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Does professional ethics affect quality of construction - a case in a developing economy?

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Does professional ethics affect quality of construction – a case in a developing economy?

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Purpose: This paper highlights the current level of professional ethics standards in the construction industry in a developing economy and how ethics influences the quality of construction projects. Design/methodology/approach: A questionnaire survey and interviews were conducted on a selected sample from the construction industry in Malaysia, which has a fast-developing economy. Findings: The findings amongst others indicate that various forms of unethical conducts that could have a significant impact on the quality of construction were found in the construction industry. The findings also suggest that professional ethics is a pre-requisite to attaining a sustained and acceptable standard of quality in construction. Original/value: apart from linking professional ethics to the quality of construction, this paper suggests ways to enhance professionalism among construction professionals to improve quality in construction including: imposing heavier penalties on those who are found to act unethically, attending ethics-training programmes and having regular ethics-awareness workshops. The construction industry needs to achieve internationally accepted quality levels to ensure that it is well positioned to support the nation’s overall economic growth and to meet various challenges at the national and international levels.

Keywords: Malaysia; construction industry; professional ethics; quality-related problem; unethical conducts

Introduction

The construction industry plays a substantial role in a country’s national economy, irrespective of the country’s levels of economic development (Zantanidis & Tsiotras, 1998). This sector of a country’s economy is an important employer of a nation’s workforce as it employs between 2% and 10% of the total workforce of most countries (Abdul Rashid & Hassan, 2005). Malaysia has achieved impressive economic growth during the last three decades (Abdul Rahman, Mohd Rahim, Hanid, & Zakaria, 2005), and this sector has employed an estimated 798,200 workforce nationwide in 2004 (CIDB, 2006).

Nevertheless, much has been reported about the performance of the construction industry in terms of quality, productivity and safety. In addition, it should be highlighted that the construction industry has been criticised for its poor performance and productivity in relation to other countries (Kanji & Wong, 1998). Generally, it is a rule that construction projects must be completed within the planned cost, scheduled time and required quality. Quality may sometimes be ignored in this industry to cut costs or to shorten the project time (Turk, 2006). To deal with the low-quality problem faced by the industry, quality management is seen as an approach to achieve the required level of quality of the end

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product and has been given great attention worldwide (Berawi & Woodhead, 2005; Hiyasat, 2000; Kanji & Wong, 1998). There is a perception that the majority of quality-related issues are caused by the human factor. Therefore, the issue of professional ethics plays an important role in reducing quality problems and preventing inconvenience to all parties concerned.

It is important to understand the meaning of the term ‘profession’ before discussing the issue of professional ethics in depth. According to Greenhalgh (1997), the essence of the word professionalism can be defined as the possession and autonomous control of a body of specialised knowledge, which when combined with honorific status, confers power upon its holders. Professionals have always been linked with the notion of ‘service’ so that a profession is described as a group of people organised to serve a body of specialised knowledge in the interests of society based on the perceived relationship (Appelbaum & Lawton, 1990). According to Bayles (1989), professional ethics is defined as a system of norms so that both the morality and behaviour of professionals could be dealt with in their day-to-day practice by this system. Professional ethics also ascribes moral responsibility not to an individual, but to all professionals practising in a particular profession. Carey and Doherty (1968) stated that this automatically tied up with more practical concepts and expectations from the public, encompassing issues such as competence, responsibility and willingness to serve the public.

It is important to highlight that when the lapse in ethical behaviour occurs among the construction professionals, the credibility of entire profession is endangered (Pearl, Bowen, Makanjee, Akintoye, & Evans, 2005). Therefore, the construction industry becomes more ethically sensitive. The adoption of ethical principles and the enforcement of standard become matters of increasing importance to society. Brien (1998) feels that the problem that faces any professional community is how could it regulate itself effectively to justify its autonomy, while ensuring that the clients of its members and society as a whole benefit from the profession’s and the individual professional’s actions, rather than becoming their victims. It is one of the ethical quality–control problems.

At the local scene, the issue of professional ethics within the construction industry affects a wide spectrum of the general population. The local authorities, public works department, client organisations, consultants, suppliers, contractors, home buyers and users of public infrastructure, are all within the scope of the above-mentioned topic, i.e. professional ethics. All those mentioned will have their own contribution towards the problems in hand, and issues of ethics and integrity in the local construction industry.

**Who are the stakeholders/professionals of construction industry?**

The construction sector in Malaysia as in most other countries is made up of different sectors including client groups, the government and local councils, private organisations, individuals, developers, contractors, suppliers, manufacturers and professionals, i.e. architects, quantity surveyors and engineers incorporating civil, structural, mechanical and electrical engineers. In addition, there are supporting regulatory bodies whose function is to inspect and to ensure that specialist installations confirm to standards set up by building by-laws, for example, this is one of the roles of the Fire Department on fire safety installation. The main problem that surfaced is the fragmentation of the different sectors in the industry.

Construction professionals exercise their own skill and judgement and are accountable to the client and bound by their professional code of ethics. Contractors on the other hand are keen to make a profit and hence their actions are less inclined to business ethics. Each profession has its own interests, which are often divergent and competing in nature. Their
diversity can be a source of conflicting ethical standards and practice, which may affect quality performance and accountability to the client or customer. The uniqueness of the sector and the need to perform accountability between and among all participants place an imposed duty on the associated notions of ethics and professionalism in an integrated framework that should facilitate responsible and accountable performance across the construction sector.

Quality management in construction industry

The issues of quality have existed since tribal chiefs, kings, and pharaohs ruled (Gitlow, Oppenheim, Oppenheim, & Levine, 2005). In a project scenario, quality can be defined as meeting the legal, aesthetic (Arditi & Gunaydin, 1997) and functional requirements of a project (Berawi, 2006). Clients and customers, both from the public and private sectors, nowadays place more emphasis on the quality of products rather than the price which was the major concern in the past. Hence, a rapid expansion of international competition in quality has occurred (Abdul-Rahman & Berawi, 2002; Kostas, 2010; Tsiotras & Gotzamani, 1996).

In terms of quality in the construction industry, Turk (2006), citing Arditi and Gunaydin (1997), mentioned that ‘high quality building project’ includes factors like the design being easily understandable and applicable, conformity of design with specifications, economics of construction, ease of operation, ease of maintenance and energy efficiency. Zantanidis and Tsiotras (1998) and Abdul-Rahman and Berawi (2002) mentioned that expectations for quality construction projects will continue to grow rapidly as the number of affluent, educated and quality-conscious customers are increasing.

With the globalisation of the economy, construction firms worldwide are actively engaged in achieving internationally accepted quality levels to ensure their forefront position in the emerging international market, especially in developing economies. Thus, the need to have a proper system that ensures quality is critical, coupled with high level of attention paid to quality management in the construction industry (Abdul Rahman et al., 2006; Hiyassat, 2000). Scholars indicate that quality management has been adopted by many countries in their respective construction industries including Hong Kong (Au & Yu, 1999; Leung, Chan, & Lee, 1999; Tang & Kam, 1999), Singapore (Low & Omar, 1997; Low & Yeo, 1997), Greece (Tsiotras & Gotzamani, 1996; Zantanidis & Tsiotras, 1998), Turkey (Turk, 2006), Jordan (Hiyassat, 2000), Saudi Arabia (Bubshait & Al-Atiq, 1999), Sweden (Landin, 2000), USA (Chini & Valdez, 2003), South Africa (Rwelamila, 1995) and Malaysia (Chew & Chai, 1996).

Quality management is a complex effort that may not be fruitful if only technical aspects are focused, and this has led to the modern concept of total quality management (TQM) (Tan & Abdul Rahman, 2005). Besterfield, Michna, Besterfield, and Sacre (2003) defines TQM as both a philosophy and a set of guiding principles that represent the foundation of continuously improving an organisation. Many tools, methods, and techniques have been developed worldwide in order to give substance to the concept of TQM (Berawi, 2004; Geraedts, Montenarie, & Rijk, 2001). A large number of companies obtained the ISO 9000 Standards certificate as a first step towards TQM (Hiyassat, 2000; Peter, Pascale, & Todd, 2010). However, if people are not serious in implementing quality management, no matter how good the system is, it will fail eventually. It is due to this human element that there is a strong perception that majority of the quality-related problems are caused by human-related factors, especially professionalism and ethics (Peter et al., 2010).
Professional ethics in the construction industry

A profession is an occupation that requires both advanced study and mastery of a specialised body of knowledge and undertaken to promote, ensure or safeguard some matter that significantly affects others’ well-being (Vee & Skitmore, 2003). Almost every profession has its codes of ethics to provide a framework for arriving at good ethical choices. Therefore, professional ethics is a system of norms to deal with both the morality and behaviour of professionals in their day-to-day practice, and ascribes moral responsibility not to an individual, but to all professionals practising in a particular profession. For the building and designing professions, the incalculable value of human life demands nothing less than the highest moral considerations from those who might risk it otherwise (Mason, 1998, cited in Vee & Skitmore, 2003).

The construction industry is a ‘perfect’ environment for ethical dilemmas, with its low-price mentality, fierce competition, and paper-thin margin (FMI, 2004). Jordan (2005) stated that unethical behaviour is taking a growing toll on the reputation of the industry. From a survey conducted by FMI, 63% of the respondents who are the construction players feel that the construction sector is tainted by unethical conduct (FMI, 2004). Surveys conducted by researchers in Australia (Vee & Skitmore, 2003) and South Africa (Pearl et al., 2005) identified much unethical conduct and ethical dilemmas in the construction industry such as corruption, negligence, bribery, conflict of interest, bid cutting, underbidding, collusive tendering, cover pricing, front-loading, bid shopping, withdrawal of tender, and payment games. It is evident that there exist significant areas of concern pertaining to the ethical conduct practised by the construction professionals.

There are many other efforts taken to increase the ethical standards and integrity among the professionals in construction sectors worldwide. According to Pearl et al. (2005), the regulatory professional acts relating to the built environment professional sector in South Africa were totally overhauled in the late 1990s and a new suite of professional acts were promulgated in 2000 to enhance professionalism. A Standard of Professional Conduct to govern the ethical practices in the American civil engineering profession was published by the American Society of Civil Engineers (ASCE, 2000). On the other hand, Australia has their own codes of tendering to enhance fairness and transparency (Ray, Hornibrook, Skitmore, & Fraser 1997).

In Malaysia, the government is very serious about improving ethics in both public and private sector. For instance, the construction industry has introduced codes of ethics for contractors to encourage self-regulation among the contractors in this sector (The Star, 2006a). Stakeholders of construction projects were asked to enforce the existing code of ethics to safeguard the engineer’s good name (The Star, 2006b). The Construction Industry Development Board (CIDB) of Malaysia also hosts integrity courses for contractors to promote the importance of integrity and plans to make the course a pre-requisite for contractors when renewing their registration (The Star, 2006b). Finally, the launching of the Construction Industry Master Plan by CIDB in 2004 also had in the master plan an objective to enhance professional ethics in the local construction industry (Sundaraj, 2006).

The link between quality-related issues and professional ethics

Besterfield et al. (2003) mentioned that quality is dependent on ethical behaviour, whereby quality and ethics have a common care premise, which is to do right things right and it is a proven way to reduce costs, improve competitiveness, and create customer satisfaction. It is evident that low ethical standards among construction professional will lead to quality
problems. These issues were highlighted in the media and received with great concern by the public (Fleddermann, 2004; NST, 2004b; RTM, 2006).

As an example, an ethics-related case in the construction industry was the collapse of the Hyatt Regency Kansas City walkways (Fleddermann, 2004). That was a hotel project in the 1970s with walkways suspended over the large atrium. With the intention to save costs, the subcontractor for the fabrication and erection of atrium steel suggested changes in the structure and it was approved by the consulting structural engineer. During the construction, part of the atrium collapsed and the engineer came out with the report saying that the design was safe and ready to be opened for business in 1980. The tragedy happened one year after the completion of the project during a dancing party in the atrium lobby. Some of the walkways on which people were dancing collapsed onto the crowded atrium floor, leaving more than 100 people dead and almost 200 with injuries. An investigation was then conducted by the Missouri Board of Architects, Professional Engineers and Land Surveyors, who reported that the original design was only marginally acceptable to the Kansas City building code, in which the walkways would only have had approximately 60% of the capacity required by the code. The situation was even worse in the new design proposed by the steel subcontractor and approved by the engineer. The consultant was found negligent in its investigation of the atrium collapse and of having placed too much reliance on the subcontractor. Therefore, the engineer has been charged with negligence, incompetence, and misconduct. Both the engineer and the consultant firm lost their licence for practising. This case strongly indicates that unethical behaviour will lead to quality problems and structural failures.

In Malaysia, as an example, a newly opened specialist hospital in Johor Bahru was closed due to fungi attack on the equipments and walls (RTM, 2006). It was found that many of the hospital’s equipments such as oxygen piping and the sewerage system are not according to the specifications. This clearly shows the poor ethics of the contractor who failed to do right things right. The contractor was given three months to rectify problems including leaking pipes, broken ceilings and faulty air-conditioning ducts (NST, 2004a). Another sub-standard-quality construction project in Malaysia was the RM238 million Middle Ring Road Two flyover, which was closed to traffic after cracks were found in 31 pillars and structural movements were detected (The Sun, 2004). The Government engaged an independent consultant from the UK to investigate the defects. The independent consultant identified that design deficiencies and improper anchoring of the columns to the crossbeam were the main cause of the cracks (NST, 2004b). Design deficiency was found to be the negligence of the design team and the repair work was then carried out at an estimated cost of RM20 million.

Research methodology
Consequently, in response to that perception, a study was performed to look into the relationship between professional ethics among the participants of the construction sector and the quality-related issues in the Malaysian construction sector. It should be noted that for this purpose of the survey, contractors and clients are regarded as professionals, and they are required to demonstrate a high degree of professionalism in performing their task, in response to the Government’s effort in introducing the National Integrity Plan to enhance integrity and ethics in the nation.

The research adopted three principal methods, namely literature review, questionnaire survey, and interviews for the study. A thorough literature search for either primary or secondary sources was conducted through academic research journals, proceedings,
dissertations, occasional papers, publications, textbooks, newspaper and online database. References to previous research designs (Low, 2005; Naoum, 1998; Sekaran, 2000) allowed the authors to grasp the problems and issues related to the topic of study and provide important insight on how to design an efficient research study.

Questionnaire survey is the main research methodology used to achieve the research objectives. Five-hundred sets of questionnaires were distributed to targeted respondents in Kuala Lumpur and Selangor state by post and via the Internet. The questionnaire contains 16 questions with multiple-choice questions in three sections: A, B, and C. Targeted respondents ranging from developer firms, consultant firms, and contracting were chosen randomly from various professional organisations which represented their respective professions. To ensure the reliability of the questionnaire survey, the sample size taken was then compared to match with the sample size recommended by Krejcie and Morgan (Sekaran, 2000, p. 295). To ensure a high response rate, the third author has critically thought of ways to achieve it, as shown in Table 1.

Data obtained from the returned questionnaire were sorted out and analysed using SPSS Version 15 and Microsoft Excel 2003. Interviews were conducted to strengthen and to clarify some uncertain findings from the questionnaire survey. Therefore, the interview questions were designed in order to achieve those objectives. Six (6) questions were asked in the interviews. The interviewees who are well-informed, cooperative and typify a circumstance or hold a characteristic that is expected or known to have salience to the financial-related problems in the construction industry (Ritchie & Lewis, 2003) were selected. The time taken for each of the interviews was on average, within one hour. Table 2 illustrates the details of interviewees for each group. Ultimately, conclusions were drawn up to summarise the data gained from the questionnaire survey and personal interviews.

Five-hundred questionnaires were distributed, and the rate of return was 13.2%. Table 3 shows the breakdown of responses by type of company.

### Professional ethics in the Malaysian construction industry

A majority (77.3%) of the respondents’ firms practise their own code of ethics/conduct. Another 22.7% of the respondents indicated that they do not have a formal code of ethics/conduct. The findings show that most of the companies are aware of the importance of ethics in work. However, this does not mean that those who do not implement codes of ethics/conduct do not stress on work ethics.

About 34.9% of the respondents indicated that their organisations have ethics training programmes for their staff. The frequency of training programmes conducted in a year ranges from 1 to 10 times. Apparently there is much room for improvement in terms of staff training in the areas of professional ethics.

The survey results also show that 74.2% of the respondents agree that the construction industry is tainted by unethical conduct. Another 13.64% does not agree with this

### Table 1. Ways to increase response rate.

<table>
<thead>
<tr>
<th>Before sending</th>
<th>After sending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions designed to be very straightforward</td>
<td>Follow-up call by phone</td>
</tr>
<tr>
<td>Initial questionnaire sent out to be pilot tested</td>
<td>Sent again to those who are not aware</td>
</tr>
<tr>
<td>No personal information of the respondents required</td>
<td>Walk in</td>
</tr>
<tr>
<td>Use the addresses which are the most updated</td>
<td>Follow-up by phone call</td>
</tr>
</tbody>
</table>
statement, and the remaining 12% either does not indicate their own stand or does not respond to the question. The response reflects that the image of the local construction industry is tainted by unethical conduct amongst the construction players.

The image of the local construction industry which the survey findings indicate as tainted by poor ethics is further reinforced by the interview results. All four interviewees agreed that the industry is tainted by unethical conduct amongst many of its practitioners. Such results are in line with foreign research results conducted by FMI (2004) that reveal 63% of the respondents in a survey agreed that the construction industry is stained by unethical acts amongst construction players.

Respondents were also asked to rate the types of unethical conduct based on the frequency scale in Table 4. Means are used to determine the average for each option. The average options can be determined more accurately as each option would fall in one of the four ranges of means. Table 5 shows the rank of the unethical conducts based on their respective means. In contrast, frequency distribution can just tell which option is the most chosen. Table 5 also illustrates eight unethical conducts of which the mean scores fall within the categories of ‘Sometimes’. Meanwhile, the means of two groups of unethical conduct scores were in the range of ‘Often’, and one unethical conducts score mean falls under the ‘None’ option. Apart from the finding shown in Table 5, there is one (1) respondent who reported that buying tenders and under-the-table money are two (2) more unethical conducts in the construction industry which he rated as ‘Very Often’ happening in the construction industry.

Table 5 illustrates the top five categories of unethical conducts in the construction industry as: (a) underbidding, bid shopping and bid cutting (categorised as a group), (b) bribery and fraud, (c) negligence, (d) front-loading, and (e) claims game and payment game. Analysis showed that the two (2) top most unethical conducts ‘Often’ happen and the remaining three occur ‘Sometimes’.

Unsuccessful tenders claiming for compensation of tendering cost with a mean of 0.74 shows that ‘None’ of this happens in the local construction industry. Based on Table 6,

Table 2. Details of the interviewees for in-depth structured interviews.

<table>
<thead>
<tr>
<th>Group</th>
<th>Position held</th>
<th>Experience of interview (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client A</td>
<td>Project manager</td>
<td>10</td>
</tr>
<tr>
<td>Client B</td>
<td>Project manager</td>
<td>26</td>
</tr>
<tr>
<td>Contractor A</td>
<td>Project manager</td>
<td>23</td>
</tr>
<tr>
<td>Contractor B</td>
<td>Engineer</td>
<td>20</td>
</tr>
<tr>
<td>Consultant A</td>
<td>Quantity surveyor</td>
<td>10</td>
</tr>
<tr>
<td>Consultant B</td>
<td>Quantity surveyor</td>
<td>8</td>
</tr>
<tr>
<td>Banker A</td>
<td>Senior sales and marketing executive</td>
<td>6</td>
</tr>
<tr>
<td>Banker B</td>
<td>Branch manager</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 3. Breakdown of response by type of company.

<table>
<thead>
<tr>
<th>Type of firm</th>
<th>Sent</th>
<th>Responded</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor</td>
<td>275</td>
<td>40</td>
<td>14.55</td>
</tr>
<tr>
<td>Architectural</td>
<td>80</td>
<td>11</td>
<td>13.95</td>
</tr>
<tr>
<td>Developer</td>
<td>45</td>
<td>6</td>
<td>13.33</td>
</tr>
<tr>
<td>Quantity surveying</td>
<td>100</td>
<td>7</td>
<td>7.00</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>66</td>
<td>13.20</td>
</tr>
</tbody>
</table>
48.5% of the respondents did not ever experience or see such conducts in the industry. The remaining 51.5% of respondents who choose ‘Sometimes’ and ‘Often’ may refer to big project because 54.6% from the total number of respondent are from companies that handled projects amounting to more than RM20 million for the pass five years.

About 4.6% of the respondents did not experience or see any underbidding, bid shopping and bid cutting exercise in the construction industry. In contrast, more than half (51.5%) of the respondents claimed that they have ‘Often’ or ‘Very Often’ experienced or seen such conduct in the industry. In terms of experiences in bribery and corruption, about 53.0% of respondents ranked it as ‘Often’ or ‘Very Often’, 37.9% ranked it as ‘Sometimes’ and 9.1% claimed that they did not experience such a conduct.

**Determination of relationship between quality-related issues with professional ethics**

Close to 73% of respondents rated the local construction quality level as ‘average’, 18.2% rated it ‘Good’ and none rated ‘Excellent’. Tables 7 and 8 illustrate the options provided and details of the findings. 40.9% and 53.0% respondents said that they ‘Strongly Agree’ and ‘Somewhat Agree’, respectively, and that unethical acts will contribute to the quality-related problems in construction industry. This shows that the majority (93.9%) of the respondents strongly agree that unethical acts contribute to the quality-related problem in the construction industry as the mean score is within the ‘Strongly Agree’ option with a value of 0.67 (see Table 8).

Respondents were also asked whether unethical conducts can be the main cause of poor quality in some construction projects. The results of the survey indicate that a majority of the respondents (72.7%) agree that unethical conducts can be the main cause of poor quality in the construction industry, with a mean score of 1.05. There are
altogether 72.7% of the respondents who either chose ‘Strongly Agree’ or ‘Somewhat Agree’ that unethical conducts can be the main cause of poor-quality projects. The remaining 22.7% chose ‘Somewhat Disagree’ and 4.6%, ‘Strongly Disagree’ to the question.

Respondents’ views on the current work ethics in the local construction industry falls in the range of ‘Somewhat Satisfy’ with a mean value of 1.47. If 74.2% respondents felt that the industry is tainted by unethical conducts among the players, the percentage of respondents who were dissatisfied with current working ethics should be around the same figure. However, only 43.94% of the respondents rated it as ‘Strongly Dissatisfied’ and the remainder rated it as ‘Somewhat Dissatisfied’.

Meanwhile, 84.8% agreed that unethical conducts will affect the effectiveness of quality management implementation, of which about 57.5% rate the influence of unethical conducts which affects the effectiveness of quality management as ‘Extremely high’ and ‘high’.

The respondents were furnished with a list of ways to enhance professionalism in the construction industry. The two (2) top most-chosen ways to enhance professionalism are ‘by leaders serving as role models’ and ‘by setting a standard of code of ethics’ for the construction industry with 57.6% and 50.0%, respectively. Table 9 shows the responses to how to enhance professionalism.

A Pearson correlation analysis was performed on: (a) rating the quality level in terms of performance and constructed product of the local construction and (b) current work ethics in the local construction industry to determine whether or not quality and professional ethics are correlated. Table 10 shows the results obtained from the analysis. The value of \( r (+0.249) \) indicates that level of quality in local construction and the work ethics are positively correlated. Quality level in the local construction industry will be better if the work ethics in this sector is better and vice versa. The correlation is significant at the 0.05 level, which means that the results occurs by 5 of 100 times. The result has strengthened the point that quality and professional ethics are related and professional ethics will affect the quality of construction. Unlike developed countries, developing countries should not jump into the quality band wagon without taking care of the

<table>
<thead>
<tr>
<th>Compensation of tendering cost</th>
<th>Frequency</th>
<th>%</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (point 0)</td>
<td>32</td>
<td>48.48</td>
<td>0.00</td>
</tr>
<tr>
<td>Sometimes (point 1)</td>
<td>19</td>
<td>28.79</td>
<td>19.00</td>
</tr>
<tr>
<td>Often (point 2)</td>
<td>15</td>
<td>22.73</td>
<td>30.00</td>
</tr>
<tr>
<td>Very often (point 3)</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100.00</td>
<td>49.00</td>
</tr>
</tbody>
</table>

Mean 0.74

Table 6. Respondent’s experience on compensation of tendering cost.

<table>
<thead>
<tr>
<th>Options</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>0.00 \leq \text{mean score} &lt; 0.75</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>0.75 \leq \text{mean score} &lt; 1.50</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>1.50 \leq \text{mean score} &lt; 2.25</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>2.25 \leq \text{mean score} &lt; 3.00</td>
</tr>
</tbody>
</table>

Table 7. Classification for ‘agreement’ scale.
need to strengthen the ethics of workers in organisations involved in the construction industry.

**Discussions**

Based on the interviews, all interviewees agreed that the local construction industry is tainted by unethical conduct among construction players. The ethical standard in the local construction industry is considered rather low. The survey findings show that about 35% of respondents’ firms have conducted ethical training programmes. This shows that many firms are unaware of the importance of good work ethics and the issue of work ethics among their staff. Each company is supposed to have a code of ethics/conducts as a guideline for their staff to stringently follow, although the staff should know things that they can and cannot do. Meanwhile, a majority (74.2%) of the respondents and all interviewees were of the view that the local construction industry is tainted by unethical conduct among construction players. The result of this study is parallel with foreign research conducted by FMI (2004), which revealed that 63% of the respondents in a survey agreed that the construction industry is tainted by unethical acts among the construction players. Indeed, 84% of the respondents in the FMI’s survey who comprised construction players had experienced, observed, or encountered construction transactions which they felt to be unethical.

Based on the feedback from the survey, respondents indicate that unethical conduct lead to monetary loss and poor quality. Five (5) unethical conducts were mentioned most by the respondents, namely: (a) underbidding, bid shopping, and bid cutting, (b) bribery and corruption, (c) negligence, (d) front loading and claims game, and (e) payment game. Failure to take control of the bidding exercise may end up in underbidding by contractors, which eventually will affect the quality of the end product delivered to end users. This is especially prevalent in public projects where contractors and suppliers with the lowest tender bid are often awarded with tender. Bribery and corruption are other

### Table 8. Whether unethical conducts contribute to quality-related problem.

<table>
<thead>
<tr>
<th>Unethical conducts contribute to quality-related problem</th>
<th>Frequency</th>
<th>%</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree (point 0)</td>
<td>27</td>
<td>40.91</td>
<td>0.00</td>
</tr>
<tr>
<td>Somewhat agree (point 1)</td>
<td>35</td>
<td>53.03</td>
<td>35.00</td>
</tr>
<tr>
<td>Somewhat disagree (point 2)</td>
<td>3</td>
<td>4.55</td>
<td>6.00</td>
</tr>
<tr>
<td>Strongly disagree (point 3)</td>
<td>1</td>
<td>1.51</td>
<td>3.00</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100.00</td>
<td>110.00</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td>0.67</td>
</tr>
</tbody>
</table>

### Table 9. Ranking of proposed way to enhance professionalism.

<table>
<thead>
<tr>
<th>Proposed ways</th>
<th>PM</th>
<th>ARCH</th>
<th>QS</th>
<th>ENG</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader as role model</td>
<td>20</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>38</td>
</tr>
<tr>
<td>Standard code of ethics</td>
<td>18</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>Heavier penalties</td>
<td>10</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Ethical awareness</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Compulsory for training</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>

Note: PM, project manager/general manager/CEO; ARCH, architect; QS, quantity surveyor; ENG, engineer.
common unethical conducts noted. Corrupted or bribed personnel will bypass stringent inspections and works procedures required during construction, leading to sub-standard quality works that will affect customers’ confidence. The indication of relatively high corruption incidents in the local construction industry is comparable to the results of an investigation on corruption by Transparency International, which is a global coalition against corruption revealed that 10% of the total global construction in 2004 was lost to corruption in the construction industry globally. This means RM390 billion was spent on such unethical conduct in the global construction industry.

Failure on the part of professional personnel to exercise the degree of care considered reasonable under the circumstances will result in poor workmanship, inadequate safety standards on site and design negligence. Professionals in the construction industry should always exercise duty of care when conducting their responsibilities.

From the cases reported in the newspapers, quality-related issues are found to have correlation with unethical conducts of the construction players. More than two third of the respondents are not very satisfied with the quality in the construction industry, which they rate ‘average’. This makes sense as there are many sub-standard-quality works found in the construction industry. More than 90% of them agreed that unethical conducts will contribute to quality-related problems and majority (72.7%) agreed that unethical conduct can be the main cause for poor-quality projects. Three out of four interviewees also have the same point of view with the respondents. The respondents also agreed that unethical conducts will influence the effectiveness of quality management implementation. Some claimed that unethical acts will affect the effectiveness of quality checking and inspection by the Clerk of Work, i.e. work to proceed without field check or inspection and testing. It can be summarised that quality-related issues and professional ethics are interrelated. The perception that quality problems are caused by the human factor can be considered reliable. Good working ethics is thus very important as it has significant influence on the quality and performance of the product.

To overcome unethical behaviours in the construction industry, immediate steps must be taken to ensure that all construction projects are led by managers who are formally trained in professional ethics, and organisations must stress on issues of professional ethics and enforce it on all personnel. More than half of the respondents felt that leadership serves as role model to enhance professionalism, whereas leadership and enforcement of...
existing law are the popular answers among the interviewees. Leaders should serve as role model among the employees as their conducts will influence the whole company because all staff look to them in day-to-day practice.

It can be summarised that quality-related issues and professional ethics are inter-related. The perception that quality problems are caused by the human factor can be considered reliable. Good working ethics is thus very important as it has significant influence on the quality and performance of the product.

Conclusions
The findings of the research indicate that professional ethics (in terms of unethical acts) has a direct negative affect on the quality of construction. There exist significant areas of concern in the Malaysian construction industry as the ethical standards among construction professionals are considered below average, and one of the best ways to enhance professionalism is through leadership, with leaders serving as role models for the staff. Although the rate of growth is a concern to many economists, it should not be at the expense of poor quality, because such a route will later have a negative impact on the economy itself.

Unethical acts that exist in developing economies can negatively affect the quality of constructed projects, thus undermining the clients and users of those projects. If this situation continues, the development and reputation of construction industry will suffer. Construction professionals are expected to behave with professional integrity and reasonable care. They should strive to achieve good quality of work as they owe a responsibility to the general public. If everyone in this sector plays their part well, professionalism will be enhanced, thus eliminating quality-related problems directly.

The main public agency of developing countries must enforce existing laws and procedures and set a standard code of ethics. All construction players must be monitored strictly to follow and generate a standard scheme to measure the quality of work achieved by contractors. It will take quite a while for the concept of TQM to take effect in such situations. Consultants should exercise their duty of care in performing their work and not resort to unethical behaviour to approve any sub-standard work. The contractors should not always view profits and benefits as their major concern and earn money in unethical ways. Clients must be fair to the contractors. They should always be alert and try to prevent any unethical behaviour among the construction players.

References


