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IMPLEMENTATION OF CODES OF ETHICS WITHIN CONSTRUCTION ORGANIZATIONS IN HONG KONG: TOWARDS AN IMPROVED ETHICAL BEHAVIOUR

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Implementation of Codes of Ethics within Construction Organizations in Hong Kong: Towards an Improved Ethical Behaviour

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A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy

CERTIFICATE OF ORIGINALITY

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Signed

OLADINRIN Timo Olugbenga

DEDICATION

This thesis is dedicated to the Holy Trinity, God the Father (The Almighty), God the Son (my Redeemer) and God the Holy Spirit (my Senior Partner).

To my darling wife, Foluke Oladinrin and my lovely daughter, Gloria Omobolanle Oladinrin.

ABSTRACT

Corporate code of ethics is described as effective instrument for influencing people's behaviour within an organization and it has become common tool in today's business world. Studies show that codes of ethics exist in organizations. The adoption of ethical codes, is borne out of the business scandals witnessed in the 1970s and 1980s such that companies now use ethical codes as symbols to communicate their commitment, regarding ethical practices, to their stakeholders. However, despite the prevalence of ethical codes in organizations, corrupt and unethical practices are still predominant. Thus, beyond the adoption of codes of ethics for moderating behaviours, it is essential to change the dynamism of ethics management within an organization through an appropriate implementation process.

Although efforts have been made to implement codes of ethics in construction organizations, there are factors hindering effective implementation of the codes. Also, corporate management of some organizations adopted a laissez-faire approach in implementing their corporate codes due to a lack of an optimized approach for embedding them within construction companies. This study aims to develop an approach for implementing and assessing corporate codes of ethics within the construction companies in Hong Kong, towards an ethical organization. The following objectives are set out to achieve the main aim: (1) to identify and assess factors hindering effective code implementation in construction organizations, (2) to identify and assess factors enabling proper implementation of codes of ethics towards effective impact of codes on employees' ethical behaviour, (3) to develop and establish a Process Approach Assessment Method (PAAM) that will provide a strong impetus towards the implementation of corporate codes of ethics within organizational processes and routines, (4) to measure the implementation of the ethical codes within construction companies using a PAAM model and validate the model

by case study. A mixed-method research was employed, combining both qualitative and quantitative research approaches. Data were collected through questionnaire survey, interviews, and case study.

Twenty two factors hindering effective implementation of codes of ethics were identified through a comprehensive literature review. The findings indicate that 'too much focus on profit making' was perceived by the respondents as the highest ranked barriers to code implementation. Using factor analysis, the factors were grouped into three major barriers, namely: 'managerial and organizational barriers', 'planning and monitoring barriers' and 'value and interest barriers'. The major barrier to ethical codes implementation in relation to construction organizations is 'planning and monitoring barriers'.

A Process Approach Assessment Method (PAAM) model was developed with the inclusion of 30 indicators, which represented enabling factors for ethical codes implementation as identified from the literature review. The factors were prioritized by ranking them based on their mean scores and relative importance index (RII). 'Protecting anyone who exposes alleged wrongdoing' ranked highest, while 'the use of ethics ombudsman' ranked lowest. However, at variant degree though, it was found that all the factors are relevant and important to ethical codes implementation within construction organizations in Hong Kong.

Using the backdrop of Nijhof et al. (2003), the indicators were grouped into six processes of ethical codes implementation (Identification and Removing Barriers IRB, Coding, Internalization, Enacting value, Monitoring, Accountability), and 5 organizational enablers in line with European Foundation for Quality Management (EFQM) excellence model (i.e. Leadership, Policy and Strategy, Employees/People, Partnership and Resources, Primary

Process, and the results). The model was empirically validated using Partial Least Square-Structural Equation Modeling (PLS-SEM). The results showed that the model has an excellent predictive power and a very reliable model representation.

A fuzzy synthetic evaluation (FSE) approach was employed to measure the extent of ethical codes implementation processes within construction organizations in Hong Kong. The results showed that the fuzzy approach is suitable for the measurement purpose with a support for the PAAM model because it enables intersubjective assessment of ethical codes implementation. The overall level of ethical code implementation in construction organizations in Hong Kong is considerably high but certain processes require further improvement. The study also utilized RADAR analysis to evaluate the significance of organizational enablers that influence ethical codes implementation. The findings confirm that leadership enabler is the most significant in construction organizations in Hong Kong. The results from the interviews also revealed that ethical standard within construction organizations in Hong Kong is comparatively high due to good ethical leadership. Similar results (with some differences) were obtained from the case study where ethical code implementation was found to be very high with process of coding receiving most attention. Leadership enabler was also the most significant in the case study organization.

Overall, this study sheds more light on the importance of improving the use of codes of ethics in construction organization. It challenges the paucity of research in this direction by bridging the research gap identified in the study. The model proposed can be used to guide ethical codes implementation, and as a tool for self-assessment to improve the use of codes of ethics within construction organizations. Furthermore, the model can enable practitioners to focus on strategic governance of the codes of ethics within their organizations.

PUBLICATIONS

Refereed Journal Papers (Published and accepted)

- **Oladinrin, T. O.,** & Ho, C. M. F. (2014). Strategies for Improving Codes of Ethics Implementation in Construction Organizations. *Project Management Journal*, 45(5), 15-26.
- **Oladinrin, O. T.,** & Ho, C. M. (2016). Critical Enablers for Codes of Ethics Implementation in Construction Organizations. *Journal of Management in Engineering, 32*(1) http://dx.doi.org/10.1061/(ASCE)ME.1943-5479.0000385
- **Oladinrin, T. O.,** & Ho, C. M. F. (2015). Barriers to effective implementation of ethical codes in construction organizations: An empirical investigation. *International Journal of Construction Management*, 15(2) 117-125.
- **Oladinrin, T. O.,** & Ho, C. M. F. (2015). Integrating codes of ethics in Hong Kong Construction Organizations Practitioners' perspective. *Asian Journal of Business Ethics*, 4(1), 15-33. (Special issue: The 5th World Business Ethics Forum) DOI: 10.1007/s13520-015-0041-3.
- **Oladinrin, T. O.,** & Ho, C. M. F. (2015). Enabling ethical code embeddedness in construction organizations: A review of process assessment approach. *Science and Engineering Ethics Journal*, DOI: 10.1007/s11948-015-9679-4.
- **Oladinrin, T. O.,** & Ho, C. M. F. (2016). Embeddedness of codes of ethics in construction organizations. *Engineering Construction and Architectural Management Journal*, 23(1).

Refereed Journal Papers (Under Review)

- Ho, C. M. F., & **Oladinrin, T. O.** Evaluation of ethical codes implementation A Fuzzy approach. *Facilities*
- **Oladinrin, T. O.,** Ho, C. M. F. & Lin, X. Critical analysis of whistleblowing in construction organisations: findings from Hong Kong. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*.
- **Oladinrin, T. O.,** & Ho, C. M. F. Fuzzy synthetic evaluation of the impact of barriers to codes of ethics implementation in construction organizations. *International Journal of Construction Management*
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Conference Papers

- **Oladinrin, T. O.,** & Ho, C. M. F. (2014). Implementing Codes of Ethics in Construction Organizations: A Self-Assessment Process Approach. Proceedings of the CIB International conference, theme: Construction in developing countries and its contribution to sustainable development, held in Nigeria (January 28th 30th, 2014).
- **Oladinrin, T. O.,** & Ho, C. M. F. (2014). Integrating codes of ethics in Hong Kong Construction Organizations Practitioners' perspective. World Business Ethics Forum, Macau, (9-11 December 2014).
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CHAPTER 1 INTRODUCTION

1.1 Background of the Research

This research focused on the implementation of codes of ethics in Hong Kong construction organizations. This study is of paramount interest not only to the construction industry but also to public policy makers. This is due to the urgent need to address the prevalent unethical behaviour within the industry. Considering the pervasiveness engulfing business organizations in the current modern life, unethical conduct has profound devastating effects which can be addressed by integrating ethical codes (Sargent, 2007). Construction industry participants see nothing wrong in taking advantage of others, in form of bribing and discrimination (Mason, 2009) and business managers within the industry focus majorly on profit-making, maximizing economic opportunities and practicing total entrepreneurship with less concern about ethical practice (Suen et al., 2007). This lack of concern is reflected in the desires to make quick money by the construction business owners without considering the ethicality of the means of making such money. Some of the unethical practices in the industry include corruption, defective works enveloped with poor workmanship and overcharge (Kang and Shahary, 2013).

One of the distinguishing features of construction industry is its linkage with other sectors in a nation's economy (Khan et al., 2014). The outcome of its activities has significant effect not only on individual but also on the entire economy of a nation. It is therefore costly to neglect the practices of such an important sector of an economy. In the context of ethical behaviour in the construction industry, a number of researchers have studied this issue from different regions and locations using diverse approaches. Relevant studies include; Suen et al. (2007) in Asia, Ho et al. (2004), Fan and Fox (2009), (Ho, 2010; 2011; 2013), in Hong Kong, Kang and Shahary (2013), and Adnan et al. (2012), in Malaysia, Vee and Skitmore (2003), and McCarthy (2012), in

Australia, Bowen et al. (2007) in South Africa. These studies suggest how to address ethical problems in the industry. Meanwhile, in Hong Kong, it is assumed that adopting codes of ethics by construction organizations will curb incessant ethical malpractices, thus code of ethics is mandatory for all general contractors willing to bid for government works (Snell et al., 1999). Ho et al. (2004), having discovered that the adopted ethical codes were not properly implemented, recommend further research in this direction. However, the implementation of codes has seen relatively little empirical research (Ho, 2010; 2011; 2013). Precisely, there are reasons to justify the need for researching into this area.

1.2 Reasons for this study

1.2.1 Public policy requirement

During the late 1990s, significant number of unethical incidents were uncovered in Hong Kong construction sector, which prompted widespread public concern and saddled responsibilities on all stakeholders in the construction industry to take a critical review of the practices and culture of the industry and explored paths for reform. This led to the appointment of the Construction Industry Review Committee (CIRC) by the Chief Executive of the Hong Kong Special Administrative Region in April 2000 to comprehensively review the current state of the industry and to recommend measures for improvement. The report identifies a number of shortcomings relating to unethical behaviour, not only in the quality of the industry's products but also in its operations, which include defective products, poor workmanship, adversarial culture, lax supervision and high costs of construction (CIRC, 2001).

In response to the report, both the general public and the Government perceived the need for a sound corporate ethical behaviour and ethics management within the industry. Therefore, the Hong Kong Government directed the Hong Kong Ethics Development Centre (HKEDC) and the Hong Kong Housing Authority (HKHA) to spearhead a business ethics campaign targeted at the Hong Kong construction industry (Ho, 2010). Resulting from this campaign, it became mandatory for all construction companies willing to bid for government projects to adopt corporate codes of ethics so as to cultivate an ethical ethos both at the individual and company levels (Ho et al., 2004). Despite the above campaign and report, Corruption Perceptions Index (CPI) of Hong Kong dropped down from 12th in 2011 to 14th in 2012 in ranking (Saisana and Saltelli, 2012). In a recent report by the Hong Kong construction industry, emphasis is placed on the integration of codes of ethics as one of the prerequisites to achieving vision 2020 (HKCA and CIG, 2012). It appears that there are certain factors responsible for the failure in implementing ethical codes in construction organizations which must be identified and assessed.

1.2.2 Unethical practice in construction industry

In practice, while most large companies around the world have now legalized behaviour through written corporate codes, reported ethical malpractices are unabatedly sustained in most of these organizations. A survey reported by Doran (2004), cited in Mason (2009), reveals the status of ethical practices in construction that only a few companies in the US feel concerned about ethics. Similarly, contractors in Hong Kong pay less attention to ethics (Ho et al., 2004). Kang and Shahary (2013) identify eighteen ethical issues in construction industry, common ethical challenges include; concealed poor workmanship, betrayal, payment diversions, lying, erratic contractors, claims games, threats, conflict of interest, collusion, fraudulent acts, and professional misconduct. This necessitates the need for a viable tool such as codes of ethics to be implemented in the web of construction practices so as to address possible ethical menace. Although efforts have been made to address these ethical issues in construction, Ho et al. (2004)

reveal that there are certain missing factors, which must be put in place for codes of ethics to be effective in construction organizations.

1.2.3 The lack of empirically grounded ethical codes implementation model

A lot of theoretical studies have been conducted with respect to code of ethics as reported in Ho (2010), yet there is dearth of empirical research to relate a viable model for code implementation especially in construction management studies. Ho (2011) elaborates some theoretical models influencing ethical decision-making in organizations and discovers the need to integrate the extant ethical theories into practice. The integration according to Ho (2011) can be accomplished by examining the developmental process of ethical codes. Schwartz (2002) identifies four phases of corporate code development process including; code creation, code content, code implementation and code administration. The first two (code creation, code content) describe codes as "product" while the last two (code implementation and code administration) represent "process." Of all the four phases, institutionalization of ethics is largely dependent on implementation of ethical codes (Johnson and Smith, 1999). Findings from the literature show that there is imbalance in research regarding code development process as most studies focus on the "product" aspect and how code development contributes to the ethical decisions of employees (Marnburg, 2000; Stevens, 1994) while the "process" aspect has been largely neglected in empirical research. In the same way, Ho (2013) notes that, although many attempts have been made to improve ethical codes implementation and administration, a formal approach has not been fully optimized in construction.

1.2.4 Deficiencies in code embedment in the web of organizational processes

Codes of ethics form part of companies' ethics management policy and exist in many organizations. For instance, 78% and 85% of the top 1000 U.S. and Canada companies

respectively as well as industry and professional associations have a written documents labelled as codes of ethics or codes of conduct (Nijhof et al., 2003). Out of the top one hundred organizations in the Netherlands, 38% have drawn up a code of conduct. Sixty five per cent of the top five hundred organizations in Spain (Melé et al., 2006) and 50% of the largest companies in Australia have adopted a code (Nijhof et al., 2003). Past research such as Ford and Richardson (2013), Robertson and Nicholson (1996), Loe et al. (2000), O'Fallon and Butterfield (2005), Stevens (2008), Rodriguez-Dominguez et al. (2009), Ho (2010) and Singh (2006) in the US, the UK, Europe, Australia, Norway, Spain, Hong Kong and Canada respectively, reflected on the status of corporate codes of ethics in the respective countries. Particularly, Ho (2013) observes that most construction organizations in Hong Kong do not know how to integrate ethical codes into their daily routine despite the presence of written ethical codes. In essence, the "3P" approach to ethical codes, wherein, an organization simply "print a code, post it on the wall and prays that people actually read it" (Myers, 2003) would not actually translate to an effective ethics program. Adnan et al. (2012) observe that contractors are always at the center of most blame associated with construction malpractices. Thus, it is imperative to address the issue of ethical code implementation at the level of organization for effective result at the industry level. Argue that adopting a formal code of ethics may earn an organization a desired acceptability from external stakeholders, improper implementation of the code can generate a negative perception of the organizational ethical requirement by the employees which may affect their disposition to ethical behaviour (MacLean et al., 2014).

1.3 Research questions

The above research rationales help to guide the generation of appropriate research questions. Given the status of research frontier in this domain, the primary research question is: How can the codes of ethics be effectively embedded in Hong Kong construction organizations?

To effectively embed means, to put into practical operation. Meanwhile, effective implementation of codes of ethics in construction organizations in Hong Kong is questionable. Therefore, the following questions are secondary to this research:

- 1. What are the factors militating against effective implementation of codes of ethics in construction organizations?
- 2. What are the factors enabling proper implementation of code ethics for effective impact on employees' behaviour in construction companies?
- 3. What is the approach to practically implement codes of ethics within organizational processes?

1.4 Research Aim and Objectives

1.4.1 Aim

The aim of this study is to develop an approach for implementing and assessing corporate codes of ethics within construction companies in Hong Kong towards an ethical organization.

1.4.2 Objectives

- 1. To identify and assess factors hindering effective code implementation in construction organizations;
- 2. To identify and assess factors enabling proper implementation of codes of ethics towards effective impact of codes on employees' behaviour;

- 3. To develop and establish a Process Approach Assessment Method (PAAM) that will provide a strong impetus towards the implementation of corporate codes of ethics within organizational processes and routines; and
- 4. To measure the implementation of the ethical codes within construction companies using a PAAM model and validate the model by case study.

The relationships between the study objectives are depicted in Figure 1.1. In order to gain more insights into the research problem, the study starts with identification of barriers to effective implementation of codes of ethics (Objective 1). For effective implementation of codes of ethics, enabling factors must be identified and assessed first (Objective 2). Objective 2 forms the basis for Objective 3 and 4. The identified factors in Objective 2 were used as indicators in the proposed model and the relationships between the model's components were established to validate the model (Objective 3). Thereafter, the enabling factors were used in line with the validated model to measure the implementation of codes of ethics in construction organization (Objective 4).

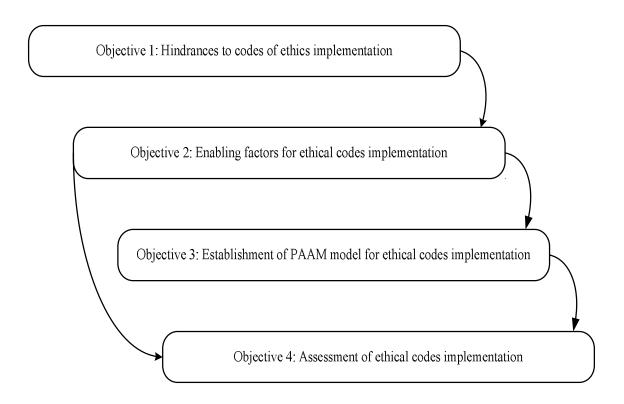


Figure 1.1: Interactions between the study objectives.

1.5 Research process

The study process is grouped into six main stages as shown in Figure 1.2. The process followed a rigorous steps for ensuring validity and value of the final model as suggested by Flood and Issa (2010). The steps include: strategizing via literature review; theoretical model development; collection and assessment of data; model validation; model evaluation; and final model implementation.

Stage 1 involves strategizing through comprehensive literature review to establish the research gaps for this study as well as to identify relevant factors in relation to codes of ethics implementation, as detailed in Chapter 2. The first sets of 22 items are factors hindering effective implementation of codes of ethics in construction organizations. While the second sets of 30

items represent the enabling factors for effective implementation of codes of ethics as well as 11 measures of expected results of effective implementation.

Stage 2 entails identification of suitable approach for assessing ethical codes implementation. Based on the findings from literature review, a Process Approach Assessment Method (PAAM) model is developed by carefully introducing the identified 30 enabling factors into the theoretical model (see Chapter 3).

Stage 3 focuses on primary data collection through questionnaire survey. The two sets of factors earlier identified from literature review are assessed and ranked at this stage.

Stage 4 involves empirical validation of the model to establish its representativeness, having assessed and satisfied the variables included in the model.

Stage 5 focuses on evaluation of the model through self-assessment questionnaire which was used to measure the implementation of ethical codes within construction organizations in Hong Kong. Also, semi-structured interviews were conducted to buttress the model evaluation and ethical codes implementation assessment.

Stage 6, which is the final stage, entails practical implementation of the established model in one general contracting organization in Hong Kong, using the same approach in stage 5.

In total, there are 10 Chapters in this thesis. The sequential structure and the topical focus of each chapter is depicted in Figure 1.3.

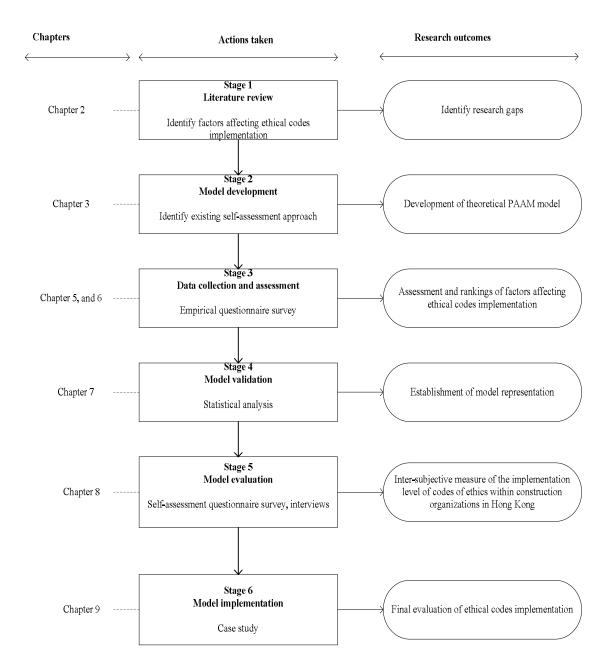


Figure 1.2: Overall research process

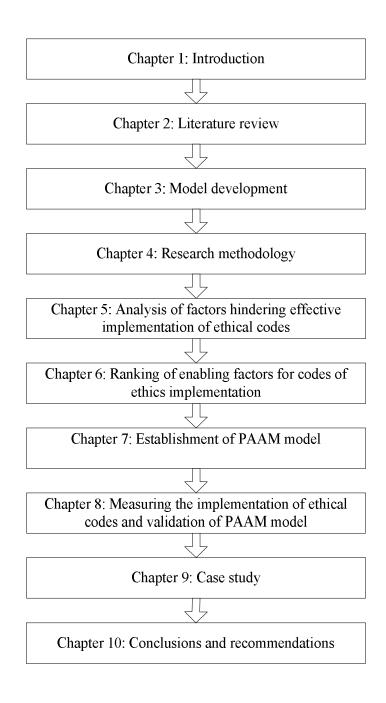


Figure 1.3: Arrangement of chapters in the thesis

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

This chapter reviews the existing literature by showing the efforts of previous researchers in this research direction. It starts with the demonstration of how the search was done followed by brief insight into the concept of corporate codes of ethics which include definitions, functions, theories and models of codes of ethics. Thereafter, an in-depth overview of codes of ethics development process was conducted. Following this, an overview of existing literature relevant to codes of ethics in construction is conducted and the factors affecting codes of ethics implementation in organizations were identified. The chapter concludes by identifying significant limitations in the existing literature which justify the reasons for the current study.

The main purpose of undertaken literature review is to identify gaps and create a paradoxical approach in the corporate codes of ethics research in construction and corporate business. A comprehensive literature survey approach was adopted in this study. First, a computerized search of three databases (including: Scopus, Web of Science, and Google Scholar) was conducted to identify relevant studies. In view of the large pool of literature on the subject of ethics, most renowned scholarly journals in both the construction and ethics domain were first identified. The search scope was expanded to include common search engines such as several online bookstores, an approach used by Yang et al. (2009) in their review of stakeholder management in the construction industry. Google Scholar was utilized more than the other two databases because of its advantages which include; wider coverage, free access, and ability to retrieve most obscure information, however, Scopus provides simple and quick citation analysis but is limited to recent articles beginning from 1995 (Falagas et al., 2008).

In searching for publications, firstly, keywords associated with "code" were combined (i.e. code of ethics, code of conduct, business code) with keywords related to "corporate business ethics" (e.g. business principles, corporate credo, corporate philosophy, business ethics, and corporate ethics statement). This is as a result of confusion that still exists on the precise nature of a business code (Kaptein and Schwartz, 2008; Stevens, 1994) which is posed by the different names used to describe codes of ethics. Secondly, manual search for issues of high-quality journals that have published articles related to ethics both in construction and other fields was undertaken. The search process was inspired by past PhD theses and the selection of articles was based on available abstracts which helped in identifying the relevant and suitable papers before reading through the whole contents.

2.2 Concept of corporate ethics

It is imperative in the context of this research to put corporate ethics in perspective for better understanding with regards to business or corporate settings, by providing a brief overview in the attempt to discuss issues related to construction ethics. The essence of this is to establish a theoretical foundation for the research study that is currently not firmly grounded in construction research. The following sections describe relevant headings within the context of corporate and general ethics.

2.2.1 Ethics

According to McCarthy (2012), it is important to consider the definition of ethics and its historical development for any ethical analysis. Fisher and Lovell (2009) describe ethics as a branch of philosophy that is concerned with formal academic reasoning about right and wrong. McDonald (2004) similarly points out that ethics is an examination of whether something is good or bad. In relation to that, researchers such as Boatright (2007), Crane and Matten (2010) and

Thompson (2005) opine that ethics connotes right and wrong actions and reactions. Ethics can also be defined as the study of morality (De George, 2006) which relates to the customs that a society accepts as being wrong or right (Yallop, 2010). In an attempt to differentiate between ethics and values, Fisher and Lovell (2009) define ethics as a branch of philosophy that deals with issues of 'right' and 'wrong', while values is described as inherent belief or commonsense about right and wrong that helps an individual to set priorities for actions. The study claims that ethics is acquired through a formal process and therefore, must be studied, while values evolve via socialization rather than study. By corporate ethics in this study, we refer to moral standards within construction companies that are capable of influencing behaviours of employees and other stakeholders within construction organizations.

2.2.2 Corporate codes of ethics

There are numerous descriptions of the meanings of codes of ethics in the literature, starting from Heermance (1924) handbook on the topic 'Codes of ethics'. Nevertheless, confusion still exists on its precise nature (Kaptein and Schwartz, 2008; Pearce and David, 1987; Schwartz, 1999; Stevens, 1994) which stems from the different names that are used to describe the phenomenon such as codes of ethics (Benson, 1989; Cressey and Moore, 1983; Molander, 1987) code of conduct (White and Montgomery, 1980) business principles (Sen, 1997), corporate credo (Murphy, 1995), corporate ethics statement (Murphy, 1995), and code of practice (Schlegelmilch and Houston, 1989). Schwartz (1999) analyzes various ethics documents and opines that a code of ethics could also be a code of conduct, code of practice, corporate credo, or even a value statement. However, the most commonly used terms are 'codes of ethics and 'codes of conduct' and the two terms are complimentary in nature (Gilman, 2005). In this study, codes of ethics and ethical codes are interchangeably used.

Many researchers have described the codes of ethics as rules, principles, philosophy and conduct that is set down to guide the behaviours of managers, employees, shareholders, consumers and other relevant stakeholders or any other aspects of an organization or society (Kaptein and Schwartz, 2008; Langlois and Schlegelmilch, 1990; Schlegelmilch and Houston, 1989; Schwartz, 1999; Schwartz, 2002; Stevens, 1994). In a simplified way, ethical codes are described as documents which contain the basic philosophical principles and state the accepted values within an organization (Stevens, 2009). In brief, code of ethics has been embraced as a tool that delimits misconduct and prescribes unethical/unacceptable behaviour that could possibly be perpetrated by organizational employees in order to limit the risk associated with any form of ethical malpractices within the organization (Adelstein and Clegg, 2015).

According to Wempe and Kaptein (2002), ethical codes are policy documents which define the responsibilities of organizations to stakeholders and the conduct or behavioural standard expected of members of the organization. They are also regarded as documents that articulate the ethical parameters of the organization by showing acceptable/unacceptable behaviour (Stevens, 1996). Generally, the numerous definitions of codes of ethics can be categorized into three main themes viz: (1) a formal or official written document (Schwartz, 2001; Stevens, 1996); (2) such document contains moral-oriented rules or policies which are expressed in form of moral standards, values, principles or ethical ideologies, embraced within a particular organization (Kaptein and Wempe, 2002; Schwartz, 2001; Stevens, 1996); (3) such policies are authorized to stimulate individual employees' behaviour (Cleek and Leonard, 1998; Schwartz, 2001) or overall organizational behaviour (Marnburg, 2000; Schwartz, 2001). All the three themes are encompassed in the definition of ethical codes given by Schwartz (2001) which is considered suitable and adopted for the current study. Codes of ethics is defined as 'a written, distinct and

formal document which consists of moral standards used to guide employee or corporate behaviour' (Schwartz, 2001, p. 248).

2.2.3 Philosophical branches of ethics

There are three main branches of philosophical study of ethics in the literature, namely: metaethics, normative ethics and applied ethics. Meta-ethics is related to the rational motive behind
moral judgment justification rather than making moral judgment itself (DeLapp, 2011). This
implies that it gives meaning to moral propositions, that is, it describes what morality itself is all
about. Normative ethics, on the other hand, deals with development of philosophical theories in
which wrong and right actions are determined by means of constructive evaluation (Robertson,
1993). Examples of normative ethics are deontological, utilitarian, and virtue ethics (Hursthouse,
2013). Applied ethics, as the name implies, is concerned with the application of ethical principles
and theories to real life events and practices (Rest, 1994). This is categorized into three subgroups viz. medical ethics, environmental ethics and business ethics, which implies that business
ethics is a species of applied ethics (Arnold et al., 2010). Owing to the fact that construction is a
business organization that embraces diverse applications, the current study falls under business
ethics as a subset of applied ethics.

2.2.4 Business ethics

The study of business ethics is more recent than ethics itself and it has attracted considerable attention in the literature (Lewis, 1985). Therefore, in order to gain deep insight into the application of business ethics, it is necessary to expressly state its meaning. Unfortunately, there is a lack of consensus about the meaning of business ethics both in practice and in theory (Baumhart, 1968; Lewis, 1985; Schutte, 1965). One of the earliest studies which sought to define business ethics was conducted by Lewis (1985). Out of 254 analyzed documents that defined

business ethics, Lewis (1985) found that 308 concepts were clearly mentioned and could be grouped into 38 prescribed categories. Rules, standards, or codes were mentioned 48 times, followed by moral principles which was mentioned 25 times, and the concept of right and wrong was mentioned 24 times.

Subsequent studies in the literature have also defined business ethics, most of which are in one way or another similar to these categories. Velasquez (1992) defines business ethics as the application of good and right perceptions to activities, transactions, and pursuits that are regarded as business. However, Chryssides (1993) argues for more sustainable definition that is suitable for dynamism in today's environment, positing that the conventional definition of business ethics is rather too static with several presumptions about ethical principles. This becomes imperative as a result of changes in organizations' behaviour and values. Barkhuysen and Rossouw (2000) define business ethics as the study of ethical dimension of economic activity which is reflected at three different levels including; macro-level, meso-level and micro level as explained later in this study.

As described by Hiironen (2004) it is the study of moral right and wrong in a specialized manner and its application to business policies, institutions and behaviour. Hiironen (2004) notes that business ethics has gained popularity among researchers and business practitioners, nevertheless, its conceptualization is still vague. Similarly, Crane and Matten (2010) consider business ethics a platform for studying activities, situations and decisions that are related to business so as to create room for judging issues of right and wrong. Yallop (2010) describes business ethics as a variant of applied ethics usually employed to solve ethical problems within an organization.

Due to the growth of interest around business ethics, Van Liedekerke and Demuijnck (2011) examine the terminology used to describe the phenomenon in the past fifteen years and identify two directional arguments; (1) numerous terminologies have made it difficult to know the best approach to business ethics issues, (2) contrary to the first argument, diverse descriptions of business ethics have created opportunity for interested individuals from different backgrounds to contribute to debate about how to identify a responsible company. The second argument is supported by the current interest of researchers in exploring business ethics issues from diverse perspectives.

In the same way, Crane and Matten (2010) analyzed English books from 1900 to 2008 to determine the trend of words and phrases used in describing business ethics using the following phrases; "business ethics", "corporate social responsibility CSR" on one hand, and on the other hand, adding "corporate responsibility" and "sustainable business" to the search as shown in Figure 2.1. It can be seen that CSR emerged during the 1970s, whilst business ethics has been dominating for more than a century before the emergency. In this analysis, Crane and Matten (2010) argue that though, "business ethics" and "corporate social responsibility" are normally used interchangeably in the literature having broadly similar concerns, they represent somewhat different lenses on business practice. Ethics is generally concerned with rights and wrongs which are lying within norms and values. CSR, on the other hand, although concerned about norms and values as well, focuses more on economic approach without a genuine consideration of the normative dimensions. It is reasonable to conclude that business ethics is as old as business itself considering the trend. Therefore, it is not a new phenomenon. Social movement actors contested privatization of law to allow for the use of codes in multinational corporations, which has led to shifts in meaning and implication of codes (Bartley, 2005)

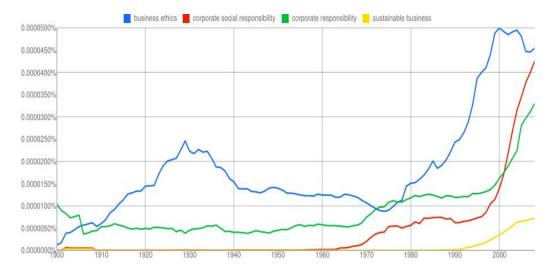


Figure 2.1: Terminology and domain of business ethics

Source: Crane and Matten (2010)

It is important to note that since the current study deals with codes of ethics implementation in a construction company, which is basically business oriented organization, the use of "codes of ethics" and "business ethics" will hereafter be interchangeable. However, in this research context, the concept "codes of ethics" is preferably used to include all the different types of codes at the corporate level. Diverse definitions of codes of ethics reflect the purpose of individual studies, thus for the purpose of this study, the definition given by Stevens (2009) is adopted, which states that codes of ethics are documents which contain the basic philosophical principles and state the accepted values within an organization.

2.2.5 Ethics theories and morality of actions

Theoretical approach of ethics can be grouped into two aspects, namely; 1. Normative/prescriptive approach: concerning what we ought to do or believe and; 2. Positive/descriptive approach which describes what we actually do or believe (London et al., 2006; O'Fallon and Butterfield, 2005; Ray et al., 1999). Ethical decision-making models are a subject of long-standing interest to ethics theorists (Whittier et al., 2006). A wide range of ethical

decision-making models can be found in the business ethics literature; two in particular dominate the literature (Ho, 2011). The normative approach models of ethical decision-making arise from normative ethics, while the descriptive approach models are developed from descriptive ethics (O'Fallon and Butterfield, 2005). For the purpose of this research, the descriptive approach is employed to address ethical behaviour in an organizational context.

The fundamental issues about ethics are the morality of actions and reasons behind individual reactions to certain situation. Hiironen (2004) argues that the best approach for determining moral actions is through diverse ethical theories that present criteria for moral judgment and further explains that these theories are explicitly normative in approach. Although there are various ethical theories in the literature at the disposal of individuals for reasoning out their decisions within an organization (e.g. deontological, teleological, egoism, ethics of care, virtue, justice and right theories), the most common approaches to ethics are deontological and teleological theories (Donaldson and Dunfee, 1994; Eastwood et al., 1998; Fitch, 2009; Sargent, 2007). Brady (1985) proposes a deontology-utilitarianism (DU) model and claims that it captures the entire spectrum of ethical decision-making. Rallapalli et al. (1998) affirm that both approaches are capable of influencing ethical behaviour. Whenever ethical problems arise, an individual is bound to make decisions that will proffer solutions to the problem and in doing this; a proper analysis of various alternatives to addressing the situation is required by individual. These theories describe the decision making process of an individual and how the decision finally materializes into behavioural manifestation. They are described further in detail in the following sections.

2.2.5.1 Deontological theory

The most famous proponent of this theory is Kant, a German philosopher who lived between 1724 and 1804. For this reason, the theory is generally referred to as Kantianism (Hiironen, 2004). This theory holds that irrespective of culture or circumstances, a certain set of actions are morally right. Thus determination of right and wrong actions emanates from established principles (Yallop, 2010). Some actions are considered wrong irrespective of the circumstances surrounding its performance. For example, stealing is wrong. If a man steals money to buy food for his hungry family, the action will be judged according to the established fact that "stealing is wrong" and not on the reasons behind his action.

According to DeConinck and Lewis (1997), deontological theorists believe that there are obligations for individuals to fulfill relative to the predetermined standards and this will invariably guide individual behaviour. Individuals who are under the influence of deontological norms do not always consider the consequences of their decisions; rather, they are being guided by universal principles. This was supported by Fisher and Lovell (2009) who posit that the context and consequences of an individual decision are irrelevant. This implies according to Kant's theory that, one should be more conscious of the established principles that will eventually determine his/her actions.

Deontological ethics can also be described as "natural law or normative ethics" (Fitch, 2009, p. 12). As discussed by Fitch (2009), the concept of 'categorical imperative' appears to be the most common fundamental element of Kant's thinking, a concept that rejected a means-to-an-end theory and established standard criterion for determining personal morality. Kant argues that a universal reason demands will determine whether an action is wrong or right and therefore set the only requirement for morality as 'rationality' (Hiironen, 2004). Deontological approach

contends for universal rules that will clarify and justify individual actions. There are three aspects of 'categorical imperative' which must be fulfilled for an action to be moral, these include:

- (1) consistent universalization,
- (2) respect for rational beings as ends in themselves, and
- (3) autonomy of rational beings" (Hiironen, 2004, p. 28).

Therefore, code of conducts, legal obligations and religious rites are all deontological in nature which is regarded as rule or code oriented approach (Fitch, 2009).

2.2.5.2 Teleological theory

Contrary to the deontological approach, teleological ethics is an approach that supports weighing the good and bad that is inherent in an action vis-à-vis the consequences of that action (Vitell et al., 1993). This simply means that the decision making process of an individual is guided by the resultant consequences of an individual's actions. For example, unlike deontological reasoning, if a contactor uses substandard materials for construction, it may lead to poor workmanship which may attract an additional cost as a result of rework. It can also lead to failure of the construction project which may tarnish the contractor's reputation or result in prosecution. In this scenario, the contractor will refrain from using inferior materials to avoid additional cost in form of rework, or prosecution in form of imprisonment, rather than considering the established principles relating to such action. Thus, Dean et al (2010) posit that, although the rewards of ethical behaviour are always insignificant, the consequences of contrary behaviour are always prominent.

The teleological approach is therefore described as *a posteriori* owing to the fact that morality of an action is based on its result (Fitch, 2009). It is also referred to as *utilitarianism* (Hiironen, 2004) or *consequentialism* (Fitch, 2009). Utilitarianism theorists believe that, the usefulness of an action and the result will determine the moral character to be adopted by an individual. In the like manner, consequentialism implies that an individual and organization will favour the adoption of values or behaviour that will promote them. Yallop (2010) posits that individuals who follow the teleological approach take time to analyze the consequences of their intended actions before venturing into it, believing that the action will eventually be judged by the relative consequences.

Under this approach, an individual can decide to maintain his/her behaviour irrespective of the organizational norms, in as much as the result of such decision will produce more good than bad and that others will also benefit from the action. Thus, morality is determined by the amount of good or bad that is produced by a certain action. This means that moral behaviour tends to produce the highest possible good that will benefit the highest possible number of people by reasoning out the best approach or action that can produce such a result. On the other hand, an immoral act tends to produce bad results that will affect a great number of people (Hiironen, 2004). Both deontological and teleological theories are commonly used as the basis for decision making models.

2.2.6 Ethics levels of inquiry

Barkhuysen and Rossouw (2000) and Steinmann and Löhr (1996) group business ethics into three levels of inquiry as follows:

the macro-level, with the focus on the morality of economic systems;

- 2. the meso-level, with an emphasis on the moral obligations of business organization and lastly; and
- 3. the micro-level of inquiry, where the focus is on decision-making and ethical dimensions of intra-organizational behaviour.

Since this study focuses on implementation of corporate codes of ethics in construction companies and decision-making processes in relation to organizational values that guide employees' behaviour, it places itself at the meso-level and micro-level of inquiry into business ethics. This is due to the unique nature of the construction industry, according to Harris Jr et al. (2013), who opine that the implication might be consequential if a sole ethical theory is applied to engineering related fields. Again, apparently, personal ethics and business ethics are inseparable, and business as an entity can never be more ethical than the people who manage it (Lewis, 1985). In this case, a construction company as one of the players in the construction industry has a moral obligation to conduct ethical business relating to meso-level of ethics. In the same way, ethics affect the way an individual makes decisions within an organization such that ethical behaviour is enhanced; this is related to micro level.

2.3 Purpose of codes of ethics

This section explains the functions of a code vis-à-vis the reasons for its adoption and the use that organizations often put it to. Ethics is regarded as a prerequisite to conduct business (Schnebel and Bienert, 2004). This implies that it is imperative for any organization that wants to succeed in business to first of all develop ethical codes. Some firms adopt ethical codes either as a result of their deliberate desire to do the right thing without any external pressure (Joyner and Payne, 2002; L'Etang, 1992) or their desire to convince the stakeholders that the firm acts in their best interests and should therefore be rewarded having fulfilled corporate social responsibility

(Joyner and Payne, 2002; Logsdon and Wood, 2005). Robertson and Fadil (1998) point out that multinational organizations also use the ethical code of conduct as an instrument to guide ethical decision-making processes so as to over-rule differences in the ethical norms of employees from different cultures. This is particularly relevant to large organizations as construction companies that often execute construction projects across nations.

In Hong Kong, Snell et al. (1999) conduct a research to examine the reasons behind the adoption of codes in various organizations including; manufacturing, property/real estate, transportation, import/export and hospitality/catering. All the firms contacted have adopted codes of ethics and were therefore asked to indicate the function(s) of the codes in their respective organization. Although, the responses from the findings were in varying degree, the reasons for code adoption include the following among others: to ensure fair dealings, to maintain ethical standards, to protect an organization against unlawful action by employees, to meet government expectation (Snell et al., 1999). Pater and Van Gils (2003) argue that most organizations adopt ethical codes in response to external pressures with a demand for ethical behaviour. Thus, morality of ethical codes adoption is rather questionable provided that the main reason for the adoption is pacify the concerned stakeholders. The function of codes is further summarized into three major purposes by Wotruba et al. (2001) including; demonstrating a concern for ethics by the organization, transmitting ethical values of the organization to its members, and impacting the ethical behaviour of those members as shown in Figure 2.2.

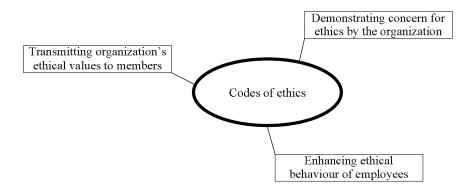


Figure 2.2: Main functions of codes of ethics

Previous studies (Marnburg, 2000; Pater and Van Gils, 2003; Wotruba et al., 2001) revealed that the principal objective of codes of ethics is to stimulate employees' behaviour. However, a written code of ethics cannot serve its purpose within an organization unless it is adequately applied (Messikomer and Cirka, 2010). In relation to this, Stevens (2009) posits that an effective code enhances social responsibility and clarifies the norms and values that an organization seeks to uphold. By this, company's reputation can be improved and government regulation intervention can be discouraged to allow companies to have full focus and control towards value achievement. Svensson et al. (2009) examine the benefits of corporate codes of ethics and reveals that the top reason among others why corporate codes of ethics are developed is to support corporate culture. Schwartz (2001) clearly demonstrates how codes of ethics can influence employees' behaviour. Using interview data, Schwartz (2001) points out eight "metaphors" to describe how ethical codes influence employees' behaviour. The metaphors stand for the function of codes of ethics within an organization. The findings from the study were presented in tabular form with the metaphors and their definitions on the first column, quote from the interviewees on the second column the third column represents the demonstration of how employees' behaviours are influenced by codes of ethics.

Further expatiation on Schwartz (2001) reveals that codes of ethics have multifunctional purposes. It can serve as a rule book to express what the organization stands for in terms of right and wrong. This will help both the new and old employees in their decision making process. Ethical codes also serve as sign-post to give direction in case of ethical dilemma. The function of ethical codes as a mirror shows that it helps individual to reflect over a behavioural pattern to ascertain if it corresponds with acceptable standard of the organization. As a magnifying glass, ethical codes reaffirm and reemphasize the importance of certain ethical issues within the organization, calling for more attention. Functioning as a shield, codes of ethics give confidence to an individual employee when acting in accordance with the speculated principles. Without the codes, it might be difficult to identify any deviant act but with ethical codes functioning as a smoke detector, unethical conduct can easily be checked. In the same way, ethical codes act as fire alarm in relation to whistleblowing within an organization. The last but not the least is the functionality of ethical codes as club, referring to necessary sanctions attached to any acts of indiscipline. With all these functions in place, it is envisaged that codes of ethics can greatly influence employees' behaviour within an organization (Schwartz, 2001). The essence of using the ethical codes as guiding tools for influencing employees' behaviour is to enable the employees to make ethical decision in the course of their routine activities within the organization. Several approaches have been proposed in the literature for guiding employees ethical decision making, thus, the next section describes the concepts of ethical decision making.

2.4 Ethical decision making

Decision making is not only a paramount thing to the heart of the management process but also synonymous with management itself (Jamnik, 2011). Most of the theories or principles discussed in the previous section are used by business ethicists to guide organizational decision making.

These principles are concepts or guidelines for making suitable decision in the course of ethical dilemma. The essence of these concepts is that managers and employees can improve upon their ethical decision making by factoring some ethical principles into their decision making process. Efforts have been made over times to provide better understanding of decision making process which led to development of several models. It is therefore imperative to re-examine some of these models so as to clarify their relevancy to the current study. In order to gain a better insight into decision-making process in business context, literature review was done across disciplines both for applied and descriptive research. It is therefore important to discuss the rationale behind ethical decision making both at individual and organizational levels.

2.4.1 Decision making models

As a result of increase in unethical behaviour, researchers from the 1980s up to the present, have cultivate the habit of developing models that will enhance decision making process of individual both as a member of organization and the society at large. Although, there are various decision making models developed from various field of study such as psychology, philosophy and management, this section dwells on the existing business decision making models drawn from various disciplines so as to garner enough contributions from various scholars regarding decision making. Table 2.1 summarizes the models by considering their theoretical base and the approaches employed by different authors.

Table 2.1: Review of ethics management related models

| Author(s) | Model name/utility | Approach/theory | Highlights |
|-----------------------------------|--|---|---|
| Rest (1983) | Ethical decision- making model | Social and cognitive psychology | Emphasis is laid on morality with reference to psychological processes of moral behaviour. |
| Ferrell and Gresham (1985) | Contingency model | Differential association, role set CMD theories | The model shows how both individual and organizational factors affect employees' ethical decision. |
| Trevino (1986) | Person-situation interactionist model | Relation exchange theory | The model presents individual and situation variables that determine individual response towards ethical dilemma. |
| Hunt and Vitell (1986) | Descriptive marketing model | Normative and positive theories | The model focuses on problem identification and evaluation based on individual perception. |
| Bommer et al. (1987) | Behavioural model | Relation exchange theory | Expanding on Trevino's model, the behavioural model incorporates environmental influence outside an organization and individual decision process. |
| Dubinsky and Loken (1989) | Ethical decision- making model | Reasoned action theory | The model focuses on individual rational behaviour that stems out of intention and attitude of an individual. |
| Stead et al. (1990) | Integrative model of ethical and/unethical behaviour | CMD theory and social learning approach | The model reveals that decision history developed over time and organizational factors have the most significant impacts on the ethical behaviour of employees. |
| Jones (1991) | Issue-contingent model | Moral intensity theory | In this model, there is more emphasis on the effect of the characteristics of moral issue on employees' behaviour and ethical decision-making. |
| Brass et al. (1998) | Social network model | Social network theory | Decision-making can be influenced by; organizational factors (e.g. codes of ethics), individual and issue-related factors and the influence can be moderated by the existing relationship within an organization. |
| Malhotra and Miller (1998) | integrated model of ethical decision-making | Hybrid theories | Unlike other models, it considers the views of all parties concerned with ethical decision-making process in marketing. |
| Schwartz (1999) | Causal model | Normative and positive theories | The model describes code of ethics as a situational variable that influences ethical decision-making both directly and indirectly. |
| Sama (2006) | Four-quadrant model of Multinational Enterprises ethical behaviour | Integrative social contracts theory | The model explains the factors that drive corporate choices in the adoption and implementation of codes of conduct, and the relative power of relevant communities to the process. |
| Majluf and Navarrete (2011) | A two- component Model of Ethical Behaviour | Descriptive approach | The model shows how explicit and implicit components of a compliance and ethics program influence employees' behaviour which in turn leads to improvement in company's economic performance. |

2.4.2 Theoretical implications of the models

Having reviewed the empirical and theoretical models of ethical decision making, some inferences could be made from the examined relevant models in the literature. The findings revealed that several individual models are based on diverse philosophical theories, while some models combine two or more theories to support their arguments. Thus, studies of ethics management models are majorly theoretical and prescriptive rather than empirical and descriptive. The reviewed models can be broadly categorized into two groups based on their developmental trends. The first category focuses on individual as the starting point of decision making process while the second category on the contrary focuses on organizational perspective.

2.4.2.1 Decision making models based on individual reasoning

Critical review of the existing models in this study reveals that models developed from 1980-1990, focus their attention on the individual as the starting point of decision making process. The models include: (Rest 1983; Ferrel and Gresham 1985; Trevino 1986; Hunt and Vitell 1986; Bommer et al. 1987; Dubinsky and Loken 1989; and Stead et al. 1990). For example, Rest (1983); Ferrel and Gresham (1985); and Trevino (1986) models are based on cognitive theory which is a learning theory that explains human behaviour based on the thought process. The theory holds that individuals make decision that best represent their choices based on personal reasoning and level of cognitive moral development (Stead et al. 1990). Although, Trevino (1986) offers a general theoretical model by considering other situational factors, which serve as moderators to individual moral development.

Again, some of these models (Ferrel and Gresham 1985; Hunt and Vitell 1986; Dubinsky and Loken 1989) focus on marketing ethics. They argue more on the approaches of individual marketer or marketing researcher in dealing with ethical issues. These models lack a sense of

generality as argued in the later model of marketing researcher by Malhotra and Miller (1998) who posit that marketing researchers cannot operate in isolation and therefore consider the perspectives of other stakeholders. There are diversities of factors that becloud individual ability to rightly make decisions. Bommer et al. (1987) expanded on these factors and explained how the factors influence the initial knowledge of an employee to arrive at a particular decision that later manifest as behaviour. Other studies as well identified varied factors as discussed in the models. This implies that there are no consensus on the factors that influence individual decision making process.

2.4.2.2 Decision making models based on organizational perspective

Jones (1991) challenges the paucity of research in ethics despite the focus of the society on ethics in the organizations claiming that previous models emanated from psychology-based disciplines. Thus the shifting in the focus of decision making studies from individual level to the level of organization was traced to Jones' work. The decision making models (Jones, 1991; Brass et al. 1998; Malhotra and Miller, 1998; Schwartz, 1999; Sama, 2006; Majluf and Navarrete, 2010) in the last two decades have shifted attentions and now focus on organizational level. Although, these models do not rule out the contribution of previous models, they serve as supplements and indicate a shift of direction to recognizing organization as a platform for decision making formation.

Studying these recent models, revealed general theories such as "moral intensity" (Jones, 1991) which focuses on the level of moral content of an issue (issue-contingent) to determine behaviour that emanates from employee's decision rather than individual cognition style. The argument here is that issues do not occur in isolation but occur as a result of interaction of individual with others either in the society or organization. Brass et al. (1998) develop a model based on social

network theory, building on the identified variables that influence decision making, the study (Brass et al. 1998) emphasizes on the influence of social relationship in a practical organizational environment on employee's ethical decision. Similarly, individual variables are not emphasized in Sama's (2006) model rather; the major focus is on firms, external and internal factors that influence ethical behaviour within an organization. Also, Majluf and Navarrete (2010) model describes behavioural decision making process around the nucleus of organizational context. These two models are structured in the direction that suit moulding employees' behaviour by organizational activities. The models emphasize on the impact of codes of ethics (as a major variable) on corporate employees' behaviour.

2.4.2.3 Inferences from the ethical decision making models

This section attempts to summarize the theoretical judgment deduced from the reviewed models. Some of the models discussed above aim at identifying main ethical rules that guide individual decision making process. However, some models depend mostly on ethical theories (e.g. Hunt and Vitell, 1986) which combine teleological and deontological approaches. While some other models posit that theories are manifested in the process (for example, Trevino, 1986). Other models as well rely on different other theoretical principles like cognitive moral development theory (e.g. Rest, 1983; Stead et al. 1990). It is discovered that there are some overlapped variances by some studies (e.g. Hunt and Vitell, 1986). Nevertheless, the models try to describe the concept of resolving issues by an individual. The current study argues that individuals cannot occur in isolation and their sense of judgment cannot always be relied upon whenever they are recognized as members of organization. It is therefore logical to conclude that these models seem to favour one side and may not be applicable in a general sense. Likewise, it is reasonable to

consider individuals as integral part of organization or society where they exist in order to draw a common ground concerning decision making.

Also in the second categories of the examined models, although they address decision making process from the view point of organizational context, it is not from business perspective. They fail to consider basic content of ethical decisions in business context. Couple with the fact that business organizations are guided by management principles and practices, there is need to consider the pertinence of ethical theories to management approach. In a dynamic and complex organization like construction that is characterized by unstable and momentary relationship, employees' decision making cannot be attributed to certain sets of variables established from other discipline. Therefore, there is need for more research to look into the factors underpinning employees' behaviour within the construction organizational context.

Model formulation appears to be theoretical based and as such does not always transform its applicability directly in real practice. The current study argues that there is lack of universal ethical theory which leads to conflicting theoretical guidance for individuals whenever employees are to choose from mutually exclusive alternatives for proper action. Meanwhile, in the study of construction industry in Hong Kong, Fan and Fox (2009) argue for ethical decision making models which are capable of addressing the tension between theory and practice. However, in the last decade, research attention seem to have been shifted from philosophical and psychological based model formulation in addressing ethics-related issues in the business world to adoption of codes of ethics since its identification as a significant factor that influences behaviour. This is because of the perception that mere adoption of ethical codes seems to produce a positive impact on the behaviours of organizational members (Adams et al., 2001). Also, the understanding that organization's performance and capabilities can be undermined by

unethical decisions has brought significant awareness about codes of ethics in organizations which has in turn created avenue for research.

Based on the findings, it is argued further that the development of models is not sufficient enough to influence behaviour of employees in an organization (e.g. construction companies). As much as the models are useful in shedding more lights to the understanding of ethical decision making, the nature of their complexity and the theory behind them make it difficult for employees to fully comprehend and apply them in their day-to-day business decisions. Rather than struggling with the adoption and application of ethical decision making model, organizations have adopted codes of ethics as tools for molding employees' ethical decision making. Except for few models (Rest, 1983; Malhotra and Miller 1998), all the examined models identified a code of ethics as a major variable that influences ethical decision making and has become a major corporate tool endorsed by organizations (Schwartz, 2001) and acts as a facilitator for decision making process (Brass et al., 1998; Ferrell and Gresham, 1985). Stead et al. (1990) argue that code of ethics are perhaps the most evident indicator of an organization's ethical philosophy. Following this trend, the next section focuses on corporate codes of ethics developmental process.

2.5 Corporate codes of ethics development process

The previous sections discusses the concept of codes of ethics in general and also examines some decision making process from the literature. It was established from the analysis of the models that code of ethics is a fundamental tool commonly used in decision making process. Therefore, this section focuses on development process of codes of ethics. According to Messikomer and Cirka (2010), leaders of organizations should concentrate their efforts on valid ethical codes development process. Numerous studies, such as, Messikomer and Cirka (2010), Kaptein and

Schwartz (2008), Verbos et al. (2007), Rezaee et al. (2001), Trevino et al. (2000), Cleek and Leonard (1998), Kaptein and Wempe (1998), argue for more integrated study of ethical codes that will consider all the developmental process of codes.

There are four stages of code development process as identified by Schwartz (2002) as shown in Figure 2.3. These stages are crucial to the current study. The review of past studies relevant to each stage is carried out in this section for better categorization and understanding of the process flow. The current study opts for Schwartz's classification which can easily be adopted internally rather than Mamic (2005) classification (Figure 2.4), which involves dialoguing with external stakeholders, because this study focuses on ethical codes implementation within an organization.

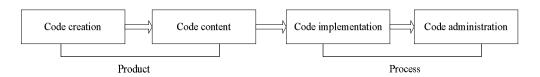


Figure 2.3: Corporate codes of ethics development process

(Adapted from Schwartz, 2002)

The above process is akin to the framework developed by Mamic (2005) for developing a code of conduct. The framework also includes four stages as shown in Figure 2.4. The first element of Mamic's classification (i.e. creating a shared vision) describes company's effort in determining and outlining their target achievement which a code of conducts would assist in realizing. Subsequent to this, the company ensures that those whom the code is addressed to understand the content and fully aware of their obligations and responsibilities, this is achieved at the second stage. The first two stages are most conducted internally to involve employees, and unions. Considering the implementation of code of conduct which is the third element, Mamic (2005) argues that some important considerations have to be in place including the structure of the

organization and the responsibility of the department saddled with code implementation task to other departments of the company. The last element as indicated in the framework deals with feedback from assessment of the whole process so as to remedy any observed problems or improve on the existing mechanism. Although, this framework is relevant to this study, it was declared to have reflected how code of conduct is being implemented by multinational enterprises and suppliers; it does not depict a standard tool for general management system (Mamic, 2005).

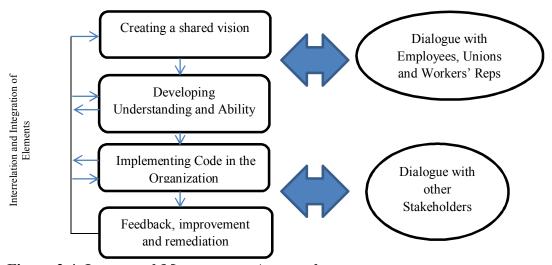


Figure 2.4: Integrated Management Approach

(Source: Mamic, 2005)

In this study, Schwartz's (2002) classification is adopted. All the four stages involved in the developmental processes are described in detail. Based on the categorization of the processes into four stages, further analysis of past studies was conducted by examining relevant studies that relate to each of the individual stages. The methodologies adopted and the findings from the studies were presented as shown in Table 2.2. It was revealed that studies that focused on codes creation mostly adopted conceptual and descriptive approaches, content analysis was common

for studies on code content. Questionnaire and interview survey were predominantly used for studies that focused on code implementation as well as code administration.

Table 2.2: Research on codes of ethics development process

| Author | Methodology/Approach | Focus and insights | |
|-----------------------------------|--|--|--|
| Code creation | | · | |
| Payne et al. (1997) | Descriptive approach | Qualitative characteristics of ethical codes, problems of codes designing, and the standards for developing codes were examined. | |
| Weaver (1993) | Descriptive approach | Ethical codes should not be drafted as legally binding document. | |
| Weaver and Trevino (1999) | Survey | The values derivable from prescriptions of ethics code design are not certain. | |
| Robertson and Fadil (1998) | Philosophical and conceptual analysis | Culture-based framework for creating corporate codes of conduct which could influence decision making of expatriate managers in foreign subsidiaries was proposed. | |
| Tucker et al. (1999) | Survey and content analysis of codes | Code is majorly developed or created by a committee to present a roadmap to the employees. | |
| Schwartz (2002) | Interview, conceptual and document analysis | Creation of a code of ethics for guiding corporate conduct by means of universal moral standards, provide a room for improvement on the existing codes of the observed companies. | |
| Lawton (2004) | Descriptive approach | Context of the code must be considered in the process of enhancing code effectiveness. | |
| Gaumnitz and Lere (2004) | Descriptive and Conceptual approach | The dimensions by which code can be analyzed in terms of a classification scheme are "length, focus, level of detail, shape, thematic content, and tone". | |
| Sama (2006) | Conceptual approach | Internal and external factors that are responsible for firm behaviours and capable of guiding code creation were examined. | |
| Messikomer and Cirka (2010) | Longitudinal approach | In accordance with Newton's (1994) framework which includes participation, content validity and authenticity of leadership as the three essential dimensions of ethical validity, a code of ethic was developed for a newly formed national professional organization. | |
| Code content | | | |
| White and Montgomery (1980) | Code content analysis | Majority of the codes examined focus on conflict of interest among organizational employees and how to address the issue when it arises. | |
| Cressey and Moore (1983) | Code content analysis | Codes focus on social responsibility and unethical conduct that may decrease organization's profit. | |
| Robin et al. (1989) | Code content analysis | Code contents were found to be either rule-based and specific or value-based and broad. The study suggested that codes should be specific and value-based. | |
| Langlois and Schlegelmilch (1990) | Code content analysis | There are differences between the content of US and European codes of ethics. | |
| Raiborn and Payne (1990) | Descriptive approach | Content of codes were illustrated via four fundamental moral principles of; integrity, justice, competence, and utility. | |
| Anderson (1992) | Comparative analysis of codes with ACM | Using code of ethics for the Association for Computing Machinery (ACM) as model, there are needs for improvement is code contents of the organizations. | |
| Lefebvre and Singh (1992) | Code content analysis | Based on the study code contents majorly focused on protection of the firms in Canada. | |
| Weaver (1993) | Descriptive approach | Content that are commonly included in the codes of ethics are identified. | |
| Murphy (1995) | Questionnaire survey | Information that is pertinent to industry is not contained in most of the codes examined across 257 large companies of US. Showing that there is still room for improvement in the corporate ethics statements. | |
| Farrell and Cobbin (1996) | Code content analysis of Australian enterprises | Contents reflect company's protection and are aimed at company's employees and managers with less focus on directors. | |

| Farrell and Farrell | Language structure analysis | The choice of language and the grammatical structure adopted in writing the codes are rather restricting addressees | |
|----------------------------|-------------------------------------|---|--|
| (1998) | of codes | instead of empowering them to make ethical decision. | |
| Emmelhainz and | Code content analysis of | Although majority of firms have codes, there are evidences of inhomogeneous across codes with insubstantial details. | |
| Adams (1999) | firms | | |
| Snell et al. (1999) | Code content analysis, | Prime motive of code content was suggested to be corporate self-defense in Hong Kong companies. | |
| , , | interview and survey | | |
| Tucker et al. (1999) | Code content analysis and | Similarities and differences across a large sample of professional codes of ethics were examined through conceptual and | |
| , , , | survey | descriptive content analyses. | |
| Wood (2000) | Code content analysis | Contents of codes of ethics in Australia were compared with that of USA and Canada and the study reveals that although, | |
| , , , | - | the cultures of the three nations seem to be driven by the same motive of code development, Australian codes reflect | |
| | | some characteristics that differentiate them from the other two nations. | |
| Van Tulder and Kolk | Code content analysis | The study examines the monitoring and compliance mechanisms embedded in the codes and finds that diverse sourcing | |
| (2001) | _ | strategies and background affect code contents. | |
| Gaumnitz and Lere | Code content analysis | Code contents were grouped into nine major categories. Only "confidentiality" was mentioned in all the codes examined | |
| (2002) | - | out of the nine specific requirements. | |
| Jakubowski et al. | Code content analysis | The research comparatively examines the similarities and differences among eight countries regarding the codes of | |
| (2002) | | professional conduct of chartered accountants. The study reveals that some codes are culture free while some are hinged | |
| | | to cultural value of a particular nation. | |
| Kolk and Van Tulder (2002) | Code content analysis | The study analyzes codes of ethics to examine how child labour is been addressed by the codes. | |
| Schwartz (2002) | Interview, conceptual and | The content of codes was examined by setting initial universal moral standards through which all corporate codes of | |
| (====) | document analysis | ethics can be ethically evaluated. | |
| Lawton (2004) | Descriptive approach | Universal contents of codes were identified | |
| Kaptein (2004) | Code content analysis | Codes of ethics of two hundred largest companies in the world were examined and variations in code contents were identified. | |
| Schwartz (2004) | Semi-structured interview | Code contents alongside other code processes (i.e. creation, implementation, and administration) were examined to demonstrate their effectiveness in influencing behaviour. | |
| Singh (2006) | Code content analysis | Majority of the codes were centered on conducts against the firm rather than conducts on behalf of the firm. | |
| Lugli et al. (2009) | Code content analysis | The study examines the relationship between sector characteristics and the contents of the codes of ethics, which relatively determine the principles behind code writing in Italy. | |
| Messikomer and | Longitudinal approach | The "code content" referred to as "product" obviously guide the ethical conduct of employees but is not enough to | |
| Cirka (2010) | | influence its ethical validity. | |
| Preuss (2010) | Code content analysis | Organizations concentrate more on the visible contents whereas other important aspects are often neglected. | |
| Fredericks and Ngan | Code content analysis and | Code contents among Malaysian companies give little or no consideration for stakeholders' participation. | |
| (2011) | questionnaire | | |
| Erwin (2011) | Code content analysis | There is a significant relationship between code quality and CSR performance. | |
| Code | · | | |
| implementation | | | |
| Kohls et al. (1989) | Survey | Ethics training programs influence employees' attitudes. | |
| Cohen et al. (1992) | Descriptive and Conceptual approach | Ethical conflict and uncertainty avoidance affect code implementation. | |
| Delaney and Sockell | Questionnaire survey | Ethics training program has a positive effect on employees but unfortunately, few companies make provision for such | |
| (1992) | | training. | |

| Weaver (1993) | Descriptive approach | Necessity of code implementation depends mostly on the intention of top management for adopting codes. | |
|------------------------------------|---|--|--|
| Stevens (1994) | Literature review | Ethics research should focus less on content analysis but more on effectiveness of codes and its communication. | |
| Murphy (1995) | Questionnaire survey | Codes of ethics is confined and disseminated within the US industry, thus external stakeholders do not know what the | |
| | | codes communicate. | |
| Farrell and Cobbin | Questionnaire survey | The study shows that codes of ethics were generally often adopted by firms but there seems to be lack of training to | |
| (1996) | | support its proper implementation. | |
| Nijhof et al. (2003) | Analytical, conceptual, and | Assessment method, based on the EFQM model, which will assist organizations that have a code to effectively | |
| | case studies | implement it was developed. | |
| Adam and Rach- | Questionnaire survey | The study examines two methods of code implementation (formal and informal). "Social norms of the organization" is | |
| Moore (2004) | | perceived by employees as one of the informal methods of code implementation that influences them most. | |
| Ho et al (2004) | Case study and interview | It was found that laissez-faire approach was adopted in implementing codes of ethics. | |
| Lawton (2004) | Literature review | Codes of ethics can be implemented by enforcing it. | |
| Schnebel and Bienert | Descriptive approach | The study described the means of communicating code of ethics to ensure its proper implementation in the web of | |
| (2004) | | business organization. | |
| Mamic (2005) | Interviews | Emphasis was laid on training and education as means of proper implementation with the help of IT systems for | |
| | | integration. | |
| Sama (2006) | Conceptual analysis | Stakeholder dialogue, partnering effort and regulatory enforcement will aid code implementation. | |
| Helin and Sandström | Interviews | The outcome of code implementation could not strengthen the ties between parent and subsidiary companies due to | |
| (2008) | | cultural differences. | |
| Ho (2010) | Literature review | Conceptual framework for implementing ethical codes was developed. | |
| Jalil et al. (2010) | Descriptive and analytical | The study describes the importance of ethical practices and how to implement them in business organizations. | |
|) ('1 1 | approach | | |
| Messikomer and | Longitudinal approach | A guiding model for implementing code of ethics in an organizational context was provided. | |
| Cirka (2010) | Occasticamenta summar and | Manitaria a the masses of implementation is annulusional | |
| Van Zolingen and Honders (2010) | Questionnaire survey and interview | Monitoring the process of implementation is emphasized. | |
| Svensson et al. | Questionnaire survey | The study measures the implementation properties (including: surveillance/training, internal communication, external | |
| (2010) | Questionnaire survey | communication and guidance) of organization codes of ethics for public and private sector in Sweden. | |
| Majluf and Navarrete | Questionnaire survey | Compliance and ethics program are shown to have a significant and positive impact over: (1) Value Consistency in | |
| (2011) | Questionnaire survey | employees' behaviour; (2) the Presence of Ethical Conflicts in organizations; and (3) the perceived importance of ethics | |
| (2011) | 1 | as a key factor to improve economic performance. | |
| Svensson et al. | Questionnaire survey | A cross-national test of codes of ethics embeddedness (i.e. Australia, Canada and US) in organizations using four | |
| (2011) | 2 | constructs including surveillance/training, internal communication, external communication and guidance was conducted. | |
| Beeri et al. (2013) | Longitudinal study of 108 | There is a significant improvement in ethical behaviour of employees a year after code was implemented compared with | |
| (2010) | employees | before implementation. It emphasizes the effectiveness of ethics program. | |
| Code | , | , p. 12. 12. 12. 12. 12. 12. 12. 12. 12. 12 | |
| administration | | | |
| Murphy (1995) | Questionnaire survey | Emphasis was laid on "sanctions" as a means of enforcement. | |
| Nijhof et al. (2003) | Analytical, conceptual, and | | |
| 1 (1,1101 00 41. (2003) | case studies | reporting ethical related issues. | |
| Mamic (2005) | Interviews | Framework for monitoring codes of ethics and reporting ethical issues was developed. | |
| | | Procedures for compliance/enforcement of codes of ethics as well as penalties for breaching code are examined. | |

Further analysis of past studies on ethical codes development is shown in Figure 2.5. It is obvious that during the 80s, studies about code development process were not prominent which could be traced to the period of dominance of decision-making theories and models as tools for addressing ethical issues. There were more attentions on this research direction during the 90s. Indeed, research on code development process have witness significant increase in the last 15 years, indicating an increase in research interest in this direction. Having reviewed studies for the past three decades about ethical codes developmental processes, it was discovered that there is need for further study.

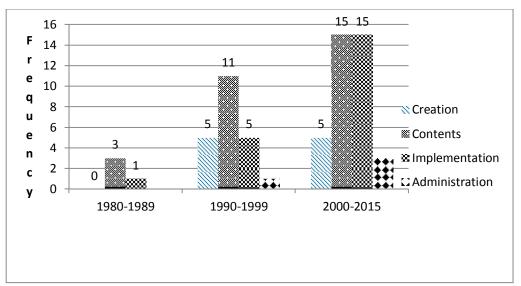


Figure 2.5: Research coverage on code development process

2.5.1 Code creation

This is a stage at which an organization decides on the objectives of creating a code as well as stakeholders that must be involved in the process (Schwartz, 2002). This stage is crucial and could be influenced by organization's size, culture and nature of business among others (Weaver, 1993). Mamic (2005) opines that management should recognize the complexity of this stage and get the stakeholders involved. In the study that focused on the construction of a living code of

ethics for a newly established national professional organization, the National Association of Senior Move Managers (NASMM), Messikomer and Cirka (2010) argue that the process of code development remains understudied in contrast to work that examines code content. Nevertheless, researches reveal that codes of ethics have been widely adopted by organizations across the globe. Compilation of previous studies on code creation (Figure 2.5) it has so far received less research attention compared with code content and implementation.

2.5.2 Code content

Code content has various dimensions (Carson et al., 2008). According to Murphy (1995), code content should be assessed based on the information that is relevant and pertinent to the industry. Weaver (1993) describes code content in the context of organizational settings by identifying common inclusions in the codes of ethics, grouped into five categories viz. (1) general matters (2) company's nature (3) employee issues (4) legal matters (5) organization's status and market actions (6) responsibilities to the society. Schwartz (2002) categorizes the code content from the perspective of a set of moral standards. Schwartz (2004) and Gaumnitz and Lere (2004) identify similar dimensions to code content which include: the length and tone of the code, justification for the code, detail/description of the code and demand/expectation of the code. Robin et al. (1989) present a slight different dimension to code content centered on whether codes are rule-based and specific or value-based and broad. The study suggests that codes should be specific and value-based rather than broad and rule-based. The argument is that ethical codes should not be too broad but specific in nature for easy comprehension in order to clearly state values embraced by an organization

Table 2.2 presents the findings from previous studies with respect to code content. It can be concluded from the reviews that code content, according to Schwartz's classification, has been

overwhelmed by previous studies. Thus, research focus should shift from what the content of code is or what a code can do, since the problem of code adoption does not correlate with its content (Helin and Sandström, 2008). Also, Figure 2.5 shows the trend of research on code content. The analysis revealed that code content among other code developmental process received more attention in literature than other stages during the last two decades.

2.5.3 Code implementation

There are two terms commonly used to describe the management of ethical codes within an organization according to McCabe et al. (1996, p. 464) namely: (1) "implementation" of ethical codes referring to the extent to which an organization attempts to communicate its code to employees and ensure compliance and (2) "embeddedness" of ethical codes, describing the degree to which the code is integrated into the organization's culture. Both the implementation and embeddedness as described here connote what is expected of an organization in the attempt to ensure that ethical expectation is properly met within a company. According to Kaptein and Schwartz (2008), implementation process of the codes of ethics is one of the determinant of the extent to which the conduct of management and employees is steered by ethical codes. Although codes cannot be effective unless distributed to employees (Weaver et al., 1999b), the distribution alone is not sufficient because there is no certainty that the employees will read it (Kaptein and Schwartz, 2008). This implies that mere distribution of codes to members of an organization does not guarantee effective implementation.

Code implementation has received increased amount of research last 15 years as shown in Figure 2.5. Methods of implementing codes of ethics can be grouped into three categories (viz: formal, informal and personal methods) according to Adam and Rachman-Moore (2004). Formal method is commonly specified and used by business organizations which include; training and courses,

and means of enforcement (e.g. conferences and ethics officers). Example set by manager and the social norms of the organization are categorized as informal methods. The study reveals that the later (i.e. social norms of the organization) has the most significant influence on the conduct of employees. The last method "personal method" is regarded as individual controls in terms of ethical standards. These methods of code implementation are further explained in the following sections.

2.5.3.1 Formal method

Training/courses on the subject of ethics

Researchers have demonstrated the importance of training in implementing codes of ethics. This involves the efforts of the organization in making the employees know what is expected of them which will invariably influence their ethical decision making. Evidence abounds from literature about the effectiveness of training as a means of implementing codes of ethics. Study by Kohls et al. (1989) found that there is a significant positive change in the attitude of employees of companies with ethics training more than companies without ethics training. Similarly, Beeri et al. (2013) affirm that there is a significant improvement in ethical behaviour of employees a year after code was implemented compared with before implementation.

Researchers such as Delaney and Sockell (1992); Mamic (2005); Webley and Werner (2008); Jalil et al. (2010); Svensson et al. (2010) and Majluf and Navarrete (2011) consider ethics training program as an effective method that has positive impact on employees' ethical behaviour. However, few companies make provisions for training program (Delaney and Sockell, 1992; Farrell and Cobbin, 1996). Tow and Loosemore (2009) inquire into the organizational factors that restrain and inspire ethical behaviour in the construction and

engineering industry and find that the absence of ethics training programs is one of the major factors that inhibit ethical behaviour of construction organization workers.

Means of enforcement

Findings from the review imply that communication is a major means of implementing codes of ethics. Ho (2013) emphasizes that a corporate code of ethics must be properly communicated so as to correctly influence the ethical behaviour of employees. In addition to that, Schnebel and Bienert (2004) point out the importance of moral communication which include; improvement in efficiency of organizational communication processes, ease of agreement on substantial issues and emphasizing on goals and targets in an ethical manner. Also, researchers like Stevens (1994), Svensson et al. (2010) and Svensson et al. (2011) emphasize the position of communication in proper implementation process of codes of ethics.

However, the communication process could not be smoothened as a result of company's restriction on the process, limiting the communication within the organization thereby resulting into conflicted understanding between the employees and other relevant stakeholders which may not have access to what the company has communicated in terms of ethics (Murphy, 1995). Conversely, Ho (2013) points out that company rarely communicate ethics-related information to frontline employees. Ho (2010) proposes a framework for implementing corporate ethics code with more focus on formal methods (communication and enforcement) as shown in Figure 2.6. The framework also encapsulates corporate ethics culture including; top management support/role modeling and application ethical codes to all levels in an organization. This culture is categorized as informal methods by Adam and Rachman-Moore (2004).



Figure 2.6: Framework for ethical codes implementation process (Source: Ho, 2010)

2.5.3.2 Informal method

Example set by Manager

This method reflects manager-subordinate relationship where manager's behaviour is set to influence that of respective subordinate (Adam and Rachman-Moore, 2004). This scenario positions the manager as a role model to the subordinate. The devastating effect of this method is witnessed when the manager lack ethical manner, this will negatively influence the behaviours of others in the group or organization. Appelbaum et al. (2005) posit that the influence of deviant role models is one of the factors that makes individual to behave unethically. Also, in the study of 214 employees in China (Fu et al., 2011), it was found that ethical behaviour of successful managers had a significant impact on organizational commitment of employees.

Similarly, using 264 supervisor–subordinate dyadic data, Jiang et al. (2011) shows that supervisor's business moral values have a significant effect on respective subordinate. Other related studies are concerned with; mangers style of leadership, for example, laissez-faire approach (Ho et al., 2004), top management influence (Jalil et al., 2010; Sama, 2006; Van Zolingen and Honders, 2010). Peterson (2004) asserts that as the perceived leader integrity

increases, individual intention to act unethically decreases. It is reasonable at this point to conclude that managers with high sense of integrity and ethical intention can easily influence other members of the organization in a positive manner. The reverse is the case for managers who exhibit unethical acts. A new conceptualization of ethical leadership was presented by Brown et al. (2005) that is capable of assisting managers to conduct themselves in a way that reflects ethical character in their followers. The concept includes the following elements; being an ethical example, treating people fairly, and actively managing morality.

Organizational social norms

Employees may be compelled to succumb to some certain obligations so as to conform to the social norms of the organization as a result of pressure from group members or superior personality (Adam and Rachman-Moore, 2004). Elango et al. (2010) reveal that ethical decision-making of organization workers are influenced by the ethical standards and practices they observe in the workplace. This method could be effective when there are newly joined organizational members who may have to rely on local norms of the organization for guidance in periods of uncertainty. Hess (2007) argues that this may lead to continuity in unethical acts especially when the social pressures emanate from individuals characterized by bad influence.

2.5.3.3 Personal method

The control that lies with individual has been described by Laufer and Robertson (1997) as individual's belief to effect change within an organizational environment which is affected by the following factors; organizational policies, cultures, norms, as well as reward systems. Henle et al. (2005) argue that personality and value influence individual's behaviour rather than the environment such an individual operates. Recent study affirms that personal values is more effective in reducing unethical practices and increased work behaviour compared to value

congruence (Suar and Khuntia, 2010). In examining the impact of both individual ethics and organizational ethics on ethical intention, Elango et al. (2010) note that personal experiences and values of managers enable ethical decision-making. This implies that experienced managers can serve as good role models for other employees.

In the study of Helin and Sandstrom (2008), from the cross-cultural point of view of the implementation of codes of ethics of an American company into its Swedish subsidiary, it was found that the receivers resisted the code by reinforcing the significance of national identity. Instead of invigorating ethical discussion capable of fortifying the ties between the parent and the subsidiary companies, the result of the code implementation had a contrary effect. Helin and Sandstrom (2008) argue that the overall content of the code has not been the major problem for the members of the case organization but the main problem has been the style and the way the code was implemented.

However, it is worthy to note that an individual behavioural belief has a strong link with decision-making (Ford and Richardson, 1994). Thus, in an organization - such as construction which is believed to have been bastardized by unethical perpetrators, an attempt to adopt personal method of code implementation may prove abortive or rather ineffective. For example, if an employee believes that a proposed action may not yield a desired result, then there will be a negative disposition towards such action. Relative to code implementation, results from the review showed that attempt have been made by previous researchers to solve code implementation problem in business organizations. Nevertheless, the recommended approaches have not been yielding long lasting results. This study does not only support the approach introduced by Nijhof et al. (2003) but also canvass for more management systems approach which allow proper weave of codes into organization's web of activities.

2.5.4 Code administration

In the context of code administration, a process of governing and controlling implemented code is evolved (Schwartz, 2002). This allow for proper monitoring and feedback on identified problems which may result into management subsequent actions including; making room for improvement or provide remedy (Mamic 2005). Similarly, Nijhof et al. (2003) observe that ensuring successful implementation of codes of ethics calls for monitoring action of the management to reveal any deviation in the course of implementation and the causes of such deviation. Monitoring could be done either internally or externally or the combination of both (Mamic 2005). The focus of this study is based on internal monitoring of codes within construction organizations in order to enhance consistency and improvement of code implementation process. According to Murphy (1995), ethical misconduct by members of an organization should be consequently sanctioned by the management as a way of administering code within the organization. Unfortunately, there are few research on code administration as shown in Figure 2.5. In brief, research concerning ethical code administration is still emerging.

Having review past literatures about codes development process with regards to research attention, there is need to examine the relativeness of ethical codes in organizations. Hence, the next section focuses on codes of ethics in the context of business organizational settings.

2.6 Codes of ethics in business organizations

Organizations are group of individuals or people sharing common goals, mission, objectives and activities and are governed by formal written policies and approved procedures (Fitch, 2009). These group of people work together in a synergetic manner to solve common problems and address any challenge that may militate against achievement of their goals. Since people are of diverse opinion and behaviour, a concerted effort is required by the organization to channel

individual behaviour towards consensual decision making process. One of the most important and challenging issues in today's business world is ethical dilemma (Piper et al., 1993). Business organizations across the world are responding to this situation. The interest in the adoption of business ethics came into limelight in the 1980s, emanating from the need to address ethical decision making and since then has been increasingly embraced by organizations worldwide.

Liu et al. (2004) identify values and behaviour as the basic (latent) components of organizational culture and posit that ethics serves as the essential formation of these components. Ethics has been described as a system of moral values that allows for judging behaviour that are wrong or right (Robbins and Judge, 2012). This implies that ethics and values are interconnected, and ethics can invariably influence the formation of personal values. Liu et al. (2004) hold that although ethics relate to values, behavioural principles and standards must be referenced in order to maintain balanced operation within an organization. As far as this is true, it can be affirmed further that codes of ethics directly or indirectly influence behaviour. The model of organizational ethics (Figure 2.7) developed by Liu et al. (2004) indicates three levels of ethical influence i.e. external/societal, local/organizational and individual factors. The study focuses on local factors that affect organizations in determining the effects of codes of ethics and finally postulates that ethical behaviour within an organization affects the final project outcome.

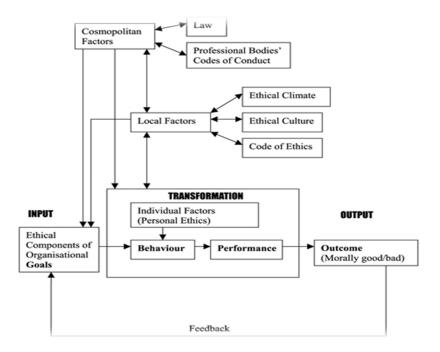


Figure 2.7: Model of Organizational ethics

(Source: Liu et al., 2004)Quinn (1997) argues that personal ethics remains the most persuasive factor whenever an individual faces ethical dilemma that requires decision making analysis. There are two stages that individual passes through in such a situation as described by Quinn (1997) namely: (1) Judgmental stage – at this point, the individual ponders on the situation in order to reflect on the best approach that will yield the most appropriate decision. This stage could be guided by deontological or teleological approach as discussed earlier; (2) Action stage – this is where individual behaviour is manifested. The action is rationalized with respect to personal values, thus, the propensity to behave in a certain way depends on the inherent personal values. This implies that personal value is driven by personal ethics which eventually leads to individual behaviour. Therefore, it is important to discuss the relationship between values and behaviour in an organizational settings.

2.6.1 Organizational values and behaviour

Organizational values according to Meglino and Ravlin (1998), remains the focus of research in organizational culture as it serves as facilitator of individual interaction, which leads to organizational survival. Organizational values create a platform for employees to act or behave in certain manners which have been pre-stated by indicating the ways things ought to be. These values may include but not limited to stakeholder satisfaction, cost control, safety measure and quality assurance (Suar and Khuntia, 2010). Dickson et al. (2001) regard organization climate (that is perception of what organizations practice and the procedures that guide the members) as a unique one based on its linkage with values.

Grojean et al. (2004) argue that direct leaders' behavioural actions are pointers to acceptable and appropriate behaviour in the organization, having examined the roles of organizational leaders in instituting value-based climate by describing mechanisms through which values are conveyed to organizational members. These mechanisms include: the use of value-based leadership, leaders setting the example, establishing clear expectation of ethical conduct, providing feedback, coaching and support regarding ethical behaviour, recognizing and rewarding behaviours in line with organizational values, consideration of individual differences, and establishing leader training and mentoring (Grojean et al. 2004). Dean et al. (2010) by examining organizational context (including; culture, climate and rewards) and ethical decision-making point out that the context of an organization influences the decision making process of an individual by exerting pressure that drives employees decision towards the achievement of organizational goals. To achieve this, it is important to determine personal value priorities by asking the employees to reveal the importance they attach to organizational values (Suar and Khuntia, 2010).

2.6.2 Interaction between organizational and individual values

Liu et al. (2004) raise an important question about whose values are to be embraced when judgment is required against certain issues by standard evaluation. The degree to which personal values coincide with organizational values reflects how both values fit into each other. This is described as the 'person–organization fit' or 'value congruence' (Verquer et al., 2003, p. 473). The concept of individual values permeating that of the organization can be considered in three ways:

- (1) Formal permission by the organization,
- (2) As an effect of rules' and procedures' ambiguity and
- (3) Individual entrepreneurial behaviour contradicting organizational behaviour (Hemingway and Maclagan, 2004).

The above points explain what happens when individual and organization values have to be managed by both ends (employees and the management board). The points elucidate how values are resolved relative to individual and organizational behaviour.

Considering the first point, the organization will permit the influence of individual values if it is in conformity with the organization's standard. The conformance of individual and organizational values is referred to as person-organizational fit or congruence. Meglino and Ravlin (1998) investigate the interaction between individual and organizational values and conclude that mutual values have the potential to influence performance within an organization especially when the values stimulate behaviours that encourage task achievement. Similarly, Sullivan (2001) examines the driving role of values in relation to behaviour and argues that, if individual values can be aligned with those of the organization, it will bring about tremendous

changes. When this happens, organizational commitment is fully encouraged being characterized by employees acceptance of the organization's values, readiness to exert extra effort to achieve organizational success and a convincing passion to sustain organizational membership (Wu and Liu, 2006).

Grojean et al. (2004) posit that ethical nature is often characterized by ambiguity and therefore reiterate the needs for the leaders to fully understand personal values as the core factor that influence behavioural choices. Since values motivate individuals' choices of behaviour, it is imperative that procedures are clearly stated relative to organizational values which will assist the employees in blending their own personal values to achieve organizational goals. Furthermore, when leaders' personal values do not conform to those of the organization, it will convey wrong notions to the members and thereby, less importance will be attached to the organizational values (Grojean et al. 2004).

In case of clash of interest where individual values conflict against organizational norms thereby generating friction and resulting into unpleasant situation, there are two options available for the employees which are: "stay" or "exit" choices (Lovell, 2002). Based on interview of selected accounting and HR professionals to reflect their actual behaviours when confronting with ethical dilemma in their various organizations, Lovell (2002) reveals that the respondents who had encountered challenges regarding their personal values indicated their choices as represented by the emboldened lines in Figure 2.8. It was revealed that although the rationale by some of the interviewees was to remain loyal or engage in blind duty, majority described it as coping with the bothering situation. Whichever the case may be, the result revealed that employees prefer to remain silent and stay or exit rather than voicing out the situation in form of whistleblowing (Lovell, 2002).

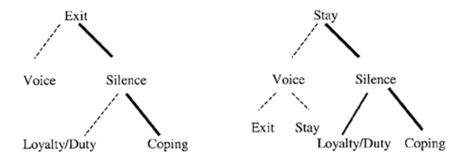


Figure 2.8: The choices of the troubled employee

(Source: Lovell, 2002)

It has been identified from the literature that personal values vary from one person to another, and also differ from organizational values (Yallop, 2010). Whenever an individual comes into an organization afresh, he/she comes with a set of inherent personal values. However, there are set of recognized values in the organizational context that guide the choice of organizational goals and, decision making evaluation is mapped such that values are being regarded. Therefore, employees are expected to align their personal values with the values embraced by the company. Some organizations have distinguished between ethical values and performance values with the emphasis on the former to prevail whenever there is conflict between the two (Rampersad, 2006). In order words, individual is expected to place ethical conduct as first priority even if it will affect the performance. Do behaviour, value and ethics interactions vary based on peculiarity of an organization? The next discussion focuses on construction industry in general with main attention on construction organizations.

2.6.3 Organizational behaviour within the construction industry

There are personality differences among people working in an organization (Appelbaum et al., 2007) and the success of the organization is dependent on the effectiveness of interactions that

exist between individuals and groups. Although the difference in personal characteristics and its effect in meeting organizational goals are great concerns to all organizations, these are peculiar to construction industry due to its complex nature (Walker, 2011). In order to achieve effective performance in the construction organizations, there is need to understand the interaction between individual and organizational behaviour (Naoum, 2001). Organizational behaviour in construction is defined as the study of behavioural attitude of individuals and groups who interact together as members of the organizations involving in construction project and how the behaviour influences the success of the project (Walker, 2011). According to Fellows (2003), organizations are formed by operating a collectively accepted ethical norms in a way that individual behaviour is greatly influenced. However, it is difficult to sustain certain behavioural pattern in the construction organizations due to its complex nature. Projects are the centre nucleus that brings people of different discipline together in construction settings and these projects are mostly one-off making it difficult to maintain long lasting relationships (Kang and Shahary, 2013; Poon, 2004).

Interdisciplinary nature of the organization implies different levels of morals and diverse manifestations of personal values which can result into ethical conflicts (Kang and Shahary, 2013). Fellows (2003) affirms that behaviour can be determined based on values by emphasizing on the relationship between beliefs, values and behaviour with beliefs at the core, values at the intermediate and behaviour at the outer layer concentrically. In order to maintain certain behaviour towards successful achievement of organizational goals, it is imperative to sustain ethical standards and values throughout a project time (Kang and Shahary, 2013). Fox (1999) argues that values have strong influence on the development of construction industry. A code of ethics has been identified from the extant literature as a tool for moderating behaviours of

organizational members, hence, it is important to discuss its prevalence in an organizational context.

2.6.4 Prevalence of codes of ethics in organizations

According to Patsuris (2002), high-profile organizations have been involving in corporate scandals and the reports have been alarming in the media. Some of the organizations involved in such malpractice include; Arthur Andersen, AOL Time Warner, Enron, Halliburton, Kmart, and Xerox as listed in corporate scandal sheet. The results of such unethical behaviour involve serious allegation against the company and their executives as well as loss of reputation. Most of the ethical malpractices in these organizations are linked to the management rather than employees. Prior to prominent peak of codes of ethics, employees' behaviour was guided by managers leading by example until the leaders perceived the need to adopt a pragmatic way of improving organizations ethical standard (Webley and More, 2003) that will subdue the risk of transferring the effect of unethical attitudes of managers to the subordinates (Hess, 2007).

As reported by the Institute of Business Ethics (IBE, 2013), pressures are on the companies through a series of external and internal factors regarding codes adoption. The first factor according to the report is intervention of Non-Governmental Organizations (NGOs). These kind of organizations are in most cases non-profit oriented, serving the interest of the public and are always ready to nail any form of unethical act to the board. The second factor is the interest of the social media outlets in scandalous stories. Media houses are frequently at alert looking for stories that will boost their business and reporters are trained to polish issues, thus, they inflict the fear of being caught in ethical malpractice upon organizations. The third factor is the devastating effect of corporate scandals. The extent of adversarial effect following any forms of scandals cannot be overemphasized. Another factor is the growing legislative inclination towards

socially responsible investment coupled with changing in expectations of stakeholders. In order to gain the attention and commitment of both employees and consumers/clients, the company must strictly adhere to its ethical responsibility (IBE, 2013). As a result of these, organizations are either being compelled or motivated to develop codes of ethics which is regarded today as a principal tool of a corporate ethics policy (Webley and Werner, 2008).

Through the intervention of researchers and academics, organizational efforts have been redirected in the past to foster ethical conduct through the use of ethical codes and programs (Treviño and Weaver, 2001). Recent research by Calabretta et al. (2011) reveal that although, there were few researchers initially, there is a progressive maturation of research in business ethics of recent. The study reflects on the understanding of the intellectual structure of business ethics over the years, affirming that theoretical foundation of the subject matter became more and more established between the year 1997 and 2002 with CSR surfacing as a dominant research topic between 2003 and 2008 to compliment the effort of ethical decision making.

Research conducted by Mamic (2005) reveals that there are growing concerns of activists, academics and consumers on labour, environmental and social issues. This occurred as a result of multinational enterprises (MNEs) adoption of flexible production methods that compelled them to dealing with several suppliers and service providers. In order to forestall these worries and to impel the practice of their business partners by setting a baseline of expected standard, a good numbers of MNEs adopted codes of ethics. The subsequent adoption of codes in this case is in response to the pressure mounted upon MNEs, demanding a pragmatic and efficient management approach that will safeguard the quality of their products as well as the reputation of the companies.

The origin and initial prominence of codes were traced back to the US, which took place around 1900 (Adams et al., 2001; Mcdonald, 2009). Consequently, adoption of codes has gone viral in many organizations across the world. The summary of rate of adoption as revealed by previous studies was compiled over a decade ago by Kaptein (2004) in which more than 50% of the case companies in the observed countries have adopted codes of ethics. In summary, according to Kaptein (2004), in an unprecedented analysis of ethical codes, 52.5% of the world's largest two hundred corporations have adopted codes of ethics. In addition, a research by Webley and LeJeune (2005) shows that sixty per cent of U.K. companies have codes.

More so, when ethical lapses in the business world became noticeable and rampant around mid1970s, it led to origination of business ethics as an academic discipline (Arnold, 2010). It is
obvious in the present days that business ethics has become more interdisciplinary compared to
when it first started as an academic discipline (Sargent, 2007). This is revealed from the
literature where many researchers from diverse fields of discipline are now keying into business
ethics as a formidable approach to solve ethical issues in business organizations and the business
ethics as a discipline itself is being reinforced by the experiences drawn from multiple disciplines
and bodies of scholarship (Arnold, 2010). With the level of adoption of ethical codes, it is
necessary to ascertain its effectiveness within organizations. The next section explores literatures
regarding code effectiveness.

2.6.5 Effectiveness of codes of ethics

Stevens (2008) reviews studies on codes of ethics that were published in various outlets and finds that most studies support ethical codes as effective tools that influence employee decision-making and molding ethical behaviour in an organizational setting. Kaptein and Schwartz (2008) also reviews the existing studies on the effectiveness of ethical codes on behaviour and reveals

that, although studies that indicate positive relationship have the largest percentage, the result is mixed. Similarly, Ho (2010) conducts a comprehensive study on the use and effectiveness of codes of ethics from the review of 51 studies between 1977 and 2008. These studies were separated into two; studies with evidence of code effectiveness on one hand and evidence of code ineffectiveness on the other. The result shows that 57% of the examined studies found that codes are effective.

Similarly, other researchers like McKinney et al. (2010) and Singh (2011) also recognize the relationship between codes and behaviour by affirming the effectiveness of codes in organizations that have adopted one. Evidences from the literature have revealed the efficacy of codes with emphasis on factors that influence effectiveness (Webley and Werner, 2008). Thus, code effectiveness has been well research and the coverage is sufficient enough, needing no further studies in the subject matter. Hence, the inclusion in this study is to briefly bring to the forefront, the previous findings about the effectiveness of codes to reinforce the need for the study.

2.7 Overview of literature on construction ethics

The study of codes of ethics is a broad field that cuts across disciplines. Therefore, the current study spreads beyond the boundaries of construction studies so as to reinforce the findings in the literature by means of thorough search. This section is carved out of the broad review for easier identification of gaps in the construction codes of ethics. To achieve this, well regarded construction journals were searched coupled with prominent journals in the field of ethics as revealed earlier. Although, codes of ethics has been in existence for the past few decades with its recognition in the field of practice such as; marketing, banking, nursing, public administration

and the likes, there seems to be dearth of research relating to ethical codes in construction study domain.

Due to multidisciplinary nature of construction industry, a good number of studies focus on professional codes of ethics; however, this study seeks to address construction from the perspective of corporate organization rather than identifying individual profession that makes up the construction colony.

Table 2.3 shows the relevant previous empirical studies on ethics in construction related research with sampling and strategies employed. Out of 22 articles, 18 studies were carried out with the use of questionnaire survey for data collection, 2 case study approach, 3 interviews, only 1 study used focus group workshop, and 3 out of the 22 articles used mixed method approach. This implies that questionnaire survey is the most commonly used research instrument for data collection with respect to construction ethics research. Also, it was found that most researchers sampled the opinions of main contractors' employees. This finding informed the choice of appropriate strategies employed for the current study.

Table 2.3: An overview of construction ethics related researches

| Author | Sample | Approach | Findings |
|--|--|---|---|
| Ray, et al. (1999) | Contractors, Subcontractors, Architects and Quantity Surveyors | Questionnaire | Companies have developed individual codes contrary to nationally prescribed codes. There is need for the development of a theoretical frame of reference. |
| Jackson (2000) | General Contractors | Questionnaire | In the US, the four most serious ethical transgressions were alcohol/drug abuse; improper bidding practices; failure to protect Public Health, Safety, or Welfare; and poor quality control. |
| Zarkada- Fraser and Skitmore (2000) | Construction estimators | Questionnaire | Higher importance was given to company's values than to individual principles and feelings of right and wrong. Thus employees engage on unethical acts to please their organization. |
| Fan, et al. (2001) | Quantity Surveyors | Questionnaire | The interests of the respondents are on their employers, their clients and themselves, neglecting general public interest. |
| Wood et al. (2002) | Employees of construction organizations | Interview | Movement towards more co-operative relations in the industry through the adoption of trust-based partnering will lead to higher ethical standards. |
| Ho and Ng (2003) | Quantity Surveyors | Questionnaire | Quantity Surveyors with higher level of education and experience tend to abstain from unethical practices. |
| Vee, and Skitmore (2003) | Project managers, Architects and building contractors | Questionnaire | Respondents are of the opinion that "Business Ethics" should be driven or governed by "Personal Ethics" and as such, there is no need for any special approach for code implementation. |
| Ho, et al. (2004) | General contracting construction organization | Case study | There was no formal approach for implementing the code at the project level. Communicating codes of conduct to project team member is at discretion of the individual project manager. |
| (Poon, 2004) | Construction managers | Questionnaire | Construction managers perceived ethical issues in a different view from other construction-related professionals. |
| Liu, et al. (2004) | Surveyors | Questionnaire | The study reveals that although, ethical behaviours have an impact on the final project outcome, there is uncertainty of the presence of ethical codes. |
| Zou (2006) | Supervisory and construction officers at different levels | Desktop studies, focus- group workshops and interviews | The study reveals that current anti-corrupt practice systems in China are reactive rather than proactive and recommends promotion of ethical culture. |
| Alutu (2007) | Civil and Structural Engineering students | Questionnaire | Findings from the study indicate that unethical practices are prevalent in Nigeria's construction industry. This result signifies the urgent need for an intervention program to be carried out through seminars and workshops. |
| Bowen, et | Architects, | Questionnaire | The study reveals that South African contractors possess a reputation for unethical practices including; collusion, |

| 1 (2005) | ~ | | |
|------------|--------------------|-----------------|---|
| al. (2007) | Contractors, | | bribery, negligence, fraud, dishonesty and unfair practices. |
| | Quantity | | |
| | Surveyors and | | |
| | Consulting | | |
| | Engineers | | |
| Sohail and | Construction | Literature | Accountability can help curbing corrupt practices and raise ethical standard within the construction organization. |
| Cavill | Professionals | review and | |
| (2008) | | field research | |
| Tow and | Construction | Questionnaire | Three factors that influence ethical conduct are; the absence of ethics training programs; lack of reward for ethical |
| Loosemor | Professionals | survey | behaviour within the industry, and the low level of "visibility" that exists within the industry. |
| e (2009) | | | |
| | | | |
| | | | |
| Ameh and | Construction | Questionnaire | Quantity surveyors are more vulnerable to bribery while Construction managers face the greatest pressure to act |
| Odusami | Professionals | | unethically among the professionals in the construction industry. |
| (2009) | | | |
| | | | |
| Kang and | Contractors and | Questionnaire | Both contractors and designers have similar perception about ethical issues in the construction industry. |
| Shahary | consulting firms | Questionnuire | Both confidences and designors have similar perception about cancal issues in the construction including. |
| (2013) | consulting inins | | |
| (2013) | | | |
| A du au | Contro at ana | Occarticanasias | The west someon mothical ansatics among Malancian contractors in hot not limited to seven mising and hid |
| Adnan, et | Contractors | Questionnaire | The most common unethical practice among Malaysian contractors is, but not limited to; cover pricing and bid |
| al. (2012) | | | cutting. |
| | | | |
| 37.41 | C 4 4 | 0 1: : | |
| Mathenge | Contractors, | Questionnaire | Shortcomings associated with the current construction and engineering process are identified and recommendation |
| (2012) | Engineers and | and interview | follows; thus ethical attention could help regenerate the whole system. |
| | Consultants | | |
| Fu and | Construction | Questionnaire | Out of the various climate types, caring and independence had a positive influence while instrumental climate had |
| Deshpand | employees | | a negative impact on organizational commitment. |
| e (2012) | | | |
| | | | |
| Nawaz | Contractors, | Questionnaire | Implementation of codes, ethics training and managers' examples can help curb unethical behaviour in the |
| and Ikram | Engineers, Clients | Questionnune | construction industry. |
| (2013) | and Consultants | | construction inaustry. |
| (2013) | and Consultants | | |
| | | | |
| Ho (2013) | Construction | Questionnaire | Ethics-related information is perceived to be insufficient by the employees. |
| | workers | | |
| | | | |
| | | | |

2.8 Ethical issues in construction industry

Construction industry is a sector that influences the growth process of a nation's economy (Chan et al., 2005) as a result of the strong linkages between construction activities and other sectors of the economy. The effect of construction practices will go a long way to affect other sectors and the infrastructural development of a nation depends on the functionality of the subject industry. Globally, the worth of construction sector is estimated to be around US\$3,200 billion per year (Cavill and Sohail, 2006). The entire construction process has a significant impact on the immediate society (Fewings, 2013; Murray et al., 2008). This sector is regularly rated as the most corrupt industry in the world. The 2005 edition of Transparency International's Global Corruption Report shows that corruption in the construction industry possess the potency not only to shape but also to devastate economies. According to Sohail and Cavill (2008), Global Economic Crime Survey examined 184 construction companies in 44 countries and found that one-third of those surveyed had experienced economic crime in one way or another, thus corruption and bribery is posing a big threat to the industry. Research from various countries in the world, for example in; USA (Jackson, 2000); South Africa (Pearl et al., 2005); Australia (Vee and Skitmore, 2003); Malaysia (Adnan et al. 2012); Kenya (Mathenge, 2012); Pakistan (Nawaz and Ikram, 2013); UK (Mason, 2009); China (Zou, 2006) and Nigeria (Ameh and Odusami, 2009) reveal the extent of unethical behaviour manifesting at different levels of construction. Common unethical practice include; abuse of company resources, misrepresentation of records, non-practice of whistleblowing, favouritism, harassment, bribery (Kang and Shahary, 2013), which have affected not only the integrity of construction industry but also its products (Rahman et al., 2007).

Illustration from the findings of Transparency International affirms the effect of corruption on construction project, attracting additional 25% to the cost of public contract thereby resulting into waste of public resources and creating unsuitable environment for business (Eigen, 2005). Hence, Vee and Skitmore (2003) indicate that the demand for a formidable ethical practice is still on the increase and that for any advancement in the construction industry to take place, ethical issues must be addressed by proper implementation and policing of ethical guidelines. Similarly, Poon (2004) also emphasizes the importance of ethics for the construction industry due to its peculiar nature and characteristics.

2.9 Ethics in construction industry (Hong Kong)

Evidences show that the construction industry of Hong Kong plays a significant role in the social-economic development of Hong Kong. The industry is regarded as both the foundation and one of the major pillars of Hong Kong's economy (Ho, 2013; Walker, 1995). Statistics reveal that construction accounted for 3.4% of the GDP in 2011 and catered for 8.0% employment of the total workforce in 2012 according to the report by Census and Statistics Department 2013. However, several non-compliant construction incidents in Hong Kong that prompted widespread public concern were uncovered during the late 1990s. This saddled responsibilities on all stakeholders in the construction industry to take a critical review of the practices and culture of the industry and explore paths for reform. It also led to the appointment of the Construction Industry Review Committee (CIRC) by the Chief Executive of the Hong Kong Special Administrative Region in April 2000 to comprehensively review the situations in the industry and to recommend improvement measures (CIRC, 2001; Ho, 2010). Although, not peculiar to Hong Kong construction industry alone, the report of the committee observed a number of shortcomings not only in the quality of industry's products but also in its operations,

pointing out some anomalies such as defective work, lack of accountability, lax supervision etc. (CIRC, 2001; Ho, 2010).

Prior to the move towards reformation in construction industry, there was a campaign by the Independent Commission Against Corruption in 1994 urging business organizations at large to adopt codes of ethics. It was reported a year later by the Hong Kong Ethics Development Centre that a good number of companies listed in the stock exchange have adopted ethical codes. Snell et al. (1999) examine the level and impact of adoption of codes of ethics among Hong Kong business organizations and found that even though, the impact of codes of ethics have been recognized with its efficacy in influencing ethical standards, some prescribed code practices were not adhere to in Hong Kong. A follow up study by Snell and Herndon (2004) examine the reasons behind this negligence of organizations not complying with the best practices prescribed. Some cultural factors were identified which are responsible for the difference in theory and practice of codes, including, power distance and traditional legalist assumption (Snell and Herndon, 2004).

In response to the report directed by the Hong Kong Government, the Hong Kong Ethics Development Centre of the Independent Commission Against Corruption (ICAC) and the Hong Kong Housing Authority (HKHA) together spearheaded a business ethics campaign targeted at the Hong Kong construction industry in particular (Ho, 2010). The main theme of the campaign was that construction companies should adopt and develop corporate codes of ethics so as to cultivate an ethical ethos both at the individual and company levels. This was due to the report that both the general public and the Government perceived the need for a sound corporate ethical behaviour and ethics management in the industry. Despite the this effort, Corruption Perceptions Index (CPI) of Hong Kong dropped down from 12th in 2011 to 14th in 2012 in ranking as

reported by Transparency International in 2012, and corruption reports across various sectors in Hong Kong revealed that building management and construction sector account for 51% in 2011 (Figure 2.9) which makes construction a more dangerous sector to the image of the nation.

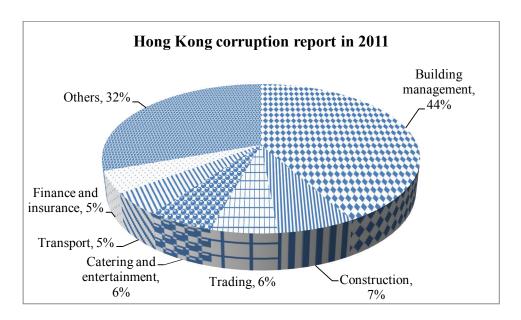


Figure 2.9: Private sectors' reports of corruption in Hong Kong

Source: ICAC (2012)

Fan and Fox (2009) identify nine ethical problems which are commonly observed in the Hong Kong construction industry. These include: bribery, favouritism, falsified documents, lying, collusion, abuse of authority, disclosure of confidential information. This indicates the prevalent level of ethical issues in the industry. Therefore, in a report titled "Hong Kong Construction Industry Vision 2020", five strategic focused areas that are essential to the successful growth and prosperity of the industry and community was expressly stated, indicating what is still needed to be done to ensure Hong Kong's construction industry remains regionally competitive, and delivers infrastructure that improves the quality of life to fulfil the aspirations of the people of Hong Kong. One of the major focuses is the adoption of business ethics by integrating ethical codes.

Consequently, with the increase in unethical behaviour in the industry, contractors have always been at the centre of any blames resulting from any construction anomalies (Adnan et al. 2011). This is connected to the fact that contractors are responsible for physical manifestation of efforts of other stakeholders and such, their operations have a direct impact on the public. In corroboration, Vee and Skitmore (2003) posit that construction contractors are reputed for unethical behaviour in the industry, instigated by the influx of new construction firms with new employees who lack construction ethics, coupled with greed of the main contractor leading to corporate misconduct. Laufer and Robertson (1997) reveal that the alignment of the behaviour of the employees and managers with the codes will determine how the behaviour of others in the organization will be positively influenced. Thus, the current study focuses on contracting organizations with respect to their codes of ethics.

With changing environmental conditions in Hong Kong, accompanied by rapid industrialization and characterized by an intense pressure to make profits, Chen (2001) argues that unethical behaviour may, inadvertently, become more tolerable compared to western countries. Fan and Fox (2009) identify nine ethical problems which are commonly observed in the Hong Kong construction industry. These include: bribery, favouritism, falsified documents, lying, collusion, abuse of authority, disclosure of confidential information. This indicates the prevalent level of ethical issues in the industry. Therefore, in a report titled "Hong Kong Construction Industry Vision 2020", five strategic focused areas that are essential to the successful growth and prosperity of the industry and community was expressly stated, indicating what is still needed to be done to ensure Hong Kong's construction industry remains regionally competitive, and delivers infrastructure that improves the quality of life to fulfil the aspirations of the people of Hong Kong. One of the major focuses is the adoption of business ethics and implementation of

ethical codes in organizational routine. With regards to ethical code adoption, it has been reported that many companies in Hong Kong have codes of ethics (Chen, 2001; Snell et al., 1999) but lower percentage of such companies have ethics control mechanisms (Chen, 2001).

A number of studies on the implementation of codes of ethics in Hong Kong have been reported in the literature (Snell et al., 1999; Snell and Herndon, 2000; 2004), using several firms across diverse sectors of the economy. The studies conclude that code adoption did not translate into any significant improvement in conduct, even some times after the adoption of codes. In line with this, Ho et al. (2004) point out that the failure of the code in influencing ethical conduct is inherent in the way the code is managed, especially within construction organizations in Hong Kong. The study (Ho et al., 2004) reports an assessment of an international construction company regarding the implementation of corporate codes in Hong Kong and reveals that laissez-faire approach was adopted by the company in implementing its corporate code. Also, senior management of many construction companies claim that their organizations have produced corporate code of ethics, but they simply do not know how to implement and embed it in their organizations' culture. Ho (2010) reveals that few studies about codes of ethics focus more on creation, adoption and content of codes while the implementation aspect seems to be neglected. Meanwhile, according to Ho (2011), the existence of a corporate code is no longer sufficient to steer ethical conduct within construction organization.

As noted by Chen (2001), in a fast-paced economy like Hong Kong, ethical standards in corporate organizations should move from focusing on one's personal goals and values to being pragmatic. Also, Ho (2010) and (Ho, 2013) expounded the needs for a pragmatic approach for embedding ethical codes in construction organizations. An example of such approach was found in (Nijhof et al., 2003), involving six processes that are necessary for implementation of ethical

codes. In line with this, a framework was developed by (Oladinrin and Ho, 2015a) incorporating all the six processes of code implementation. Integrating such processes into the routine of an organization will facilitate prevention of damaging ethical misconducts while inspiring human impulses for moral thought and behaviour. According to a view shared by Paine (1994), an ethical framework can serve as governing ethos for an organization.

Looking at the ethical scenarios in construction organizations, the question that was generated is: why is the case of unethical behaviour apparently not abating especially in the construction companies despite the presence of ethical codes? With the persistent increase in the record of unethical issues in construction organizations, it is logical to conclude that if the method of implementing ethical codes is faulty and does not create room for proper administration, the effort in the whole code development process will be futile and the codes of ethics will remain dormant, thus the need to study factors affecting implementation of codes of ethics within an organization.

2.10 Factors militating against implementation of codes of ethics

In an attempt to realize the role of ethics and ethical issues, some studies have investigated factors relating to ethics and ethics management in business organizations (construction organizations inclusive). Considering enormous research about the impact of ethical codes on moderating employees' behaviour, this section identifies the factors militating against implementation of codes of ethics. Some construction specific research have scrutinized certain factors that inhibit effective implementation of ethical codes within construction companies. Ray et al. (1999) reveal that companies have developed individual codes contrary to nationally prescribed codes in Australia. This implies that the adoption of ethical codes is to satisfy selfish interest and not the interest of the public which can hinder its effective implementation in the

long run. Zarkada-Fraser and Skitmore (2000) discover that companies that have adopted codes placed higher importance on company's values than individual principles and feelings of right and wrong. Therefore, employees engage on unethical acts to please their organization. A study by Ho et al. (2004) reveals that there is no formal approach to the implementation of ethical codes at the project level, and communicating codes of ethics to project team members is at the discretion of the individual project manager.

According to Liu et al. (2004), although ethical behaviours have good impact on the final outcome of construction project, employees are uncertain about the presence of ethical codes. This is similar to the assertion by Ho (2013) which shows that ethics related information is not sufficiently disseminated within construction organizations. With reference to the study by Tow and Loosemore (2009), there are three main factors that affect ethical conduct; the absence of ethics training programs; lack of reward for ethical behaviour within the industry and the low level of visibility that exists within construction industry. Similarly, Nawaz and Ikram (2013) affirm that there are evidences of unethical behaviour within construction industry due to lack of ethics training and exemplary managers. Obviously, there is paucity of literature about the factors hindering effective implementation of ethical codes in construction organizations. Therefore, the factors presented in Table 2.4 were drawn from extensive literature review within and outside construction management studies as Chileshe et al. (2005) reveal that an interdisciplinary perspective provides more information on a phenomenon than a single point perspective. These factors are further discussed in detail and are believed to be impairing the influence of corporate ethical codes on the behaviour of employees within an organization. The identification of this factors will contribute to the achievement of objective 1: To identify and assess factors hindering effective code implementation in construction organizations.

Table 2.4: Factors hindering effective implementation of ethical codes

| Table 2.4: Factors hindering effective i | Study |
|---|--|
| Complexity of construction process | Poon (2004); Vee and Skitmore (2003); Adnan et |
| | al. (2012) |
| Employees' ignorance about ethics | Sakyi and Bawole (2009); Schwartz (2001) |
| Insufficient ethics education | CIRC (2001); Adnan et al. (2012); Suen et al. |
| | (2007) |
| Lack of exemplary leadership | Brien (1998); Webley and Werner (2008); Mason (2009) |
| Lack of commitment to written codes | Webley and Werner (2008); Tow and Loosemore (2009); Badenhorst (1994) |
| Partiality in administering codes of ethics | Sakyi and Bawole (2009); Gert (1998) |
| Copies of the codes not available to staff | Sakyi and Bawole (2009); Ngai (2005) |
| Code content are not clear enough | Frankel (1989); Webley and Werner (2008); Schwartz (2004) |
| Organizational culture | (Brien, 1998); Webley and Werner (2008); Mason (2009) |
| Selfish interest for adopting ethical codes | Webley and Werner (2008); Ray et al. (1999) |
| Unethical behaviours are often pardoned | Sakyi and Bawole (2009); Suen et al. (2007) |
| Fear of retaliating whistleblowing | Webley and Werner (2008); Mesmer-Magnus and Viswesvaran (2005) |
| Insufficient enforcement of codes | Adnan et al. (2012); Sohail and Cavill (2008) |
| Ineffective application of rewards | Tow and Loosemore (2009); Mason (2009); Ortega-Parra and Sastre-Castillo (2013) |
| Undue pressure | AMA (2006); Webley and Werner (2008) |
| Lack of proper monitoring of code | Webley and Werner (2008); Jenkins and Unies |
| process | (2001) |
| Inconsistent communication of code | Webley and Werner (2008); Sohail and Cavill (2008); Ho (2013); (Suen et al. 2007). |
| Lack of ethics training | Sohail and Cavill (2008); Nawaz and Ikram (2013); (Weber, 2007) |
| Poor control measures | Badenhorst (1994); Sohail and Cavill (2008) |
| Too much focus on profit making | Scalza (2008); Badenhorst (1994); Suen et al. (2007). |
| Non-recognition for work done | Smithers and Walker (2000); Olomolaiye (1990) |
| Value conflict | Lee and Barrett (2006); Ray et al. (1999) |

2.10.1 Complexity of construction process

The importance of ethics for construction industry cannot be overemphasized due to the characteristics of the industry such as its exposure to various dangers (Vee and Skitmore 2003). Furthermore, the industry is characterized by complex processes. For instance, there is complex working relationship among project teams due to temporary and multi-disciplinary affiliations (Poon, 2004). According to Adnan et al. (2012), most professionals in construction industry get involved in ethical malpractices due to fierce competition and high complexity of construction works.

2.10.2 Employees' ignorance about ethics

Despite the popularity and significant level of adoption of codes of ethics in various organizations, it seems that employees in most companies are still ignorant about the importance of ethics to individual employee and organization at large. In a study conducted by Sakyi and Bawole (2009) to examine the challenges in implementing ethical codes among the public sectors in English speaking West African countries by interviewing some managers, it was revealed that ignorance about ethical codes is one of the major hindrance to code implementation. Schwartz (2001) with a similar finding therefore recommends that potential ignorance can be addressed primarily by the company's ethics program such as, training and leading by examples.

2.10.3 Insufficient ethics education

Adnan et al. (2012) point out that insufficient ethical education either from college or professional institutions is one of the major reasons for failure in ethical codes integration within the construction industry. An ethics-based research in Hong Kong (CIRC, 2001) also reveals the essence of promoting ethics education for construction students, having discovered insufficient

ethics education in the construction industry. Completing ethics courses in school increases ethical awareness of the students as well as intent to be ethical in practice (Luthar and Karri, 2005; Noel and Hathorn, 2013).

2.10.4 Lack of exemplary leadership

As a consequence of lack of exemplary leadership, it is apparently difficult to bridge the gap between policy and organization's practice (Webley and Werner, 2008). Emphatically, Brien (1998) identify the leadership failure to actively encourage ethical behaviours within an organization. Personal ethics of employees can be influenced by ethical values of the organization especially, when leaders show good examples of ethical practice (Mason, 2009).

2.10.5 Lack of commitment to written codes

Lack of commitment of managers to ethical codes is one of the factors that hinders ethical behaviour within an organization (Badenhorst, 1994). Webley and Werner (2008) make it clear that no matter how well a code of ethics is structured, its efficacy can easily be undermined by lack of management commitment. For example, Ho et al. (2004) found that some construction organizations adopt a lax approach to implement their codes of ethics. Ethical inclination of employees is linked with managerial commitment to ethics (Tow and Loosemore, 2009), otherwise, employees may display little or no commitment to ethical codes.

2.10.6 Partiality in administering codes of ethics

Partiality in the administration of ethical codes indistinctly hinders code implementation (Sakyi and Bawole, 2009). This occurs in a situation where for instance, an employee that is supposed to be punished for unethical practice is eventually pardoned against what is stipulated in the written codes of ethics. Similarly, impartiality in implementing codes sets in when there is clear

evidence of favouritism such as given preferential treatment to female employees or kinsmen by officials in the organization (Sakyi and Bawole, 2009).

2.10.7 Copies of the codes not available to staff

One major barrier to ethical codes implementation is unavailability of written codes to members of an organization (Sakyi and Bawole, 2009). This is the case in a situation where a company adopts a written code with the intention to satisfy certain conditions only. For instance in Hong Kong, all companies must have a written code of ethics, a condition without which a company cannot bid for government works. In a case study of some organizations in China regarding codes of ethics by Ngai (2005), some of the interviewed employees revealed that copies of ethical codes have not been given to them.

2.10.8 Code content are not clear enough

Although codes are valuable tools for raising employees' consciousness, their ethical pronouncements to guide ethical conduct are likely to be irrelevant without meaningful interpretation (Frankel, 1989). In a clear manner, Schwartz (2004) notes that some provisions in the codes of ethics do appear to be unjustifiable, and it is necessary to provide clear justification before organization members can comply with the stated and expected conducts. Webley and Werner (2008) also argue that sending a written code of ethics to employees is not sufficient for them to understand and comply with its contents. There may be need for interpreting the contents otherwise, the implementation of the codes will be hampered. In brief, ambiguous code content is a barrier to code implementation.

2.10.9 Organizational culture

There is a relationship between ethics programmes/policies and organizational culture however, organizational culture is the determinant of the outcomes of those ethical policies (Webley and Werner, 2008). This assertion accords with Brien (1998) which reveals that organizational culture is a major cause of ethical failure within a corporate. This is because personal values and ethical beliefs is influenced by organizational culture (Mason, 2009).

2.10.10 Selfish interest for adopting codes of ethics

The authority and power conferred on professionals are sometimes used to salvage personal interests (Frankel, 1989). Ever since a code of ethics has become common tool for moderating behaviour, it has been widely adopted in various organizations for various purposes. In an environment such as Hong Kong where ethical codes are compulsory for construction organization in order to bid for government work, some organizations have adopted a code purposely to fulfil the condition for bidding for public construction projects. This is tantamount to selfish interest of adopting codes (Webley and Werner, 2008).

2.10.11 Unethical behaviours are often pardoned

There is possibility of hindering the implementation of ethical codes in an organization where ethical misconducts are not sanctioned. Badenhorst (1994) observes that behaviours that would rather be disapproved at individual level, is not only being disregarded but also embraced at a business level. This is described as prevalence of a syndrome of leniency by Sakyi and Bawole (2009), where management shows some measure of leniency and thereby pardon some obvious unethical practice that should warrant punishment in an organization. This kind of situation can hinder effective implementation of ethical codes.

2.10.12 Fear of retaliating whistleblowing

Ethical misconducts are best known to the members of an organization and they are in the best position to give sincere report of any unethical occurrence. However, an employee is faced with unmeasurable risks when deciding to blow the whistle regarding unethical practice within the organization (Mesmer-Magnus and Viswesvaran, 2005). Thus, the fear of the unknown makes some employees to cover up major illegal acts especially where there is likelihood of retaliation and alienation (Webley and Werner, 2008).

2.10.13 Insufficient enforcement of codes

Adnan et al. (2012) note that there are several reasons why practitioners are involved in unethical conducts despite the presence of codes of ethics. One of the reasons is due to insufficient enforcement of ethical codes. Having a written code is not sufficient enough to influence employees' behaviour (Ho et al., 2004) but practical approach to ensure that the code's contents are enforced. For any approaches to curbing corrupt practices to be effective, it must be accompanied by effective enforcement (Sohail and Cavill, 2008).

2.10.14 Ineffective application of rewards

Reinforcement of organizational values is influenced by proper and consistent system of reward (Ortega-Parra and Sastre-Castillo, 2013). Even though an act of rewarding compliance with ethical codes serves as motivating factor that perpetuates ethical compliance within an organization, ineffective application of such rewards can act negatively towards achieving organization's goals of ethical practices (Tow and Loosemore, 2009). For instance, if the management mistakenly reward an unworthy employee, it may send a wrong signal to other employees about the management commitment to ethics.

2.10.15 Undue pressure

One major barrier to ethical codes implementation within an organization is undue pressure to meet targets. In a survey carried out by the American Management Association to assess the factors responsible for unethical behaviour, pressure to meet unrealistic targets ranked highest (AMA, 2006). Thus, ethical behaviour can severely be undermined when management sets unrealistic targets that expose workers to undue pressure which may lead to temptation to expand output by unnecessarily cutting corners (Webley and Werner, 2008).

2.10.16 Lack of proper monitoring of code process

According to Jenkins and Unies (2001), for codes of ethics to have a real impact within an organization, there must be provisions for effective monitoring of code implementation process. Unfortunately, Jenkins and Unies (2001) find weaknesses in many organizations with respect to independent monitoring of ethical codes. Therefore, lack of attention to monitoring the process of ethical codes can lead to continuous corporate malpractice (Webley and Werner, 2008).

2.10.17 Inconsistent communication of codes

One important organizational ethics initiative is consistent communication of codes of ethics (Sohail and Cavill, 2008). According to Webley and Werner (2008), consistent communication with respect to importance of ethics forms one significant enabler for building and maintaining an ethical culture within an organization. In contrast, inconsistent communication of ethical codes can hinder the goal of code implementation (Ho, 2013).

2.10.18 Lack of ethics training

The importance of ethics training cannot be overemphasized in the process of implementing ethical codes. However, lack of ethics training will lead to lack of commitment to ethical conduct

and members of organization will not take ethical codes seriously at different levels of the company (Weber, 2007). In a recent study to examine the reasons behind incessant unethical practices in Pakistani Construction Industry, Nawaz and Ikram (2013) find that lack of ethics training is one of the major causes of ethical malpractices in construction industry. Ritchey (1990) cited in Vee and Skitmore (2003) relates the problem of unethical practices in construction industry to the influx of new construction firms with inexperienced employees who lack construction ethics, with greed being a major factor hindering the management of such companies from training their new staff.

2.10.19 Poor control measures

Developing a practical and effective method of controls for implementing ethical policies is imperative for an organization that wants to stay corruption-free (Sohail and Cavill, 2008). According to Badenhorst (1994), any organizations that fail to embrace an effective control system regarding ethics will invariably be encouraging unethical behaviour. Invariably, poor control measures about ethical codes will constitute a barrier to code implementation process.

2.10.20 Too much focus on profit making

All that matters in most business organizations is maximum profit earning irrespective of the way and manner of getting such profit. This is described as clever business according to Badenhorst (1994). Managers, especially in construction sector that is characterized with eagerness to make quick money, often prioritize profit above other business concerns, with less focus on ethics and its consequences (Suen et al., 2007). As far as profit making is important in any business setting, too much focus on it will hinder implementation of ethical standards. Meanwhile, there are evidences in past studies that affirm the existence of positive relationship between ethics and increase in company's profit (Rao, 1996; Rieck, 1998).

2.10.21 Non-recognition for work done

Obviously, workers get demotivated to comply with expected standards of their organization when their efforts are not recognized, whereby they feel non-belonging. In a study in UK by Olomolaiye (1990), it was found that construction workers are often motivated when the management recognizes work done by them. The opposite is the case whenever there is failure to recognize work done by the workers. Similar study in Australia reveals that non-recognition for work done is greatly felt by construction workers that stay mostly on site which therefore makes them reluctant in complying with company's policies (Smithers and Walker, 2000).

2.10.22 Value conflicts

In an international study conducted by Lee and Barrett (2006) about values in construction, it was observed that some stakeholders (subcontractors, suppliers) see construction value in a different way from contractors and designers. When there is conflicting values (e.g. individual and organization values), the process of decision making within an organization maybe distorted (Ray et al., 1999). It can be said that unethical decision is unlikely when there is conflicts of values in an organization.

The issues discussed above are the bottlenecks that impede the implementation of codes of ethics in most organizations without the exemption of construction companies. From the literature, there is an interesting observation that the critical success determinants for an effective code are indeed those elements found to be missing when a failure in ethical behaviour occurs. Therefore, given the multiple effects of the barriers listed above, the next section focuses on the factors that enable proper implementation of ethical codes at the organizational level.

2.11 Enabling factors for implementation of codes of ethics¹

Codes exist in different diversities; names, length, styles and content. Despite the differences, codes still have certain features in common and the central aim of codes is to influence stakeholders' behaviour within an organization by setting out the desired values, expected standards of behaviour and admired business practices (Snell et al. 1999). To ensure that code does not just exist in isolation, it is necessary to integrate it (Ho et al. 2004). Figuring out the best way to make ethics a priority is critical to successful business in the 21st century (Brimmer, 2007). One effective way both theoretical and in practice is the implementation of ethical codes. While it is important to implement a formalized code of ethics in an organization, there are certain factors that will determine its effectiveness in achieving its aim of enhancing employees' behaviour (Ki et al., 2012) as well as making the organizations responsible in terms of ethical behaviour. Inspired by the approach adopted by Nijhof et al. (2003), a total of thirty factors were generated from extensive literature review (Oladinrin and Ho, 2015e). These factors are summarized in Table 2.5, representing set of attributes and actions that are expected of a responsible organization in order to effectively integrate and embed codes of ethics. The essence of this section is to identify enabling factors for codes of ethics implementation which will contribute to the achievement of objective 2: To identify and assess factors enabling proper implementation of codes of ethics towards effective impact of codes on employees' ethical behaviour in construction companies.

¹ This section has been wholly published in: Oladinrin and Ho (2015). Enabling ethical code embeddedness in construction organizations: A review of process assessment approach. Science and Engineering Ethics Journal, DOI: 10.1007/s11948-015-9679-4.

Table 2.5: Supporting factors for integration of codes of ethics

| No | Factors | Source reference |
|----|---|---|
| 1 | Commitment of managing director to ethics | Suen et al. (2007); Salopek (2001a) |
| 2 | Consistence of codes with international standard (e.g. ILO) | Mamic (2003); Nijhof et al. (2003); Compa and Hinchliffe-Darricarrere (1995) |
| 3 | Protecting anyone who exposes alleged wrongdoing | Kaptein (2011a); Lloyd and Mey (2010) |
| 4 | Providing financial demand of codes of ethics | Schwenke (2007); Wheldon and Webley (2013) |
| 5 | | |
| 6 | Identifying situations that encourage bad behaviour | Rampersad (2006); Nijhof et al. (2003) Suen et al. (2007); Tow and Loosemore (2009) Kouzes |
| | Managers acting as role models | and Posner (2006); Appelbaum et al. (2005) |
| 7 | Regular revision of codes of ethics | Schwenke (2007); ; Nijhof et al. (2003); Montoya and Richard (1994) |
| 8 | Giving code standards with explanation to new employees | Lloyd and Mey (2010); Nijhof et al. (2003); Hemingway and Maclagan (2004) |
| 9 | Employees ethical appraisal | Svensson et al. (2009); Irvine (1987); Adam and Rachman-Moore (2004) |
| 10 | Updating code contents to reflect current ethical issues in practice | Sakyi and Bawole (2009); (DiPiazza, 2001); Montoya and Richard (1994); Adelstein and Clegg (2015) |
| 11 | Training about the importance of codes of ethics | Beeri et al. (2013); Suen et al. (2007); Jose and Thibodeaux (1999) |
| 12 | Strategic planning of the company emphasizing long-term importance of codes of ethics | Lloyd and Mey (2010); Kleiman (2013) |
| 13 | Communicating codes with employees | Ho, 2013; Nijhof et al. (2003); Kleiman (2013) |
| 14 | Regular meeting by supervisors to stimulate acting in accordance with codes | Nijhof et al. (2003); Kaptein (2011a) |
| 15 | Including guidelines for employees' decision- making in the codes | Nijhof et al. (2003); Ho et al. (2004) |
| 16 | Addressing value conflicts with codes of ethics | Svensson et al. (2009); Montoya and Richard (1994); Rampersad (2006) |
| 17 | Creating a forum for discussing ethical dilemma | Brimmer (2007); Banner and Cooke (1984) |
| 18 | Rewarding code compliance behaviour | Tow and Loosemore (2009); Rampersad (2006); Murphy (2011) |
| 19 | The use of an ethics ombudsman (investigator) | Mathenge, (2012); Adam (2005) |
| 20 | Assessing individual value during recruitment and selection | Majluf and Navarrete (2011); Rampersad (2006) |
| 21 | The use of an ethics committee | Adam and Rachman-Moore (2004); Wood (2000) Rampersad (2006) |
| 22 | Regular ethical audits | Suen et al. (2007); Rampersad (2006) |
| 23 | Fixing clear sanctions for rules of conduct | Weaver (1993); Weller (1988); Spielthenner (2015); Stevens (2008) |
| 24 | The use of a hotline system for reporting irresponsible behaviour | Webley and Werner (2008); Rampersad (2006) |
| 25 | Using indicators for detecting ethical level of organization | Adam (2005); Schwenke (2007); Nijhof et al. (2003) |
| 26 | Reporting ethically sound projects within the organization | Kaptein (2011); Schwenke (2007) |
| 27 | Focusing on areas for special attention from annual ethical report | Nijhof et al. (2003); Schwenke (2007); Singh (2011) |
| 28 | Conducting employees' critical self-evaluation | Loumbeva (2008); Webley and Werner (2008); Rampersad (2006); Ho (2010) |
| 29 | Sub-contractors and suppliers subscribing to codes of ethics | Svensson et al. (2009); Nijhof et al. (2003); Garegnani et al. (2013) |
| 30 | Establishing open communication system to challenge code themes | Nijhof et al. (2003); Kleiman (2013) |

2.11.1 Top management commitment

A sustainably ethical organization requires transformational leadership, which is characterized by an unequivocal commitment to ethical conduct in both word and deed (Schwenke 2007). Thus, identifying the barriers to ethical code embeddedness begins with assessing top managers' level of commitment to responsible, ethical entrepreneurship. Loumbeva (2008) stresses the importance of leadership commitment to ensuring the future formulation of ethical codes in organizations in a manner that places more emphasis on process and less on code content. According to Schwenke (2007), a lack of committed leadership support jeopardizes the implementation of any ethics initiative and dooms it to irrelevance. Salopek (2001a) shows that organizations with explicit commitment to code of ethics add double value to shareholders than those with lack of commitment. These findings imply that across-the-board organizational commitment to ethics can add financial value to the company in the long run. Schwenke (2007) observes that many organizational leaders are also invested in maintaining the status quo, which may also constitute a significant barrier to ethical code implementation. The following subsections describe the items (enablers) related to this process.

2.11.2 Code consistency with international agreements

The consistency of ethical codes content with international agreements such as the International Labour Organization (ILO) Conventions is another important aspect to consider, as a lack of consistency can constitute a barrier to proper implementation of codes of ethics (Mamic, 2003). Designing ethical codes around certain key principles has become common practice (Sakyi and Bawole, 2009), as doing so has the advantage of making ethical codes operational across borders. For instance, international labour rights can be enforced with the aid of ethical codes implementation (Compa and Hinchliffe-Darricarrere, 1995). Research conducted by the ILO

revealed that the codes of many multinational enterprises adhere closely to established international standards (Mamic, 2003). Failure to achieve consistency with such standards can result in difficulties, particularly when dealing with international stakeholders.

2.11.3 Whistleblowing and whistleblower protection

Whistleblowing is an act of disclosing alleged wrongdoing capable of endangering other people's status, either internally or externally to the organization or other concerned party (Lloyd and Mey, 2010). Internal report is more beneficial to the organization because it can facilitate early discovery of misconduct and provide opportunity for early investigation that is necessary for corrective action (Suen et al., 2007). However, protection schemes should be available to safe guard whistle-blowers. Several authors have illustrated the significant role that whistleblower protection can play in maintaining ethical organizational practices (Gilman, 2005; Lloyd and Mey, 2010; Svensson et al., 2009). The inclusion of such protection in the codes of ethics is important to prevent retaliation (Lloyd and Mey 2010), but, at the same time, when an attempt to discredit an individual or organization through false allegations is detected, immediate action should be taken to sanction the would-be whistleblower.

2.11.4 Providing financial support for CoEs

Transitions in organizational size and changes in employees over time make it difficult to rely on ethically committed leaders and employees to ensure ethical performance. Unclear ethical standards can also render it difficult for an organization to decide whether conditions justify the expenditure of scarce financial resources on the processes needed to implement ethical codes and related measures (Schwenke, 2007). A lack of managerial interest in meeting the financial demand required to create an ethically balanced organization is another pitfall in code implementation. However, success can be achieved if attention is paid to ensuring adequate

financing for such initiatives as training (Nijhof et al. 2003).

2.11.5 Risk inventory to discover behaviour bottlenecks

A risk inventory is an effective way of discovering ethical behaviour bottlenecks that pose potential barriers to responsible organizational behaviour. Such an inventory involves the consistent registration and categorization of relevant incidents and ethical dilemmas within the company (Nijhof et al., 2003), thereby providing useful information that can be further processed for the total removal of the identified barriers. This, according to Rampersad (2006) will help employees to naturally behave in an ethical manner.

2.11.6 Role modeling

The leader or manager of an organization should serve as a role model for subordinates (Kouzes and Posner, 2006; Suen et al., 2007). Role modeling refers to a manager-subordinate relationship in which the manager's behaviour is aligned to influence that of his or her subordinates (Adam and Rachman-Moore, 2004). It can thus have devastating effects when managers behave in an unethical manner, as the other members of the organization or group may follow suit. Appelbaum et al. (2005) posit that deviant role models are a significant factor in unethical employee behaviour. Also, in a study of 214 employees in China, Fu et al. (2011) found ethical behaviour on the part of successful managers to have a significant influence on the organizational commitment of employees.

Similarly, using data from 264 supervisor-subordinate dyads, Jiang et al. (2011) show that the business-related moral values of supervisors exert significant effects on subordinates. Peterson (2004) asserts that the individual intention to act unethically decreases with an increase in perceived leader integrity. It is thus reasonable to conclude that managers with a strong sense of

integrity and high degree of ethical intention are likely to have employees who behave ethically, whereas the reverse is the case for managers who engage in unethical acts. Brown et al. (2005) present a new conceptualization of ethical leadership that helps managers to conduct themselves in a way that will induce ethical characteristics in their followers including; providing an ethical example, treating people fairly, and actively managing morality.

2.11.7 Regular code revision

The flexibility to periodically revise codes of ethics and related policies and strategies in response to stakeholder reactions is very important to the coding process. Schwenke (2007) recommends establishing a process for carrying out periodic reviews of and making regular updates to codes of ethics to ensure that the values they comprise are consistently the priority values of the organization. In other words, new ideas from stakeholders may warrant the revision of existing codes. The failure to translate the behaviour considered necessary by stakeholders into expected standards may render codes of ethics partial and ineffective (Nijhof et al., 2003). At the same time, however, care must be taken to avoid favoritism and bias during code revision.

2.11.8 Ethical appraisal of employees

An organization's ethical performance can be assessed by observing its employees' compliance with established ethical standards (Adam and Rachman-Moore, 2004). Organizations may also find it useful to carry out an ethical appraisal of employees before hiring them, perhaps by requiring them to pass an entrance examination on the company's codes of ethics (Irvine, 1987). Such appraisals may be particularly important in today's globalized world, as an organization's attempts to become globally competitive can easily be hampered by engaging employees who

lack ethics (Svensson et al., 2009).

2.11.9 Contemporary ethical issues

According to DiPiazza (2001), it is necessary to identify the ethical issues relevant at any given time and mobilize individuals and other resources to tackle them. One way of doing so is to allow employees to talk about contemporary issues in meetings or via the organization's Intranet (DiPiazza, 2001). Organizations are also encouraged to explore other means by which discussions of ethical issues can be integrated into routine company procedures such as a social media group (e.g. Facebook, WhatsApp). Resulting from this, relevant information that is necessary for ethical development can be gathered for the purpose of updating ethical code's contents (Sakyi and Bawole, 2009). Also, organizational management is expected to recirculate the updated codes in order not to mislead employees who might have retained the knowledge contained in the previous codes (Adelstein and Clegg, 2015).

2.11.10 Giving code standards with explanation to new employees

It is a rather costly assumption to assume that new employees will automatically be guided by ethical codes without being provided with the information necessary for its integration. To become properly oriented and behave in the way expected of them in their daily routines, new employees must be provided with extensive information on the organization's systems, ethical standards, and practices (Nijhof et al. 2003). Lloyd and Mey (2010) argue that ethics training should be part of the formal orientation scheme for all new employees, as well as an element of ongoing training interventions. Ethics-related materials should be disseminated among and explained to new employees, with emphasis on expected organizational behaviour, to help them to determine the compatibility of their personal conduct with organizational requirements.

2.11.11 Ethics training

Employee training on the importance and long-term effects of ethical codes is an important aspect of the code implementation process. For example, some employees may lack the skills and experience necessary to take responsibility or make decisions, and thus need proper training. Previous studies show that although many organizations claim to be conducting ethics training, the training provided is often too brief to be effective and excludes new employees and managers (Malan and Smit, 2001; Nicolaides, 2009). Mamic's (2003) research on CoEs implementation in multinational enterprises found employees to display positive attitudes after attending ethics training sessions, which in turn resulted in growth in productivity. In essence, proper ethics training for employees not only enhances code effectiveness, but also boosts productivity because employees learn how to behave ethically in any given circumstance (Beeri et al., 2013; Suen et al., 2007).

2.11.12 Aligning a CoE with the company's vision

One important means of effecting code internalization is to align the code's requirements with the organization's vision (Nijhof et al. 2003). The continuous alignment of ethical principles with the organization's vision familiarizes members with the organizational system of decision-making (Schwenke. 2007). Mamic (2003) cites the creation of a shared vision as one of the first steps in code of ethics implementation. Creating a shared vision among departments, teams and individuals, allows the code of ethics to serve as a tool for ensuring vision achievement irrespective of functional diversity. Also, it will create an avenue for emphasizing long-term benefits of ethical codes to the company which is important in organizational strategic planning (Kleiman, 2013; Lloyd and Mey, 2010).

2.11.13 Communicating codes to all employees

Communication is an essential ingredient of effective ethical code management (Ho 2013), and ethical compliance standards must be properly communicated to all employees, possibly through the dissemination of manuals (Adam 2005), posters, and e-mails (Ho 2013). It is necessary for organizations to develop a comprehensive communication plan that can engage various audiences and deliver specific messages using a variety of media such as internal ethics seminars (Rampersad, 2006). It was found that the organization under study had adopted a laissez-faire approach to such implementation. Ho (2013) confirms that the absence of a formal, unified company policy for communicating Code of ethics to employees is common among construction companies in Hong Kong.

2.11.14 Demonstrating acting in accordance with the codes' theme

To achieve successful ethics initiatives, it is necessary to encourage employees to act in accordance with ethical codes' guidelines. Posting codes on the walls of an organization does not necessarily translate into employee behaviour in accordance with those codes. As advocated by Kaptein (2011b), corporate code of ethics can be better implemented by supervisors and junior managers within the organization to effectively reduce unethical behaviour in the workplace. This is because, it is believed that this management level has the most significant influence on employees' behaviours due to their proximity and frequent interactions. Thus, duties of supervisors should include to stimulate acting in accordance with ethical codes by employees which can be achieved by a regular meeting centered on synergetic effort to achieve this purpose (Nijhof et al., 2003).

2.11.15 Empowering employee to decision-making

Achieving and maintaining ethical standards requires a partnership between employees and

management. Organizational leaders need to empower employees to proactively participate in ethics-related problem-solving by making relevant decisions on their own (Schwenke 2007). Allowing employees to resolve ethical dilemmas themselves is likely to encourage their willing compliance with code requirements (Fraedrich, 1992). However, appropriate decision-making by employees can be achieved early enough if relevant guidelines for such decisions are clearly presented in the code of ethics (Nijhof et al. 2003; Ho et al. 2004).

2.11.16 Addressing value conflicts with codes

In their study of organizational culture, Liu et al. (2004) raise an important question about whose values are to be adhered to when judgment is required to resolve certain issues. The degree to which personal values coincide with organizational values reflects the degree of alignment between the two. Yallop (2010) reports that personal values vary by individual, and generally also differ from organizational values. Sullivan et al. (2001) examines the driving role of values in relation to behaviour, and argues that if individual values can be aligned with those of the organization tremendous changes can be effected within the company. Lindsay et al. (1996) point out that determining exactly what constitutes ethical behaviour in an organization that functions in a complex and risky environment with regularly changing procedures, such as the construction industry, is a difficult task. They thus recommend introducing processes for resolving conflicts whenever they arise, for example, a process that indicates which value takes precedence in decision-making when various values conflict. Such processes should be included in the code of ethics for ease of implementation within the organizational system (Lindsay et al. 1996).

2.11.17 Creating forums to discuss ethical dilemmas

Discussions of ethics and ethical dilemmas within the organization are valuable ways of raising

the consciousness of all stakeholders concerning the ethical choices they make (Schwenke 2007). Several scholars have expressed their support for such initiatives (Webley and Werner 2008; Schwenke 2007; Brimmer 2007). For instance, Schwenke (2007) is convinced that the provision of discussion forums as part of an organization's routine practices equips its members to deal effectively with ethical dilemmas. Organizations are also encouraged to explore other means by which discussions of ethical issues can be integrated into routine company procedures. Emphasis in these discussions should be placed in organizational values and value expectations, thus helping employees to make decisions in accordance with those values should ethical dilemmas arise. According to Svensson et al. (2009), ethical dilemmas arising in the marketplace can also be resolved by Code of ethics, and Wood et al. (2002) reported that approximately 50% of the organizations they surveyed claimed to use their code of ethics for just that purpose.

2.11.18 Rewarding employees' compliance with codes

Brown et al. (2005) posit that employees learn how to behave in the organizational setting by studying and emulating others, particularly leaders, and observing the outcomes of their behaviour, among which are rewards and punishments. If an employee who consistently acts in line with organizational values is promoted, then his or her coworkers may learn from his or her example and respond positively to the company's ethical requirements (Gruys et al., 2008). Some individuals work not only for financial gain, but to gain recognition for good performance and achieve job satisfaction. When these individuals fail to gain recognition and appreciation from management, their morale is likely to suffer, and they may demonstrate less commitment to organizational values. Thus, appropriately rewarding employees is one means by which management can motivate them to act in ways consistent with those values (Kaptein and

Wempe, 2002; Mason, 2009; Sakyi and Bawole, 2009; Tow and Loosemore, 2009). In fact, Rossouw (2002) is convinced that reward systems are the "single most important formal influence" on an employee's behaviour.

2.11.19 The use of an ethics ombudsman

An ethics ombudsman is a high-level individual charged with the responsibility for ensuring compliance with ethical standards (Adam, 2005). Ethics ombudsmen should be independent arbiters and not be regarded as members of the management team (DiPiazza, 2001), although they are responsible to the board of directors and are expected to possess a sound understanding of the organizational environment (Lloyd and Mey 2010). According to Mathenge (2012), the appointment of such an ombudsman also ensures confidentiality, thereby reducing fears over retaliation for whistleblowing.

2.11.20 Assessing individual values during recruitment and selection

Using an official set of core values as a standard to assess potential employees before they join the organization and to assess incumbent employees before they are assigned new tasks is another means of ensuring value enactment (Rampersad, 2006). It can also help in problem-solving and avoiding disagreements (Majluf and Navarrete, 2011). Adam and Rachman-Moore (2004, p. 225) aver that strong employee personal values result in a high level of 'personal ethical commitment' and low level of 'commitment to organizational values', which implies that individual employees may tend to favour values that accord with their own. Hence, prior assessment of values ensures that all members of the organization are on the same page.

2.11.21 Ethics committee

An ethics committee can represent the interests of company and employees alike by ensuring

the organization's ethical initiatives are efficient and in accordance with applicable laws and guidelines (Carroll and Buchholtz, 2003). Wood (2000) points out that one of the formal ways of ensuring implementation of ethical codes within an organization is to set up an ethics committee. Such a committee thus acts as an advocate and watchdog for effective ethics management within the organization. Although ethics committees are more common in large organizations, smaller companies can appoint an ethics officer or task the human resources manager to act in this capacity with the responsibility of identifying and renewing company's values, organizing ethics training and educating, guiding and counselling employees about ethics, (Rampersad, 2006).

2.11.22 Imposing clear sanctions for rules of conduct

Another important aspect of ethical code implementation is the imposition of sanctions for unethical behaviour. The effectiveness of ethical codes is highly dependent on the provision of sanctions in the code against noncompliance as well as the perceived threat of sanctioning any noncompliant acts within an organization (Weller, 1988). According to Harrington (1996), sanction threats effectively prevent a particular deviance from ethical standard in a company, because the strongest reason for abiding by a code seem so be the possibility of sanctions for violations (Spielthenner, 2015). Similarly, Stevens (2008) argues that codes of ethics cannot be effective unless code violations within an organization are sanctioned appropriately.

2.11.23 Ethical audits

Several studies have confirmed the role of regular ethical audits in ensuring and maintaining an ethical organization (Lloyd and Mey, 2010; Rampersad, 2006; Suen et al., 2007). Developing a proper auditing mechanism is important to monitoring ethical code adherence. It can also help an organization to identify possible deviations from established standards and take necessary

corrective actions (Rampersad, 2006). A proper auditing mechanism facilitates recommendations for making ethical codes more efficient and relevant to changing circumstances (Schwenke, 2007).

2.11.24 The use of a hotline system

Koehn (1998) recommends a hotline system for helping to impose ethical standards and providing answers to employees' policy-related questions. A number of authors have also pointed out the role hotlines can play in facilitating a whistleblowing mechanism (Rampersad, 2006; Webley and Werner, 2008), as they allow employees to obtain ethical advice and lodge complaints anonymously (Lloyd and Mey, 2010).

2.11.25 The use of symptomatic indicators

One of the recommendations for an effective compliance program made by U.S. Federal Sentencing Guidelines is the use of systems specifically designed to detect unethical conduct (Adam, 2005). Introducing a system with an ethical dimension in the form of the indicators used in most results-based management enables stakeholder evaluation of an organization's ethical compliance (Schwenke, 2007). Such indicators not only help stakeholders to determine how grounded in ethical principles the organization is, but also to identify the activities that may lead to unethical conduct. Owing to the multilayer activities in construction organizations, there is need to establish symptomatic indicators that facilitate proactive measures to ensure ethical practices.

2.11.26 Transparent ethical reports

Accountability can be achieved by issuing transparent reports on ethical conduct on an annual or project basis (Schwenke 2007). Issuing reports to both internal and external stakeholders on

the way an organization has maintained ethical behaviour and achieved ethically sound projects constitutes a formidable means of convincing them of the organization's commitment to ethical practices. Lloyd and Mey (2010) are convinced that the fact that ethical codes exist in an organization is not a sufficient guarantee of ethical behaviour. The process of developing and communicating the achievement of those codes to stakeholders in a transparent and consultative manner is imperative (Rossouw and Van Vuuren, 2010).

2.11.27 Critical self-evaluation among employees

Critical self-evaluation is important to help employees to identify areas within a code that require special attention (Rampersad, 2006; Webley and Werner, 2008), which implies that they should be given the opportunity to assess themselves in ethical terms. Loumbeva (2008) suggests that organizations provide a uniform format for such self-assessment exercises. This can be achieved by using evaluation criteria that cover the organization's core ethical values in order to reinforce the essence of achieving the targeted level of conformity with codes of ethics (Adam and Rachman-Moore, 2004).

2.11.28 Relating code of ethics to suppliers and subcontractors

Requiring suppliers and subcontractors to subscribe to an organization's Code of ethics is equally germane to ethical practices. Svensson et al. (2009) advise that both suppliers and customers be informed of the existence and functions of codes of ethics. Wood et al. (2002) found that codes of ethics are usually communicated to these two groups, whether formally or informally, to some extent. However, the extent to which the standards of these codes are met across the supply chain remains an unanswered question. In the case of the multiple subcontracting relationships (Jenkins, 2001) common in the construction sector, for instance, it is difficult to ensure that all parties adhere to code requirements. However, requiring

subcontractors and suppliers to agree to code of ethics makes it possible to hold them accountable for their conduct (Nijhof et al., 2003). Garegnani et al. (2013) opine that relating code of ethics to other stakeholders enables adequate conveyance of organizational commitment to ethical behaviour which invariably should yield a positive effect on the stakeholders.

2.11.29 Establish an open communication system to challenge code themes

According to Nijhof et al. (2003), proper accountability requires organizations to communicate their approachability concerning various ethical code themes through their marketing or public relations efforts. Doing so also involves accepting responsibility for policies and processes and employees' conduct and decisions. Allowing code themes (Schwenke 2007) to be openly challenged without favouritism can also create a dialogue with stakeholders that may lead to the company's betterment (Nijhof et al. 2003).

2.11.30 Addressing areas requiring ethical attention

The main purpose of examining ethical compliance is to reveal sensitive areas that pose a danger to the organization's business activities and reputation. Once revealed, the onus is on the organization to address those issues in an appropriate manner (Nijhof et al. 2003; Schwenke 2007). Failure to do so will compromise the organizational benefits of having codes of ethics in place.

2.12 Outcomes of effective implementation of ethical codes

Salopek (2001b) reports the findings from a survey conducted by ethics resource center about the benefits of effective ethics program including: building and sustaining company's reputation, fostering productive work environment for employees, boosting employees' loyalty for continuous self-regulation. Oladinrin and Ho (2015b) also explore the results of effective

implementation of ethical codes in construction organizations in Hong Kong. According to the 1991 Federal Sentencing Guidelines, an organization is considered for reduced fines (resulting from unethical conduct) if there is proof of effective enactment and communication of ethical codes to employees (Rafalko, 1994). This implies that, effective implementation of codes of ethics will increase organization's protection against lawsuit (Adams et al., 2001; Ki et al., 2012; McKendall et al., 2002; Snell et al., 1999). Based on review of relevant literature on codes of ethics in general, an initial list of 11 indicators representing the results of ethical code implementation were compiled and synthesized for this study as shown in Table 2.6.

Table 2.6 Indicators for the result of ethical codes implementation

| | | Study | | | | | | | | | | | | | | | | | |
|-------|--|---------------------------|---------------------|---------------|-----------------|---------------------|------------------|--------------------|-------------|--------------|---------------------|------------|--------------------|--------------------|------------------|--------------|--------------|-------------------------|----------------------------|
| Label | Indicators/Variables | Wheldon and Webley (2013) | Snell et al. (1999) | Brooks (1989) | Salopek (2001b) | Adams et al. (2001) | Ho et al. (2004) | Kang et al. (2004) | Ohrn (2002) | Ofori (2009) | Bejou et al. (1998) | Rao (1996) | Lawrence and Weber | Fan and Fox (2009) | Ki et al. (2012) | Rieck (1998) | Singh (2011) | McKendall et al. (2002) | Total number of occurrence |
| R1 | Improved employees' ethical behaviour | | > | | | • | > | | | > | | | | | | | • | | 5 |
| R2 | Subjective and inconsistent management standards are minimized | | > | | | | • | | | | | | | | | | | | 2 |
| R3 | Building public trust | < | | ` | | , | | > | | | | | | | | | | | 4 |
| R4 | Enhancing organizational reputations | < | | | • | | | | > | | | | | | | | > | | 3 |
| R5 | Enhancing employees' loyalty | < | | | > | ~ | > | | | > | | | | | | | | | 4 |
| R6 | Improved client's satisfaction | | > | | | | | | | | ~ | | | | | | | | 2 |
| R7 | Boost workforce morale | | > | | ~ | | | | | | | | | | | | ~ | | 2 |
| R8 | Increased protection against lawsuits | | > | | | ~ | | | | | | | | | ~ | | | ~ | 4 |
| R9 | Increased compliance with complex government policies | | > | | | | | | | | | | > | | | | | | 2 |
| R10 | Increased company's profitability | | | | | | | | | | | > | | ~ | | > | | | 3 |
| R11 | Enhanced mutual relationship among project stakeholders | | > | | | | | | | | | | | | | | ~ | | 2 |

2.13 Summary of the findings in the literature review

Various definitions of codes of ethics have been provided in the literature to reflect the purpose of individual studies. Thus, this study embraces the definition by Schwartz (2001) which defines codes of ethics as 'a written, distinct and formal document which consists of moral standards used to guide employee or corporate behaviour' (p. 248).

Several decision-making models have been developed by the previous scholars, most of which revealed that code of ethics is a fundamental tool used in ethical decision-making process. Codes of ethics are developed to guide behaviour and any final analysis of the impact of a code must include how well it affects behaviour. Code development process includes; code creation, code content, code implementation and code administration. The last two stages are lagging behind in empirical research especially in the construction management studies, which may be the reason why unethical practices persist in construction organizations.

Implementation of codes goes beyond printing and circulating codes within the organization, rather it requires management system in form of process assessment method for its proper embeddedness that will considerably enable the stages of code development process to be integrated into the web of organization.

Factors that hinder effective implementation of ethical codes and influence the impact of codes of ethics on employees' behaviour have been identified, which must be further assessed to put them in a better perspective. Similarly, factors that enable effective implementation of codes of ethics were equally identified and discussed in this chapter. However, there is lack of empirical research on holistic approach for managing ethical codes implementation within an organization.

2.14 Summary of the Chapter

This chapter reviewed past studies on ethics management in general, in business organizations in particular and in construction organization specifically. This chapter began with a general description of the concept of ethics codes and its purpose, ethical decision-making, development of ethics codes and ethical codes in business organizations. Thereafter, an overview of existing literature on construction ethics in general and Hong Kong construction in particular is conducted.

In brief, in the extant literature on ethical codes, descriptive statistics and broad prescriptions for ethical code development process are often combined. However, in the existing literature, there exist a paucity of research concerning practical implementation of ethical codes within an organization. Previous research focused mainly on descriptive analysis of code development process but paucity of research exist on the measurement of ethical code implementation in an organizational context. Therefore, in order to move research on ethical codes beyond this level, it is imperative to develop a comprehensive theoretical model that will reflect multiple factors for implementing ethical codes and their interaction with various organizational areas to capture the idiosyncrasies of construction organizational settings. Such model should reveal whether the implementation of codes of ethics indicate purposeful and significant organizational structuring. From these viewpoints, the next chapter will discuss relevant management approach that can be adopted for assessing and measuring code implementation processes.

CHAPTER 3 A MODEL FOR ETHICAL CODES IMPLEMENTATION

3.1 Introduction

The essence of this chapter crystalized from the identified factors that enable effective implementation of codes of ethics through literature review as emerged from previous chapter. A theoretical framework is derived in an attempt to convey the interrelationships between these factors in order to conceptualize the overall structure of ethical codes implementation process. Only a few studies made effort to provide implementation framework for ethical codes and just one of these studies (Nijhof et al., 2003) specifically addressed the measurement of ethical codes implementation using European Foundation for Quality Management (EFQM) Excellence Model, and it forms a backdrop for the current research. Also, in this chapter, past research about business excellence and self-assessments approach are reviewed. Thus, the chapter explains the development and structure of a hypothetical framework for codes of ethics implementation such that the factors included in the framework can then be further explored and analyzed for assessment and measurement purposes.

3.2 Quality management practice in organizations

3.2.1 Business excellence through quality management

Organizations worldwide seek performance improvement towards achieving outstanding results to convince their stakeholders (Oakland et al., 2002). Considering the present global economy, Vora (2002) opines that business excellence can be accomplished through the knowledge of quality management principles and proper implementation of quality management practices. Although, there are numbers of quality management models that are used for assessment in organizations, Conti (2002) asserts that the choice of a model and assessment procedure should emanates from a vivid investigation of the existing models'

characteristics and approaches that best fit the purpose of its adoption. Based on this assertion, the current study examines relevant models suitable for organization's assessment in terms of quality management practices and business excellence via literature review.

The introduction of quality management at this point is inspired by the findings from the past literature. According to Egan's report (Egan, 1998), emphasis is on the shifting of construction industry focus away from product to process in order to attain quality and maintain business excellence in the industry which is characterized by changing operating process. However, Sciarelli (2002) reveals a more comprehensive concept of quality that transcends product and process but also embraces other relevant developmental mechanisms which was termed "quality next future". The study emphasizes that the quality of organizational practices has become company's mission which drives the members towards achieving the set objectives and is influenced by people working in the organization. Meanwhile, the quality of the organization, either at the product or process level is determined by the quality of life and behaviour of its participants. Sciarelli (2002) puts that

"quality lives in symbiosis with ethics: the ethics of company-client relations, the ethics of company-shareholder relations, and the ethics of entrepreneur-worker relations" (p.1148).

Sciarelli represents quality in a stepped pyramid form as shown in Figure 3.1. The first two elements from the top ('social quality' and 'quality of stakeholders' relation) are regarded as "quality next future". Social quality is related to the social role, while quality of stakeholders' relation refers to the relational interaction within and outside an organization via a proper decision making process. This concept will yield better contribution of quality to the development of impalpable resources connected to personnel e.g. expertise and moral.



Figure 3.1: Pyramid of Quality

Source: Sciarelli (2002)

Excellence entails weighing and satisfying the desired requirement of all relevant stakeholders (Zairi, 2002). Therefore, business excellence can be attained when there is excellent performance demonstrated across various areas, measured against agreed criteria. Good knowledge of quality management principles and its practical implementation can help in achieving business excellence in the present global economy (Vora, 2002). The current evolution of quality management depicts a strong basis for competition among organizations, thus the shift in quality perspective from a strait 'manufacturing-based discipline' to a corporate focus which is applicable to all functional areas of business including employees' activities, with an intention to attain effective management (Hellsten and Klefsjö, 2000). It is therefore necessary to consider a soft part of quality management (i.e. ethics) and its relationship with quality management especially in construction organizations.

3.2.2 Quality management and business ethics relations in construction

Attempts have been made by researchers in construction quality to define quality performance but the efforts failed to reach consensus. For example, the following definitions

were given regarding quality in construction; meeting customers' expectations (Chase, 1998; Kanji and Wong, 1999), reduction in rework or defects (Love et al., 1999; McKim and Kiani, 1995), conformance to ISO 9000 criteria (Bubshait and Al-Atiq, 1999; Sun, 1999), and completion on-time and within budget (Love et al., 1999; McKim and Kiani, 1995). Hence, Hoonakker et al. (2010) conclude that there is no precise definition of 'quality' in construction due to lack of empirical data on the subject matter. Nevertheless, the need to manage quality related issues, in order to satisfy construction customers, has led to adoption of quality concepts from manufacturing sector such as TQM and ISO series (Hoonakker et al. 2010).

In Hong Kong, the expectations of customers and global competition have made many organizations to embrace quality which seems to have increased competitiveness among companies in the region in a way that reflects global trend (Lai et al., 2002). Construction companies in Hong Kong, in particular, began to pay attention to quality improvement in the early 1990s when it became a requirement for contractors to be certified to the ISO series in order to be qualified for tender submission for public housing construction work as stipulated by the Hong Kong Housing Authority. Thus, Hong Kong contractors began to invest in quality improvement up to the minimum required level of ISO certification in order to meet up with the requirement of Housing Authority (Castledine and Bannister, 1996; Tam, 1996). For proper implementation, many companies have adopted ISO 9000 while TQM principles are embraced by few but the studies of implementation are lagging behind in Hong Kong (Lai et al. 2002).

However, the relationship between quality management and business ethics has been established by previous researchers (Buban, 1995; Fisscher and Nijhof, 2005; Stainer and Stainer, 1995; Svensson and Wood, 2005a; 2005b; Vinten, 1998). Bowman and Wittmer

(2000) state that ethics as a soft side of management, and quality as a hard side of management, are both critical prospects of an organization. Svensson and Wood (2005a) emphasise that customers as well as other stakeholders are becoming more sensitive and discriminating against organizations that fall short of their criteria regarding ethical business standard. Business ethics represent a core value which affects the implementation of TQM, therefore it must be integrated into the core values that make up TQM principles so as to make a meaningful contribution to the quality concept (Svensson and Wood, 2005a).

Stainer and Stainer (1995) examine the relationship between productivity, quality and ethics and find that strong arguments exist in favour of ethical behaviour in companies in relation to quality and productivity. This implies that organizational ethics is rated above other factors, and raising ethical standard by proper implementation of ethics program will positively influence quality and productivity level in an organization. A recent publication by Ferrell and Fraedrich (2014) emphasize that the success of an organization in the long run has much connection with business ethics. Ethical behaviour is a factor that is meant to be integrated in the process of quality and productivity management, by so doing, quality of life will be enhanced provided that consideration is given to social responsibility when ethics is integrated (Fisscher and Nijhof, 2005). Achievement of TQM in an organization depends on its human resources thus ethical behaviour of employees is a crucial issue to be managed as any decrease in the quality of corporate ethics will invariably affect TQM outcome (Svensson and Wood, 2005b). Simply put, TQM is most effective in the organization that embraces ethics (Buban, 1995).

Liu (2003) in the quest for quality in public housing projects in Hong Kong examines the project procurement process using behaviour-performance-output cycle as shown in Figure 3.2. At the conception phase, the client set out the goals which must be actualized by the

contractors with great emphasis on higher quality products. Behaviour and performance are the basic factors at the transformation phase where goal (input) is processed to achieve expected outcome (output) of high quality. It is important to note that the quality of behaviour of employees will determine the quality of performance and subsequently the quality of final product. Thus, the achievement of quality standard previously set will greatly be influenced by quality behaviour. Therefore organization should focus on the behavioural aspect of its employees since the quality of their decision making will determine the quality of the final product which will determine the level of client's satisfaction. Code of ethics has been identified as a formidable tool that influences behaviour in the organization as discussed in the previous chapter. Unfortunately, ethics has been generally neglected in the concept of TQM (Vinten, 1998). In building ethical standards into TQM concepts by organization, the effects of ethics must constantly be measured (Buban, 1995).

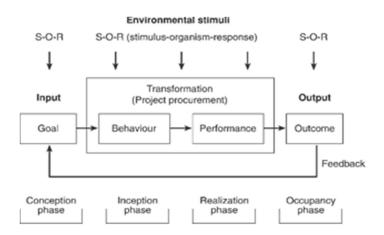


Figure 3.2: The construction project procurement process

Source: Liu (2003).

The arguments from the extant literature can be succinctly expressed thus; product quality (outcome) can be influenced by quality performance, which in turn can be influenced by sound ethical behaviour. The behavioural phenomenon is highly related to people or members of an organization, hence, people management cannot be undermined in the process

of achieving ethical behaviour. This view is shared by Ahire et al. (1996) which claim that product quality is greatly influenced by quality-oriented people management. Also, Nair (2006) establishes a positive relationship between people management and performance within an organization. Considering the assertion by Samson and Terziovski (1999) that variations in organization's performance can be explained by people management practice as against product-centred quality management, implying that quality of people is a determinant for achieving quality performance, it is imperative to develop or employ a self-assessment approach for managing people's behaviour which will offer an organization the opportunity of continuous evaluation.

In the case of the Hong Kong construction industry, having made it compulsory for all contractors to be ISO certified to fulfil tendering condition, the Hong Kong Housing Authority spearheaded the promotion of quality assurance in construction by introducing and maintaining a Performance Assessment Scoring System (PASS) for the purpose of assessing quality performance of contractors working for the authority (Kanji and Wong, 1999; Tam et al., 2000). In the same way, when corporate ethics attract the attention of both the government and construction industry of Hong Kong, the Hong Kong Housing Authority also took the lead in mandating all its general contractors to develop corporate ethical codes, a condition they must fulfil before tendering for projects (CIRC, 2001). Surprisingly, unlike the approach (PASS) for monitoring quality performance, there is no corresponding approach for assessing and monitoring corporate codes of ethics which focus on people management. Hence, the next section considers and discusses the approach to self-assessment for people management.

3.2.3 Self-assessment for effective people management

Diverse approaches to implementation framework have been identified in the literature which are classified into three broad categories according to Yusof and Aspinwall (2000a) as follows:

- (1) Consultants/experts based frameworks these are developed based on individual opinion and assessment through personal consultancy experiences garnered from organizations involving in TQM for instance, Deming and Edwards (1982).
- (2) Academic based frameworks as the name implies, are derived from the efforts of academics basically from their research outcome and experience in the field e.g. Dale (1995).
- (3) Awards based frameworks these are models commonly used by organizations in recent time firstly to gain recognition, secondly as implementation guidelines (Ghobadian and Woo, 1996) and thirdly as tools for self-assessment (Hewitt, 1997; Yusof and Aspinwall, 2000b).

Award models have been identified by previous authors (Bohoris, 1995; Curkovic et al., 2000; Lee et al., 2003; Yong and Wilkinson, 2001) as the approach mostly adopted by organizations due to their great influence in the practical implementation of TQM. Some of these models are well recognized internationally and are also used to rank excellent performance of organizations and also serve as tools that help organizations to focus on areas needing improvement (Thurairajah et al., 2005). Common examples of these models include:

Deming Prize (DP) Model and Japanese Quality Award Model – Japan,

The Malcolm Baldrige National Quality Award (MBNQA) Model – USA,

European Quality Award (EFQM Excellence Model) – Europe,

South-African Construction Excellence Model (SACEM) – South Africa,

Austria Quality Award – Austria and,

Australian Award model – Australia.

Past studies (Biazzo and Bernardi, 2003; Conti, 2002; Tutuncu and Dogan, 2004) have recognized EFQM and MBNQA as models with inherent conceptual values that are most fitted as self-assessment tools in the context of an organization. Quality assessment construct is broadened to cover the entire organization by these two models which make them more formidable than past traditional quality-based models and they are referred to as 'excellence models' (Conti, 2002). For example, Deming Prize (DP) focuses on quality assurance using statistical techniques while EFQM and MBNQA have leadership as their key criterion. The current study supports these arguments because coheres with the research focus of self-assessing the implementation of codes of ethics in construction organizations. Therefore, it is important to examine the concepts of excellence models and self-assessment so as to arrive at the choice of most appropriate model suitable for the current study.

Proper implementation of excellence models assumes that an organization has a well-known and established systematic approach for managing its process, which is only the evidence of robust practices that can guarantee the success of excellence models in an organization (Adebanjo, 2001). One of the tasks of this study is to adapt business excellence model into the codes of ethics implementation in the construction organizations in Hong Kong. However, process assessment methods will be employed in the current study to measure the extent of codes of ethics implementation within construction organizations, and this necessitate the need to explore the concept of self-assessment practices. Attaining world class status demands that organizations look inwardly at their whole operations and processes by a way of self-assessment as a recognized method used by organizations in achieving this purpose (Azhashemi and Ho, 1999). Hillman (1994) defines assessment as an evaluation process within an organization using a model to achieve continuous improvement. Hillman

(1994) identifies three variables that determine the success of self-assessment, expressed as follows:

Self-assessment = Model + Measurement + Management

Model – represents the framework that has been carefully selected prior to the assessment exercise which is suitable for evaluating organization's progress.

Measurement – implies benchmarking company's actual performance indicators against each element of the model. The measurement part will be achieved in the current study through the use of fuzzy synthetic evaluation to determine extent of code implementation as contained in the element of the model. This will be explained further in subsequent chapters.

Management – this refers to procedure for managing the holistic self-assessment process beginning from model selection up to the necessary course of action to be taking on the result of the analysis. This invariably represents the approach for the current research, which will be discussed in detail later in this study.

Biazzo and Bernardi (2003) identify three types of assessment logic as shown in Figure 3.3 (conformity, consistency and causation) and introduce evaluation parameters (external and internal) which take into cognizance the trait of self-assessment tools. External parameters align with non-prescriptive self-assessment tools (e.g. EFQM) while internal parameters conform to prescriptive models. The result of cross-referencing both internal and external dimension produced evaluation logic matrix in Figure 3.3. For example, cell I (paradigmatic approach) depicts a situation when non-prescriptive requirements are provided in form of template by a model (being conceptualized as a paradigm) to guide self-assessment. The second cell (situational approach) is based on frameworks that provide a road map for appraising connections between contingency factors and environmental qualities but lack concrete judgment criteria.

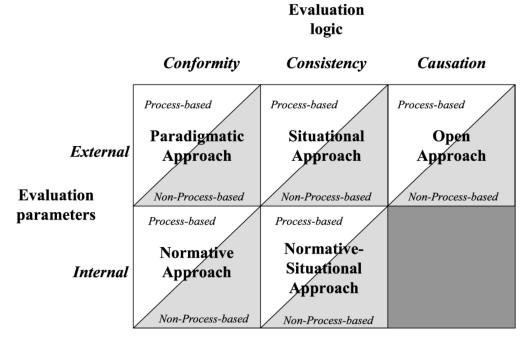


Figure 3.3: Self-assessment approaches: a classification

Source: Biazzo and Bernardi (2003)

The current study falls within process-based for both paradigmatic and situational approaches. The reason is because, codes of ethics have been adopted by construction organizations in Hong Kong as revealed in the literature review (Ho et al. 2004) but have not been properly implemented to reflect the established theoretical effects in the organizations. These approaches allow compliance of codes of ethics with the criteria of excellence models on one hand, and satisfy quality award admin body's recommendations for checking consistency of good practices within organizational system on the other hand. Since the parameters to assess the organizations are not established within tools, the task here is to explicate and rationalize a new praxis following necessary construction processes to formulate evidence-based judgment that reflect the systematic practice within the organization.

Fountain (1998), Porter and Tanner (2012) and van der Wiele and Brown (1999) note that there is no best framework for self-assessment and suggest that researchers should critically select the model that best fit their purpose.

However, some past researchers argue that EFQM is more suitable and extensively used in relation to self-assessment than MBNQA (Tutuncu and Dogan, 2004; Biazzo and Bernardi, 2003). The most renown and diffused paradigmatic approach to self-assessment is represented by the 'enablers' in the EFQM model (Biazzo and Bernardi, 2003). A survey conducted in 1994 on self-assessment reveals that sixty per cent of the organizations embarking on self-assessment practice use EFQM model (Adebanjo, 2001). MBNQA intensively focuses on customer satisfaction through implementation of TQM, while EFQM in a broader view, analyses the effect of quality both on organization itself and also on its social and environmental community (Nakhai and Neves, 1994), thus EFQM is a product of an improvement on MBNQA (Tutuncu and Dogan, 2004). Since social ideology deals with interaction among people in a certain or diverse behaviour, it thus means that EFQM can be used to assess such mechanism (e.g. codes of ethics) put in place by organizations to regulate people's behaviour. Therefore, EFQM model is considered suitable for this study and will be discussed extensively in the next subsection.

3.2.3.1 European Foundation for Quality Management (EFQM) Model

The keen interest in self-assessment by the European organizations led to the introduction of the European Quality Award (EAQ) that is now known as EFQM which was developed by the European Foundation for Quality Management in 1991, with the first award winner in 1992. Prior to that, the formation of EFQM was effected by fourteen leading European businesses with reference to TQM philosophy. EFQM Excellence Model is a non-prescriptive framework (using TQM concepts) that provides sufficient guidelines for organizations to

attain excellence and capable of analyzing the whole or large part of a company with easy adaptation (Adebanjo, 2001; Pyke et al., 2001; Tutuncu and Dogan, 2004).

A protagonist of EFQM (Conti, 2007, p. 119) narrates the history of EFQM developmental stages as shown in Figure 3.4. The first part (a) represents the model as it was first presented in 1991 while the lower part (b) shows the later scheme, disseminated in 1992 which shows how the nine criteria of the model are subdivided into two major components, "enablers" and "results". Five of these criteria are grouped under "enablers" and four are under results. The criteria for the enablers depict what an organization does on one hand, and the results criteria reveal the achievement of the organization on the other hand. The results are induced by the enablers and response from "results" assists in improving the enablers (EFQM, 2003). The concept of the model is that both customer/people satisfaction and societal impact are accomplished by ways of leadership impulsive policy and strategy, people management, partnership and resources and processes resulting eventually to excellence in business results (Watson and Davis, 2002).

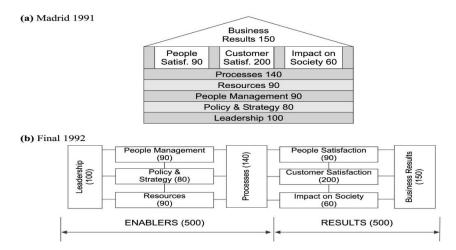


Figure 3.4: EFQM Excellence Model

Source: Conti, (2007)

The enablers are the organization's factors that generate the results. Each criterion is scored against the awarded point in a prescriptive manner. However, the model is regarded as non-

prescriptive because the weighting attached to each criterion only serve as guide based on the commonly adopted score card, revealing the importance of the contribution of each criterion to business success (Thurairajah et al., 2005). The resultant weightings after self-assessment exercise are either used to compare the organization against other organizations or for internal self-improvement on areas that need to be improved. As a result of its effectiveness, EFQM has been extensively used in many organizations across various sectors of economy (construction sector inclusive) and has attracted the attention of academic researchers.

Researchers and practitioners have been debating on the weightings of EFQM Excellence Model due to perceived rigidity of the scoring system which makes the model more of prescriptive than descriptive. However, EFQM (2003) declares that the model as a nonprescriptive framework, allows the achievement of sustainable excellence using diverse approaches. Similarly, Oakland (2001) opines that the weightings may be modified to accommodate specific requirement of any organization. Furthermore, in the study of Danish organizations by Eskildsen et al. (2001), it was found that more importance is attached to enabler block (70%) than the result block (30%) as against equal 50% as it appears on EFQM model. It was claimed that the findings are acceptable since the enablers induce the results (Oakland, 2001). Thus, keenly devoting greater effort to the enablers seems more sensible and profitable (Davies, 2004). The current study supports these arguments and therefore concentrate on the criteria for the enablers only, since they can be controlled within an organization. However, resulting outcomes of effective implementation of codes of ethics are introduced as expected results of participating organization since it can be measured within the organization but they are not categorized like the original EFQM classification. Chinda and Mohamed (2008) used this approach to assess the integration of safety culture in the construction industry. Details of the enablers are discussed in section 3.3.2.1 to 3.3.2.5.

3.3 Description of the model

3.3.1 Process Assessment Approach Method (PAAM)

Nijhof et al., (2003) conducted a study based on a Process Assessment Approach Method (PAAM), which integrated both "product" (code creation and code content) and "process" (code implementation and administration) as discussed in chapter two, to measure the implementation of a corporate code of conduct in a workplace. The PAAM was based on the EFQM, which is a process approach for reviewing the company management system to make sure that employees are encouraged to work in conformance with ethics codes. Nijhof et al., (2003) argue that implementing ethical codes in a workplace would be very much in line with models such as the EFQM. The study claims that PAAM allows organizations to discern clearly their strengths and areas in which improvement can be made and culminated in planned improvement actions which are then monitored for progress.

Nijhof et al., (2003) distinguish six processes that represent responsible way of managing ethical codes within an organization which are termed as processes of 'responsibilization', namely:

- (i) The process of identifying and removing barriers;
- (ii) The process of coding;
- (iii) The process of internalization;
- (iv) The process of enacting values;
- (v) The process of monitoring and;
- (vi) The process of accountability.

The research (Nijhof et al., 2003) has the following important findings: (i) it is essential to take on a process approach to measure code implementation in organizations; (ii) The assessment method based on the EFQM model is sufficient for assessing the implementation process of a corporate code. In the current research, the six processes developed by Nijhof et

al, (2003) are included in the theoretical model. Each of these processes has been affirmed to have separately stimulated ethical behaviour and they are further discussed in this section. It is assumed that the enablers part of EFQM, representing the five organizational areas, allow for embedding each of the six processes of 'responsibilization' (Adelstein and Clegg, 2015). Implementation of organizational processes that guide codes of ethics is important for sustainable organizational practice. The processes are structured in a way that permits self-assessment so that areas needing improvement can easily be identified. Each process is discussed in detail as follows.

3.3.1.1 Process of identifying and removing barriers

Ho (2011) reveals that although construction companies have adopted codes of ethics to promote ethical behaviour, many have failed to properly implement those codes or identify the factors stifling code effectiveness. Before excellence can be achieved with regard to responsible behaviour, organizations must identify the barriers that need to be removed. The first step in doing so is to gather all relevant information about the barriers as to know what and where they are (Nijhof et al. 2003). Factors constituting main barriers to responsible organizational regarding ethical codes implementation are extracted from previous literature review as discussed in chapter two are included in the proposed framework.

3.3.1.2 Process of coding

A code of ethics is a representation of an organization's identity expressed either in a mission statement or list of core values (Nijhof et al. 2003). Kaptein and Wempe (1998, p. 853) emphasize the importance of coding process by stating that 'code is nothing, coding is everything'. In the absence of supporting measures and compliance procedure engulfed in the coding process, the code will not be effective (Garegnani et al., 2013). It is thus important for an organization to code its values for easy recognition of its identity and the proper shaping of behaviour. The coding process involves translating desired behaviour into established

standards and target values in the form of a written code of ethics that can be easily understood and followed by organizational members (Nijhof et al. 2003). The coding process should also cuts across all organizational areas and incorporate all stakeholders' reactions.

3.3.1.3 Process of internalization

The internalization of codes of ethics involves activities aimed at helping employees to understand the meaning of those codes and encouraging them to act responsibly (Nijhof et al. 2003). There is a tendency for unexpected results when an organization refuses to internalize that which it claims to stand for. Although it is of course good to have a written code of ethics in place, finding ways to internalize that code is more important than to prevent ethical lapses (Seglin, 2011). Appropriating a code goes deeper than simply agreeing to a set of values. It entails the meaningful translation of the code to encourage ethical behaviour in employees' routine activities. In fact, the extent of code internalization is a major influential factor in codes of ethics conformance (Sakyi and Bawole, 2009). The internalization process involves ensuring that the organization's codes of ethics forms part of the employee recruitment and selection procedure, taking the necessary actions to stimulate actions aligned with that code, and clearly defining the responsibilities of decision-makers and those influenced by them.

3.3.1.4 Process of enacting values

Value enactment is the process of translating the organization's mission/values into the required actions expressed in its codes of ethics. Nijhof et al. (2003) consider such enactment to be an integral process of responsibilization in the belief that aligning behaviour with a code of ethics is essential to the code's further internalization. The combination of articulated organizational values, affirm the rate at which societal values change, and aggregate individual moral convictions of the organization's workforce indicates the immutability of the organization's ethical bearings (Schwenke, 2007). It is thus important for an organization to take responsibility for ensuring the desired value enactment via the mechanisms discussed

in the following sections. It has been observed (Brown et al., 2005) that employees learn how to behave in an organization setting by studying and emulating others and by observing what the outcomes of their behaviours are, particularly organization's leaders. These observations include among others, noting those actions that are rewarded or punished. If an employee who consistently acts in line with organizational values is being promoted, another employee who desires promotion may learn from such co-worker and start to enact organization's values (Gruys et al., 2008).

3 3 1 5 Process of monitoring

It is difficult for employees to achieve unfaltering compliance with a code of ethics and its guidelines, regardless of their clarity and exhaustiveness (Welfel, 2005). It is thus important that organizations establish mechanisms to monitor the processes of code implementation and administration. Jenkins (2001) argues that an element of independent monitoring must be present to guarantee codes of ethics implementation. Although the essential purpose of a monitoring mechanism is to determine whether certain types of behaviour mesh with the codes of ethics, in addition to controlling the code application process and sanctioning procedures for deviations, it should also explore the causes of deviations (Nijhof et al. 2003). Jenkins (2001) argues that such monitoring arrangements remain a contentious issue for many companies, which are reluctant to implement them. However, proper evaluation of ethical code implementation is difficult in the absence of independent monitoring and verification, which in turn renders code application in practice a "mere expression of good intentions" (Jenkins, 2001, p. 26).

A survey of 132 codes conducted by Kolk et al. (1999) revealed that 41% of the codes did not make specific mention of monitoring. However, 44% of the participating companies claimed to monitor code compliance themselves, although less than 10% of organizational codes and 5% of those established by business groups reflected any form of external monitoring (Kolk

et al., 1999). Also, findings on organizational codes in the U.K. (Ferguson, 1998) reveals no clear statements of commitment to systematic monitoring or independent verification of code compliance. Monitoring is an essential exercise for ensuring codes of ethics compliance. An ethical organization must monitor the results of its codes of ethics to ascertain whether its outcomes are being achieved in an ethically acceptable manner (Schwenke 2007).

3.3.1.6 Process of accountability

The process of accountability entails the effective communication of an organization's responsible conduct to its stakeholders through the dissemination of information on actions taken in exemplary projects (Nijhof et al. 2003). Stakeholders expect to be informed about an organization's ethical performance. Accountability in terms of ethical conduct also gives the organization an idea (perceived or real) of the extent to which stakeholders believe it is taking responsibility for ethical behaviour. Schwenke (2007) opines that an organization's leadership should set ethical standards and implement mechanisms to hold itself accountable for ethical performance. Accountability can also help to curb corrupt practices and raise ethical standards in construction organizations (Sohail and Cavill, 2008).

3.3.2 Organizational enablers: EFQM approach ²

The tremendous benefits contained in EFQM made construction researchers to adopt its implementation in various aspects of construction management. Watson (2002) studies the problems associated with the implementation of EFQM in construction companies using a sample of fifty companies and the result was used to produce a generic model that aids implementation of EFQM model in construction-related organizations. Similarly, Watson and Davis (2002) develop a methodology for EFQM implementation within construction-related educational establishment and affirm the possibility of attaining all the advocated advantages of EFQM. Vukomanovic et al. (2007) in their study on the approach for benchmarking

² This section has been published in a journal paper by Oladinrin and Ho (2014b)

construction performance introduce an integrated model based on EFQM and Balance Score Card (BSC). However, Chileshe (2005) examines the application of EFQM model in the supply chain and tendering process within the UK construction companies and concludes that the non-prescriptive and weighting arrangement of the model need to be validated and tested and therefore introduces Structural Equation Modelling (SEM) to validate the model. The efforts of previous researchers in implementing EFQM model within construction organizations focus on quality attainment using the model as a tool to measure performance in this regards. Meanwhile, quality performance depends on a sound ethical standard within the organization (Buban, 1995). This aspect is neglected by various researchers and this form the motivation for the current research.

Organization can be managed traditionally by focusing on its separate units (e.g. production, accounting, marketing, logistics etc.). However, a better approach to managing organization is to consider the whole parts as a system with emphasis on the connection that exists between the separate parts and the performance of all the units will determine the general performance of the system. Construction organization is considered a system with any given employee or unit or process forming part of a larger system and the functions of those entities, acting together, are substantiated by their results. In a system approach, everything is connected to one another and a change in one entity will invariably affect the others in the system. Therefore, to effectively and proactively accommodate the demands of incessant unethical behaviour in the organization, all system components must be addressed regarding decision-making. Watson and Howarth (2011) employ the approach of European Foundation for Quality Management (EFQM), and group the components of organization (enablers) which allow achievement of organization results into five. This approach is used in this study for clearer perspective of organizational enablers as discussed in the following sections.

3.3.2.1 Leadership

Leadership is one of the most important aspects of any business organization (Butler and Chinowsky, 2006). Leadership, as described by (Pochron, 2009), is an on-going process (embodied by responsible actors) that occurs as a result of formal and informal interactions within an organization. This dynamic process is initiated whenever a leader recognizes the need for a change, perceives the possibilities for the change, and consequently takes action. Because of the diverse approach to describing leadership, however, researchers have not reached a consensus as to what it really means (Butler and Chinowsky, 2006). The ability to make a correct decision at the right time makes a leader a good one indeed and others can emulate such as a result of behavioural influence, because leadership is about exerting influence in a way that invigorates others to comply with a desired goal (Pochron, 2009; Wotruba et al., 2001). This calls for a significant mastery over the leaders' behaviour and attitudes in a sacrificial manner to be able to exercise the greatest influence on other employees.

Neergaard and Pedersen (2005) assert that managers as leaders in organizations are crucial change agents capable of shaping responsible business practices. Thus, the impact of leadership in making an ethical organization by adhering to codes of ethics cannot be overemphasized. As noted by Emiliani (2000, p. 261), 'ethical behaviour to establish an ethical environment will begin with the leaders within the organization as integrity, or the lack of it, flows from the top down.' According to the study, reported by Gottlieb and Sanzgiri (1996), it was found that 75% of 8,000 respondents supported the fact that the organization's leader plays the most significant role in ensuring ethical standards for the organization. It was therefore suggested by the authors (Gottlieb and Sanzgiri, 1996) that an organization's leaders should act as contributors and drivers to ethical management by playing their roles in the formulation of the ethical policy, communicating an ethical code of

ethics as well as leading by example. According to the report of the Construction Management Association of America (CMAA), there are some successes recorded against leadership development efforts in the construction industry. Notwithstanding, there is a significant need for leaders who are capable of fulfilling the current needs of the industry. One of the identified needs is the issue of ethical malpractice, which has dragged the industry in mire and therefore dented its image. Whatever culture an organization imbibes, flows from the top management down; therefore, successful implementation of a code of ethics will be determined by readiness and dedication of top management.

Unfortunately, construction organizations have not been diligent and committed to combatting the incessant unethical behaviours they are often burdened with. Leadership is considered in construction as the main enabler in shaping ethical behaviour (Ho et al., 2004). The leadership referred to in this study covers both the corporate leaders (e.g., directors) and project leaders (e.g., supervisors) who transmit an organization's ethical value to the rest of the employees. Oladinrin and Ho (2014b) propose a framework to express necessary elements for enabling ethical codes implementation through leadership enabler. It is envisaged that the leadership enabler will assist leaders in facilitating the achievement of a mission and vision of ethics, establish required values for long-term success, and internalize them through proper actions and behaviours.

3.3.2.2 Policy and strategy

Watson and Howarth (2011) describes policy and strategy as a means by which an organization implements its mission and vision through a clear stakeholder focused strategy, supported by relevant policies, plans, objectives, targets, and processes. These are guidelines developed to regulate decision making toward organizational required actions. The scope of all decisions that affect the organization are defined by business policy, such that employees can make decisions without necessarily making reference to top management for guidance

and direction. Likewise, the roles and responsibilities of top management regarding issues that affect the success of organization are also relevant. According to Kay and Popkin (1998), improving organizations' profitability depends on enhancement of their decision-making strategies by integrating ethics into their decisions. This enabler refers to the means of implementing codes of ethics by responsible organizations via strategies, policies, plans, objectives, targets, and processes that are centred on stakeholders' requirements. The context of integrating this enabler into construction organization to aid effective implementation of ethical codes is presented earlier conceptual study (Oladinrin and Ho, 2014b).

3.3.2.3 People/Employees

The mantra "our greatest asset is our people" contending that technology and tools alone cannot make the firms to accomplish their goals is common among many organizations these days as people facilitate competitive advantage for organizations (Brandenburg et al., 2006; Butler and Chinowsky, 2006). Global competitiveness attempts by organizations will eventually be hampered and frustrating if employees remain unethical (Lloyd and Mey, 2010). Employees are positioned right at the heart of any organization and a sound knowledge of their interaction with the whole organizational structure is a crucial ingredient for the success of any business. Roxburgh (2006) emphasizes the importance of human factor in strategic decisions in organization by recognizing the impact of people's behaviour on economies and profitability of an organization. A successful operation of any organization both real and perceived is linked to the ethical conduct of its employees (Lloyd and Mey, 2010).

As noted by Brimmer (2007), employees' ethical conduct has been a common focus in the public eye recently and has led to emphasis being put on the effect of ethical codes on the global competitiveness of business firms. Just as power concentration focusing on selected few individuals in an organization does not aid profitability because it disables it from

integrating in its immediate environment, so too a centralized approach to codes of ethics would not enable an ethically sound organization (Loumbeva, 2008). In other words, a shared responsibility pertaining to code implementation in an organizational environment will enlighten the focus on stakeholder needs and, as such, enables codes of ethics to be embedded effectively, which in turn create a positive impact on profitability. Loumbeva (2008) concludes that making an ethical decision unilateral is not the best approach in the context of organizational decision-making process. The 'people' enabler indicates the means, by which an organization manages its human resources at all levels (individual, team-based, and organization) such that their knowledge and full potential are released (based on organizational activities) toward the achievement of its policies and strategies as well as its processes (Chinda and Mohamed, 2008).

3.3.2.4 Partnership and Resources

Researchers have made an attempt to define what resources really mean. Bryson et al. (2007) define resources as any assets that an organization might take advantage of to achieve its target goals. According to Barney (1991), resources are specifically described as all assets, knowledge, capabilities, information, firm attributes, and organizational processes managed by an organization, which equip the firm to conceptualize and implement strategies for better and improved efficiency and effectiveness. Resources are any assets both tangible and intangible at the organization's disposal for developing and implementing its strategies (Ray et al., 2004). Similarly, Hansen et al. (2004) categorize an organization's resources into two broad concepts: productive resources (resources needed for goal achievement) and administrative resources (resources governing the use of productive resources). In essence, strategic management calls for effective and efficient utilization of corporate resources in both the long and short term (Key and Popkin, 1998).

In this study, resources refer to the administrative assets that enable a construction organization to plan and manage the behaviour of its internal stakeholders/employees (Loumbeva, 2008) efficiently and effectively through the implementation of codes of ethics. These include personnel and financial resources, as well as the relevant documents necessary for shaping the behaviour of an organization's employees. For example, if an organization targets a certain level of quality behaviour, the specific knowledge and information required to attain and maintain such a level of behaviour are termed 'resources' in this context. Ethics has been identified as the shelter that accommodates moral, social, and legal issues; therefore, using components of ethical analysis as a foundation for decision making in an organization will amount to the best use of corporate resources (Key and Popkin, 1998). As Neergaard and Pedersen (2005) opine, managing quality social and environmental issues extends beyond the perimeter of the organization's boundary. An important management task for a company is the collaboration and partnerships in connection with other companies along the supply chain (Neergaard and Pedersen, 2012). This implies that a construction company should ensure ethical conduct while collaborating with other stakeholders (e.g., suppliers, subcontractors, government, among others) based on contractual arrangement. This enabler shows how an organization handles its external partnerships, project participants, and other stakeholders in relation to the resources needed to aid its ethics policies and strategies via effective decisionmaking processes.

3.3.2.5 Primary processes

Managers today are delighted about processes because of challenges of disjunctive departments, poor regulation, and limited lateral communication, which processes seem to address (Garvin, 2012). Organizational processes are defined according to Garvin (2012) as series of tasks and activities that help organizations in transforming inputs into outputs and they are grouped into three categories: work processes, behavioural processes, and change

processes. This study is concerned with behavioural processes that focus on ingrained behavioural patterns (e.g. decision-making and communication processes), which reflect the ways and manners of acting and interacting within an organization. Behavioural processes, although not independent of work processes, affect the ways work processes are carried out and they are the underlying determinants of operational process's results (Clark and Wheelwright, 1992). This means that behavioural processes inspire and form the way work is performed by regulating the behaviours of individuals and groups. This is applied to construction organizations that are characterized with disaggregated units. With individual and interpersonal relationships that fit into a disaggregated model of the company, processes influence the implementation of any framework (Chinda and Mohamed, 2008) capable of moulding behaviour within a construction organization such that the firm's objectives and goals are achieved.

The necessity of behavioural processes is emphasized in this study as a result of the peculiarity of construction organizations regarding ethical issues. Garvin (2012) asserts that all behavioural processes share common characteristics and have no independent existence but they affect how work is being carried out. In relation to the current study, it is believed that when an individual organization manages its behavioural processes well, it will bring about positive ethical results because they share common characteristics. Thus, a synergetic ethical performance can be attained at the project team level due to common behavioural processes. Certain attributes that can aid these processes in construction organizations are regarded as primary processes. The primary processes enable an organization to manage and improve its processes so as to aid its policy and strategies, maximize opportunities, and generate increasing value for all the stakeholders (Watson, 2002).

3.3 Overall model structure

Given the mixed findings about formal and informal methods of ethical codes implementation process, this model aims to improve on the existing approach. The model utilizes mixed method approach to produce a holistic and effective implementation process. In line with 30 enabling factors of codes of ethics implementation already established in chapter 2, the five organizational enablers and the six processes of ethical codes implementation earlier discussed in this chapter, a Process Approach Assessment Method (PAAM) model is developed. The major task is the fitting of the factors into the proposed model. A schematic representation of the model illustrating the interrelatedness between these categories is shown in Figure 3.5. The model's indicators are arranged to reflect the organization's ethical enablers, and the six sectors within the circle in Figure 3.6 represents the six processes of responsibilization with reference to Nijhof et al. (2003). The significant organizational enablers facilitating operationalization of the respective processes, i.e., leadership, policy and strategy, employees, resources, and primary process, are linked with the indicators, each of which shows how each of the six responsibilization processes is embedded in each of the EFQM model's five organizational enablers. Although these processes can be expressed in various ways within the company, together, they form the fabric of the implementation process and render a code of ethics operational as part of the organizational culture.

Figure 3.5 represents the model for enabling proper codes of ethics management within an organization by ensuring the embeddedness of the established factors within the company's activities. It shows how responsible companies can integrate codes of ethics in their daily activities to enable self-assessment. Thus, the model is intended to assist in codes of ethics implementation and assessment. The proposed framework will help organizations to grasp what codes of ethics implementation entails and what is required of an ethical business. In a

recent study by Adelstein and Clegg (2015) which describes a code of ethics as a stratified vehicle for compliance, it was discovered that a strategic approach to business ethics is not dependent on ethical intentions of an organization but on evaluated contributory benefit to business. Adelstein and Clegg (2015) argue that the use of code of ethics as a tool brings more success to business rather than simply doing the right thing. Thus, the need to assess the implementation of this ethical tool (codes of ethics) within an organization becomes imperative. By this, companies can harmonize their ethical performance and evaluate their strength and weakness with regards to ethical codes embeddedness, which the PAAM model is set to help to achieve.

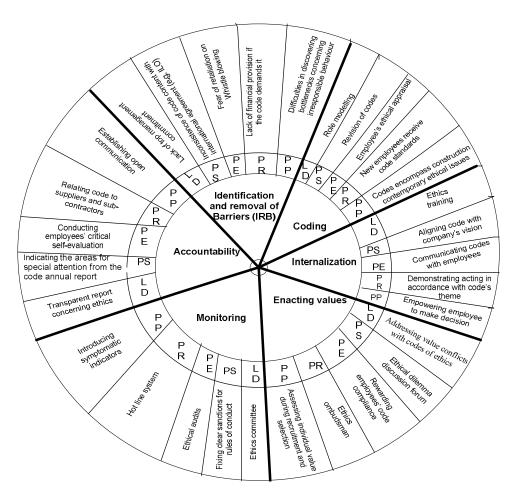


Figure 3.5: Theoretical PAAM model for ethical code implementation Source: Oladinrin and Ho (2015a)

Source. Oladinini and 110 (2013a)

Legend: LD = Leadership, PS = Policy and Strategy, PE = People/Employees, PR = Partnership and Resources, PP = Primary Process

3.4 Summary of the chapter

There has been an increasing awareness of the critical need for integrating ethics in the organizational fabric, but a great deal exists for improvement. This chapter discusses the organization enablers and the processes to be embraced by any responsible construction organization for the proper management of codes of ethics. A modified PAAM model for enabling codes implementation is proposed on a vast array of literature reviews. The attributes are categorized under five enablers, using the EFQM excellence model, which is commonly used in practice and is acknowledged to be a valuable tool, and six processes which must be adhered to by any organizations willing to embed its codes of ethics in a responsible manner. Positioning the attributes of code implementation under separate enablers is a step forward in construction management research. It is important to note that the model proposed in this study is only suitable for an organization that has a written code of ethics already. Based on the EFQM self-evaluation mechanism, a self-assessment can be conducted via the framework using any convenient scale to assess the indicators. This PAAM model will hereafter inform the design of research instrument for data collection as well as analytical methods as discussed in the next chapter. The development of the model has contributed significantly to the achievement of objective 3: To develop and establish a Process Approach Assessment Method (PAAM) that will provide a strong impetus towards the implementation of corporate codes of ethics within organizational processes and routines.

CHAPTER 4 RESEARCH METHODOLOGY

4.1 Introduction

Several approaches can be adopted in conducting a research but the general aim is meeting the objective(s) of the study. Thus, there is need to carefully design the research by selecting the most suitable method(s) in order to achieve the aim of the study. This chapter presents a blueprint that enables prioritization of decisions regarding research process and to find answers to the research questions by explaining the procedures used to achieve the four objectives of this study. Hence, this chapter describes the research design and strategies necessary to achieve the objectives.

4.2 Scheme for research design

Research design deals with a set of decisions regarding the topic under study, and is one of the most important aspects of any academic research due to the systematic way of explaining how the research will be conducted in order to properly address the objectives (Creswell, 2013). According to Burns and Grove (2003, p. 195), a research design is defined as "a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings". The essence of a research design culminates in maximizing valid solutions to a research problem. Therefore, it is imperative to address issues that are paramount to solving the research problem vis-à-vis the nature of the research. These issues are identified by Sekaran (2003) as shown in Figure 4.1, and the components are related to research design although, they are not necessarily in any particular order. This idea is followed in the current study to symbolize a schematic representation of necessary considerations regarding research design and the item headings are further discussed. The italicized words in Figure 4.1 are the ones relevant to this study.

4.2.1 Purpose of the study

Giving a considerable attention to specific goals of research helps in determining the approach to be adopted to achieve such goals. Purpose of research has been generally classified into three main elements viz: exploratory research, descriptive research and explanatory or hypothesis testing research (Bourne, 2005; Kelly, 2009; Sekaran, 2003; Yin, 1996). According to Bourne (2005), exploratory research is usually carried out with the purpose of getting more insight about a phenomenon or to develop a new idea in form of proposition that is open to further enquiry. It involves the use of strategies such as interview, focus group meeting or personal observation. Descriptive research design is used to collect information regarding the current status of a phenomenon and as the name implies, to describe "what occurs" and "characteristics of", with respect to variables or conditions in a particular situation using suitable approach (Sekaran, 2003). Hypothesis testing is employed when there is need to explain relationships that exist between two or more factors and how the factors interrelate or differ from each other (Sekaran, 2003). Based on the forms of the objectives for this study, which are: to identify "what", to address "how" (Yin, 1996), the research design for this study is a combination of exploratory, descriptive and hypothesis testing research.

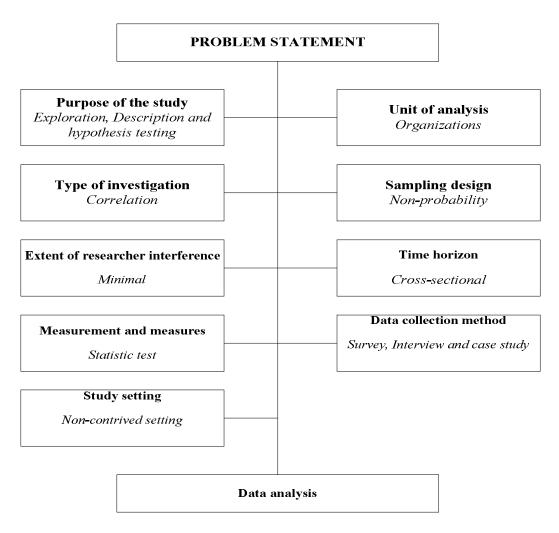


Figure 4.1: Scheme for research design

Adapted from Sekaran (2003)

4.2.2 Types of investigation

There are two types of investigation according to Sekaran (2003):

- (1) Causal research
- (2) Correlational research.

Causal research is engaged to establish a cause-effect relationship between factors or variables in a definite manner. In causal research, both categorical dependent and independent variables are established, and the cause and/or effect of the relationship between

the two sets of variables must also be established (Johnson, 2001). However, in correlations research, the relationship between two or more variables is established in an interrelated manner rather than testing the cause-effect relationship. Correlational research only comprises quantitative variables which are to be studied in a non-manipulative way (Johnson, 2001). Since this research focuses on identification of important factors relevant to ethical codes implementation, and variables associated with the proposed model as well as establishing relationships among the variables, both causal and correlational research are suitable and are therefore employed in this study.

4.2.3 Extent of researcher interference

The nature/type of investigation will determine the extent to which a researcher can interfere with the course of research flow (Sekaran, 2003), the extent which could be minimal, moderate or excessive interference. For example, in a typical cause-effect research involving laboratory experiment, a researcher is bound to alter some variables so as to be able to establish a valid cause and effect relationship. Whereas, in contrast to this, correlational study does not permit any tangible interference of researcher, rather, the situations or factors under investigation are allowed to flow a natural course in a natural environment with a minimal interference of the researcher (Sarwat et al., 2011). Due to the nature of this study, the researcher interference is bound to be minimal. Information about the investigating factors was basically opinions of the practitioners and the information regarding processes of code implementation was gathered within the selected construction organizations with little coordination by the researcher.

4.2.4 Measurement and measures

There are four categories of measuring scales in research, starting from the lowest to the highest according the power of measurement: nominal, ordinal, interval and ratio (Patten and Bruce, 2000). The choice of suitable scale is determined by the type and nature of

information/data to be collected. In this study, background information of the respondents was collected as well as their opinion about the factors related to codes of ethics implementation in construction organizations. Table 4.1 shows the scales and their characteristics, it also indicates the ones that are relevant to this study.

Table 4.1: Properties of scales

| Scales | Characteristics | Application | Relevant to this study |
|----------|---------------------------------|------------------|------------------------|
| Nominal | It shows differences but no | Naming | Yes |
| | order, distance or origin | | |
| Ordinal | It shows differences and order, | Ordering | Yes |
| | but no distance and origin | _ | |
| Interval | It shows differences, order, | Equal interval | No |
| | and distance but no origin | without absolute | |
| | | zero | |
| Ratio | It shows differences order, | Equal interval | No |
| | distance and origin | with absolute | |
| | | zero | |

4.2.5 Study setting

The study setting is determined by the environment in which the study is expected to be conducted either artificial environment (laboratory settings) which is contrived, or natural environment (field settings) which is non-contrived (Speer, 2002). Research conducted in a contrived setting is called experimental research, while non-contrived setting is known as non-experimental research (Johnson, 2001). The current research was conducted in a natural environment (construction organization). This is because field setting is commonly adopted in organizational studies and can substantiate generalization of research results (Dipboye and Flanagan, 1979).

4.2.6 Unit of analysis

There are five categories of unit of analysis (Sekaran, 2003) namely: individual, dyads, groups, organizations and culture. For the purpose of this research, the focus is on the construction organizations therefore the unit adopted is organization. Although, data was

sourced from individual respondents as representatives and members of their respective organizations, the focus was to address the issue being studied at the organizational level rather than individual level.

4.2.7 Sampling design

The essence of sampling in research is to conduct a detailed study of a portion instead of studying the entire population such that the information derived from the sample is sufficient enough to make a conclusive generalization about the whole population (Ross, 2005). The selection of sample that is guided by scientific sampling procedures has many advantages over the study of the whole population, these include: reduction in the cost of data gathering and analysis, reduction in the requirement for trained personnel needed for fieldwork, improved speed in data analysis and reporting, and achievement of greater accuracy (Ross, 2005). The target population in this study includes the employees, managers and professionals who can provide relevant information about their organizations in line with the current research.

Selection of suitable and relevant sample can be guided by two types of sampling design namely: probability and non-probability sampling (Ross, 2005; Sekaran, 2003). In probability sampling, each member of the defined target population has a known, and non-zero, chance of being selected. In contrast, in non-probability sampling, there is no predetermined or known chance of selecting any member of the population. Although probability sampling (e.g. random) minimizes possible bias in data collection, Abowitz and Toole (2009) argue that probability sampling is rarely achievable in an applied setting such as construction. Hence, convenience and snowball samplings are commonly used in construction management research (Abowitz and Toole, 2009). For this reason and due to the sensitivity of ethics research, non-probability sampling was adopted in this research. Thus, in order to enhance

the response rates, participants and organizations that show interest in participating in the research were approached.

4.2.8 Time horizon

One of the most important factors to be considered while planning a research is the time horizon. Time horizon simply means the time dimension for the research and can be categorized into cross-sectional and longitudinal approaches (Saunders et al., 2011). A cross-sectional design involves the collection of data on certain factors or variables at once for the purpose of gathering quantitative data in connection with the variables so as to determine the patterns of association (Bryman and Bell, 2011). Longitudinal approach demands a sufficient period of time to observe likely changes that could occur in a study, thus, data are collected at several points of time. Although longitudinal approach in its full strength has the capacity to study change and development (Saunders et al., 2011), it is time consuming. Due to time constraint, cross-sectional design was employed in this study, which was engaged in a snapshot manner to gather opinions of practitioners regarding factors pertaining to ethics codes implementation with the focus on addressing the research problem.

4.2.9 Research strategies and methods for data collection

For proper justification of strategies and methods used in this study, references were made to academic papers, research method texts of similar and relevant studies as well as acknowledged experts in research methodology. This approach provides an overall guidance for the choice of suitable strategy and method for the current study. Saunders et al. (2011) argue that considerations must be given to certain issues prior to data collection and analysis. These issues include:

- the philosophical perspective that determines;
- the research approach and;

 the strategies which enable the researcher to arrive at the choice of suitable research method.

4.2.9.1 Research philosophy

Research philosophy is described according to Levin (1988) as a researcher's belief about the way data are collected and analyzed. Saunders et al. (2011) distinguish ten different categories of philosophical perspectives as follows: positivism, realism, interpretivism, objectivism, subjectivism, pragmatism, functionalist, interpretive, radical humanist and radical structuralism. The current research focus on the relevant philosophies and the justifications for their choices were made. There is significant attachment between research approaches and research philosophies (Saunders et al., 2011). The approaches which could either be deductive or inductive are determined by the nature of the data (quantitative, qualitative or mixed) to be collected.

This study employed the use of mixed methods for data collection including quantitative and qualitative data. Quantitative data were collected by means of questionnaire surveys, while interview was used to collect qualitative data. Several authors embrace pragmatism as a philosophical perspective to address mixed method research (Teddlie and Tashakkori, 2003). Similarly, Denscombe (2008) claims that pragmatism is mostly suitable for the mixed methods approach. In an attempt to establish the suitability of pragmatism approach for mixed method research, Cresswell (2003) reviews several relevant studies and reveals that pragmatism is not attached to any philosophical belief of either reality, actual or empirical nature of a situation and does not support a belief in a single directional approach in addressing situations. It is therefore flexible and allows researcher to choose different alternatives for data collection and analysis. Thus, the current study positions itself on 'pragmatism' philosophical perspective.

4.2.9.2 Research approaches

There are two approaches to research according to Saunders et al. (2011): (1) Deductive reasoning approach; and (2) Inductive reasoning approach.

Deductive approach works from a more generalized theory to a more specific conclusion. In other words, it follows a logical flow of conclusion from the premises of available facts. On the contrary, inductive approach moves from specific observations to broader generalizations and theories. In this study, the two approaches were relevant. The data gathered from the experts and practitioners' opinions about the factors related to ethical codes implementation, were analyzed to form a deductive conclusion. Similarly, inductively, a model for implementation of codes of ethics within the construction organizations was established with reference to Nijhof et al. (2003) and the model was empirically tested based on the data collected.

4.2.9.3 Research strategy

Yin (2013) identifies five main research strategies and points out three conditions which help in distinguishing the most suitable strategy to adopt. The strategies are: experiment, survey, archival analysis, history and case study. The conditions guiding the choice of strategies are: the kind of research question under study; the extent of investigator's control over actual behavioural events; and the degree of focus on contemporaries as against historical events. To aid quick decision on selecting the most suitable research strategy, Yin (2013) simplifies the process by providing a guiding table as shown in Table 4.2. which equally shows the strategies adopted in the current research.

Table 4.2: Choosing suitable research strategies

| Strategy | Form of research question | Requires control over behavioural events | Focuses on contemporary events | Used in this study | |
|-------------------|--|---|--------------------------------|--------------------------|--|
| Experiment | How, Why | Yes | Yes | No | |
| Survey | Who, What, Where, How many, How much | No | Yes | Yes | |
| Archival analysis | Who, What, Where, How many, How much | No | Yes/No | Yes | |
| History | How, Why | No | No | No | |
| Case study | How, Why | No | Yes | Yes | |

Since the study setting for this research is non-contrived as explained earlier (Section 4.2.5), therefore it does not require control over behavioural events, which means that experiment is not applied in this study. Similarly, the current study focuses on contemporary events in the construction organization rather than historical events. Historical strategy is employed when only historical documents are available for sourcing data and there is no person to provide required information to the investigator (Yin, 2013). This leaves the choice of strategy between the survey, archival analysis and case study.

In summary, two major strategies are suitable for this study:

- (1) Survey (interview and questionnaire)
- (2) Case study.

The use of archival analysis strategy was embedded in the case study as will be seen later in this thesis. Using convenience sampling has a potential to generate useful insights, but it has limitation in generalizing the findings to larger populations (Fellows and Liu, 2008). In non-probability techniques, sampling error and confidence intervals are rarely calculated (Abowitz and Toole, 2009). Creswell (2009) posits that combining methods offers a better understanding than using a single strategy. Also, Abowitz and Toole (2009) notes that the limitations inherent in the use of a particular sampling strategy can be overcome through

mixed method research designs. Therefore, the current study employed mixed method approach in order to rivet on the advantages of the combined strategies and to compensate for the inherent limitations in individual data sample.

Survey strategy

Survey research can either be in form of questionnaire survey or interview. Survey research is adopted in this study due to its identified strengths as explained in the following.

- Suitable for gathering information from wide sample coverage of the population (Glasow, 2005).
- Useful for gathering demographic data to describe the components of the sample (McIntyre, 2002).
- Very cost effective and very easy to make generalization (Bell, 2013).
- Effective in collecting attitudinal information that is often difficult to evaluate using observational approaches (McIntyre, 2002).

Questionnaire survey

Research related to ethics has been predominantly carried out with the aid of a questionnaire survey (Beeri et al., 2013; Kaptein, 2011a; Majluf and Navarrete, 2011; Snell et al., 1999; Svensson et al., 2009), being an effective instrument for gathering people's perceptions with the ease of analyzing inter-correlations among participants' opinions (Spector, 2006). Thus, the use of questionnaire survey is considered suitable for this study. There are three different sets of questionnaires used in this research to address objectives 1, 2 and 4. Before embarking on the distribution of the questionnaire, pilot study was conducted in order to validate the content of the questionnaires. After the review of the questionnaire by research experts, it was distributed to the employees of a selected construction organization in Hong Kong to test their understanding of the questions. After refining the questionnaires, ethics clearance was

obtained from the Hong Kong Polytechnic University Ethics Committee. This is necessary because of the sensitivity of ethics research and the involvement of human factor.

Questionnaire survey and procedure for Objective 1

In order to gather mixed opinion from various participants, a web-based questionnaire survey was used (Wright, 2005). The first set of questionnaire (refer to Appendix 3) was designed using internet (SurveyMonkey) tool and was posted online using the Co-operative Network for Building Researchers (CNBR) platform. In order to have a broad spectrum of construction professionals (academics and practitioners) participated in the survey, accessibility to the survey link was open to all CNBR members for a period of 9 months from February to November 2014 and reminders were sent three times. This was supplemented by sending the survey link directly to email addresses of some respondents selected with the aid of snowball sampling. One major advantage of online survey is cost reduction in terms of printing, postage, telephone and data entry (Shannon et al., 2002). Other benefits include; shorter development time, accuracy in data entry, and complex data gathering at source (Dix and Anderson, 2000).

However, there are challenges in using web-based survey including; coverage bias, difficulty in reaching specific target audiences, poor response rates, as well as confidentiality issue (Shannon et al., 2002; Solomon, 2001). Meanwhile, Fox (1999) advices that academics should embrace the opportunities offered by new technologies. Recently, similar studies have been conducted using this approach (Elmualim et al., 2012; Fahmy et al., 2014; MacLean et al., 2014). Recall that 22 factors/variables hindering effective implementation of codes of ethics were derived from literature review, the respondents were asked to rank each of the variables using a five-point Likert scale ranging from "1= strongly disagree to 5= strongly

agree" to determine their level of agreement. The analysis of the data obtained from this process is discussed in the next chapter.

Questionnaire survey and procedure for Objective 2

Public policy in Hong Kong has made it compulsory for all contractors to possess a written code of ethics. This implies that all the organizations involved in this research have written codes of ethics. The second set of questionnaire used to address objective 2 consisted of 30 attributes/indicators previously identified in literature review (see Appendix 4). The questionnaire was bilingual (i.e. designed and presented in English and Chinese) for ease of comprehension because of the involvement of frontline employees in the research (Hon et al., 2012). The indicators were represented by statements in the questionnaire and all the statements are in turn rated on a five-point Likert-type scale with points 1 and 5 representing strongly disagree and strongly agree respectively (Doloi, 2009). In order to boost the survey response rate, small incentive packages in form of supermarket cash coupons were attached to the questionnaires as suggested by Lucko and Rojas (2009). Most of the questionnaires were distributed to construction practitioners and collected personally by the researcher given the sensitivity of ethics-related research (Beeri et al., 2013) and the increased response rate associated with personal delivery and collection methods (Ki et al., 2012). Others sets of questionnaire were designed as fillable forms using the 'developer' tab in Microsoft word 2013 and were sent to the respondents as email attachment. However, the participants were assured of the anonymity of the information provided.

Questionnaire survey and procedure for Objective 4

Gatewood and Carroll (1991) examine various approaches that are suitable for gathering data relating to ethics and conclude that self-report questionnaire is the most commonly used approach. This method is also adopted in this study for the third set of questionnaire survey.

Using the same 30 factors enabling codes of ethics implementation which formed the contents of the model, the factors were carefully transformed to assessment questionnaire (see Appendix 5) to determine the relevance of the indicators in a respective organization. Also, 5 point Likert scale ranging from 5 to 1, representing highly significant and non-significant respectively was adopted.

Interview

The purpose of the interview in this study is mainly to discover the effort of participants' companies on implementation of ethical codes by asking questions related to the established indicators (Adam and Rachman-Moore, 2004). In order to reveal the reality and to obtain more information about ethical codes implementation and the measures used by construction organizations, 19 semi-structured interviews were conducted using open-ended questions, starting from October 2014 to May 2015. There is lack of consensus regarding sample size required for qualitative interviews especially in PhD studies (Mason, 2010). For instance, Guest et al. (2006) found that saturation usually ensued within the first 12 interviews, Creswell (2012) suggests 5-25 interviews, Green and Thorogood (2013) note that it is rare to get new information from interview transcripts after interviewing 20 participants. Therefore, 19 interviews conducted in this study is considered satisfactory.

The use of open-ended questions was to provide the respondents with utmost flexibility in coordinating their responses and to facilitate wide-range discussions (Aberbach and Rockman, 2002). The subjects were selected from different construction companies in Hong Kong in order to obtain intersubjective 'reality' (Åkerlind, 2012, p. 329). The selection was based on personal network sampling (Spreen and Zwaagstra, 1994) and snowball sampling (Sadler et al., 2010). Table 4.3 presents the background of the interviewees including their position in the organization with the number of years of experience indicating years spent in the current organizations. The years spent by the participants in their respective companies

ranges from 3 to 20 years. The essence of using the respondents' years of experience in their current organizations is to ensure that they are capable of providing information about their current companies and also to know the participants that are new in the company. The same approach was used by Pater and Van Gils (2003) in a similar research that examines the effects of ethical codes on decision-making.

Similarly, in a study that examines interrelationships between ethical codes and behaviour within an organization, Schwartz (2001) asked the interview participants to indicate the number of years they have spent in their respective companies and found that it was between 3 months and 33 years. In addition, in the current research, some of the interviewees have worked for more than one company therefore, they were asked to also share their experiences in their former companies. The interview covers a broad spectrum of organizational members including 1 Director, 4 Senior managers, 6 Project Managers, 2 Project Supervisors, 2 Site supervisors, and 4 Frontline workers as shown in Table 4.3. This is considered necessary in order to eliminate biases inherent in focusing on the top management alone (Schwartz, 2001).

Due to sensitivity of ethics, the respondents were interviewed face-to-face in order to enable the interviewer to read meaning into the body language of the interviewees and to ascertain the truthfulness of the information. Also, it allows the interviewer to describe any ambiguous questions which gives better outcomes than telephone and videoconferencing interviews (Chapman et al., 2003). Meanwhile, some of the interviews were conducted in conducive locations other than the respondent companies' premises so as to give them latitude to articulate their responses frankly (Easton et al., 2000). Considering the likelihood of language barrier, an interpreter was hired to assist the researcher when need be. The interview was tape-recorded to avoid information loss and was subsequently transcribed using transcribing software (Schwartz, 2001; Skukauskaite, 2012). The transcription was personally carried out by the researcher to maintain accuracy (Easton et al., 2000).

Table 4.3: Background of the interviewees

| No | Position in the organization | Years of experience |
|----|------------------------------|---------------------|
| 1 | Director | 20 |
| 2 | Senior Manager | 18 |
| 3 | Senior Manager | 5 |
| 4 | Senior Manager | 20 |
| 5 | Senior Manager | 21 |
| 6 | Project Manager | 15 |
| 7 | Project Manager | 4 |
| 8 | Project Manager | 8 |
| 9 | Project Manager | 4 |
| 10 | Project Manager | 15 |
| 11 | Project Manager | 11 |
| 12 | Project supervisor | 14 |
| 13 | Project supervisor | 6 |
| 14 | Site supervisor | 10 |
| 15 | Site supervisor | 6 |
| 16 | Frontline worker | 5 |
| 17 | Frontline worker | 3 |
| 18 | Frontline worker | 5 |
| 19 | Frontline worker | 4 |

Each separate interview lasted for about one hour on average. Although this study focuses on the implementation of ethical codes, general questions relating to ethic in construction organizations were generated. According to Aberbach and Rockman (2002), to align a proposed framework, drawing a systematic sample of interviewees is more appropriate when there is need to make inferences from a larger population. The purpose of the interview in this study was to elucidate the "weight of evidence" (Seaman, 1999, p. 35) to the study proposition and to give meaning to quantitative outcomes. Recall that this study generally focuses on organizational assessment, one or two case studies might be insufficient for generalization. Thus, in order to have a wide coverage of companies participated in the research, a wider-coverage interview was adopted. Thereafter, another series of interviews were conducted in a selected case study for further verification of the usefulness of the model as will be discussed later.

Case study

Rowley (2002) suggests the use of case study research to assess contemporary events when it is difficult to manipulate relevant behaviour. Rowley (2002) describes diverse sources of evidence that are employable in case study research which include: documents, artifacts, interviews and observation. In this study, series of activities including company visits, document analysis, company assessment, and semi-structured interviews were conducted. Concerning the appropriate number of cases to be chosen, Davies (2004) opines that greater certainty can be obtained from larger number of cases. However, there is time limit for PhD study, thus there is a limit to the numbers of cases that can be covered within the study time frame.

Cresswell (2003) reveals that there is greater degree of shallow investigation in any single case when larger number of cases are involved. The author further (Cresswell, 2003) warns that, for in-depth investigation of each of the cases, a researcher should choose not more than four cases. Yin (2013) emphasizes the essence of theoretical framework that shows the condition under which the phenomenon to be studied can be found. In line with this, the conceptual model developed in this study indicates organizational areas where code implementation is applicable. The selection of case was guided by certain assumptions advocated by Nijhof et al. (2003) as follows:

- The organization must have adopted a written code of ethics;
- The code should contain guidelines about both desirable behaviour (value orientation) and prohibited behaviour (compliance orientation);
- The code pertains to the behaviour of employees as individuals and to the corporate behaviour of the organization as a whole;
- The code signifies responsibility distribution forms within the firm and;

- The use of the code as an instrument focuses on heightening corporate social responsibility;
- Lastly, the organization must have attempted code implementation in a way.

Considering these assumptions, coupled with the sensitivity of ethics-related study, the current research manage to use one construction organization for case study. This decision was reached after several invitations to gain access into some organizations were turned down and other organizations did not meet up with the above assumptions. A single case study was adopted in similar studies such as Ho et al. (2004) and Ho (2013). In order to get insights into the reality so as to avoid stripping away of some crucial details, a qualitative approach was adopted to compliment quantitative assessment regarding ethical codes implementation in the subject organization. Therefore, both the qualitative and quantitative data were collected concurrently and the discussion of results were integrated as suggested by (Hanson et al., 2005). In essence, 5 face-to-face (semi-structured) interview were conducted with the members of selected organization between March and June 2015, using the same open-ended questions that was used in the broader interview as discussed earlier.

Table 4.3 displays the participants' positions in the organization with the number of years spent in the subject organization and the interviewees are positioned at various level of organization. Although 5 interviewees might be considered relatively small, Eisenbeiss et al. (2014) posit that minimum of three members of an organization is recommended to draw reasonable conclusions in most organizational studies.

Table 4.4: Background of the interviewees for the case study

| No | Position in the organization | Years of experience |
|----|------------------------------|---------------------|
| 1 | Executive Director | 30 |
| 2 | Senior Manager | 16 |
| 3 | Senior Manager | 9 |
| 4 | Project supervisor | 6 |
| 5 | Frontline worker | 3 |

4.2.10 Methods of data analysis

4.2.10.1 Mean Score (MS) ranking technique

Data obtained by questionnaire survey are commonly analyzed by the use of mean score ranking technique (Chan, Lam, et al., 2009; Cheung and Chan, 2011). In addition, mean score ranking technique has been widely applied in ethics research including an assessment of ethical behaviour of quantity surveyors in Hong Kong (Fan et al., 2001) and impact of codes of ethics in Hong Kong (Snell et al., 1999). It is therefore appropriate to adopt the same technique to assess factors relating to code implementation in construction organizations. The formula for calculating mean score is given as follows (Cheung and Chan, 2011):

$$M = \frac{\sum s}{n}$$

Where M represents the mean score; s is the respondents' scores based on Likert scale of 1 to 5; n is the total number of respondents. The use of mean score ranking further contributed to the achievement of objective 1 and 2 as presented later in this thesis.

4.2.10.2 Exploratory factor analysis

Exploratory factor analysis (EFA) was used to address objective 1. This was performed to categorize the number of variables into a smaller and reasonable number of factors (Hair et al., 2010). For better interpretability of factor loadings and clear dimensionality of the indicators, principal axis factoring, coupled with varimax rotation was utilized (Chinda and Mohamed, 2008). In determining adequate sample size for factor analysis Williams et al. (2012) reveal that there is lack of consensus concerning the required sample size needed to accomplish a factor analysis. Sapnas and Zeller (2002) argue that sample size as low as 50 may be adequate. Costello and Osborne (2011) posit that subject to factor ratio is a good criterion to determine the sample size. The author (Costello and Osborne, 2011) explore

common practices among researchers and find that many researchers used subject to factor ratio of 2:1 to report their findings from factor analysis. Subject to item ratio used in this study is approximately 4:1 which is above 2:1 that is commonly reported.

The use of EFA requires various tests to ascertain its appropriateness for factor extraction. First, principal components analysis requires that there be correlations values greater than 0.30 between the variables included in the analysis (Yang et al., 2009). Second, Kaiser-Meyer-Olkin (KMO) must not be less than 0.50 (Chan, 2012). Third, the Bartlett's test of sphericity should be significant (p< 0.05) for factor analysis to be suitable (Williams et al., 2012). Fourth, according to Hair et al. (2010), 0.3–0.4 loadings are minimally accepted values to determine the items that should be retained or removed. In order to screen out variables that represent weak indicators of the factors/constructs, a cut-off 0.4 factor loading was applied in this study. All these criteria helped in analyzing the data pertaining to objective 1 as discussed in the next chapter.

4.2.10.3 Partial Least Square - Structural Equation Modeling (PLS-SEM)

Two types of SEM are common in the literature viz: covariance-based SEM (e.g., AMOS and LISTREL) and variance/component-based SEM, which uses Partial-Least Square (PLS) and therefore takes the name PLS-SEM (Ghofar and Islam, 2014). PLS-SEM, equally referred to as PLS path modeling in literature, was first designed by Wold (1975), as a non-parametric technique (You et al., 2014), closely related to standard least-squares methods (Lu et al., 2012), which is used to estimate causal relations in path models where latent variables are indirectly determined/assessed by associated indicators (Memon et al., 2013). It is a form of alternating least squares algorithms that cover principal component and basic correlation analysis for analyzing high dimensional data in a low-structure (Henseler and Sarstedt, 2013). Due to specific advantages of PLS, the approach has been embraced in

many fields of research, for instance in marketing (Hair et al., 2012), behavioural science (Bass et al., 2003), organizational study (Sosik et al., 2009), and knowledge management (Koohang et al., 2014). Despite the popularity of PLS in other disciplines, it is still underutilized in the construction management research (Memon et al., 2013). Past construction studies that used PLS path modeling include; the assessment of resources and cost overrun in construction (Memon et al., 2014; Memon et al., 2013; Rahman et al., 2013), e-bidding in construction organizations (Aibinu and Al-Lawati, 2010), construction organizations' flexibility (Lim et al., 2010), testing the relationship between the safety climate and safe work behaviour in construction site (Mohamed, 2002), and investigating the causes of corruption in the Chinese public construction sector (Le et al., 2014). In addition, a recent study by MacLean et al. (2014) used PLS analysis to examine the effect of decoupling formal ethics programs on members of an organization.

PLS-SEM is gaining attentions nowadays due to its inherent advantages. Some of the advantages of PLS path modeling in past studies include: it requires minimal assumptions regarding population or statistical distributions of data sets (Henseler and Sarstedt, 2013); it requires minimum sample size as small as 30 (Wixom and Watson, 2001); it is more appropriate when dealing with real world applications and complex models (Wu, 2010). Enegbuma et al. (2014) assert that PLS path modeling is prevalent in strategic management research. Since the current study describes a strategic approach towards implementation of codes of ethics in construction organizations in a real world, with minimal assumption of sampling population, PLS is adopted, using latest Smart PLS 3.2 software package for the analysis. In theory, two forms of PLS-SEM analysis have been identified; *reflective* and *formative* (Lowry and Gaskin, 2014). Reflective formation is adopted in this study because the focus is to examine whether the processes are substantiated by the enablers in a confirmatory manner (Diamantopoulos, 1999).

There are two steps in PLS path modeling evaluation (Henseler and Sarstedt, 2013; Memon et al., 2013):

- (1) Inner model otherwise known as structural model, determines the relationships between latent (unobserved) construct.
- (2) Outer model also called measurement model, specifies the relationships between latent construct and its associated observed indicators/variables.

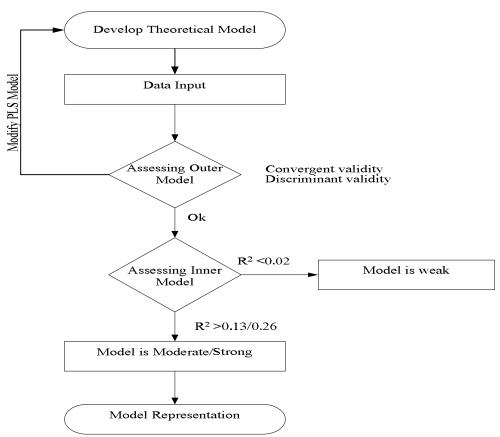


Figure 4.1: **Schematic diagram of PLS-SEM analysis** Adapted from Rahman et al. (2013).

PLS-SEM technique is theory building unlike covariance-based SEM which is theory driven (Lauria and Duchessi, 2007; Lowry and Gaskin, 2014; Vinzi et al., 2010), involving a systematic and sequential procedure in validating theoretical model (Aibinu and Al-Lawati, 2010) as illustrated by Rahman et al. (2013) in Figure 4.1, which guides the current research.

In PLS-SEM models, causal relationships are represented as paths (arrows) in which a given path is a hypothesized correlation between connecting variables indicating the causal and consequent constructs of a proposed theory (Lowry and Gaskin, 2014). Therefore, each path in Figure 4.1 is a hypothesis for testing a theoretical proposition as presented in chapter three. PLS-SEM is a multi-technique approach, combining factor analysis, regression analysis as well as path analysis on the same platform (Aibinu and Al-Lawati, 2010). Therefore, the use of PLS-SEM approach does not require prior separate factor analysis. The approach was used to contribute to the achievement of objective 3.

Using PLS-SEM approach, the model developed based on literature review in Chapter 3 is hypothesized in Figure 4.2. The relationships between organizational enablers (observed variables), six processes of code implementation (independent constructs including: Identification and removing barriers IRB, Coding, Internalization, Enacting value, Monitoring, Accountability) and ethical code implementation (dependent construct) are established. For clarity purpose, the enablers associated with each process are numbered accordingly, starting from the process of identifying and removing barrier (IRB) with all the associated items tagged as "1". Hence, the enablers/indicators relating to IRB sector of the circle is numbered LD1, PS1, PE1, PR1 and PP1, in the research model. For the coding process, number "2" was assigned to all the enablers attached to it (e.g. LD2, PS2, PP2, PR2, PP2). The same procedure is applicable to other processes.

At the other right side of ethical code implementation are the indicators representing the resultant outcomes (R1 to R11) of effective implementation of ethical codes as discussed in Chapter 2. The indicators are ringed out as shown in Figure 4.2 because the results of ethical codes implementation cannot be controlled within the organization but they can be anticipated. Therefore, these indicators are not the focus in this study and they are hid in the

subsequent statistical analysis in Chapter 7. The research model, follows the broad hypothesis that effective implementation of codes of ethics can be achieved through the instrumentation of the five enablers and the six processes of responsibilization. The hypotheses $(H_1 - H_6)$, therefore assert a direct positive impact of each of the processes (each embedded with five enablers/indicators) on ethical codes implementation. The focus is to assess whether the indicators for the enablers can substantiate the six processes and to examine the influence of the processes (H_1-H_6) on ethical codes implementation. The main hypotheses to be tested are as follows:

Hypothesis 1: the embeddedness of process of 'identification and removal of barriers' (IRB) has a positive impact on effective ethical code implementation.

Hypothesis 2: the embeddedness of process of 'coding' has a positive impact on effective ethical code implementation.

Hypothesis 3: the embeddedness of process of 'internalization' has a positive impact on effective ethical code implementation.

Hypothesis 4: the embeddedness of process of 'enacting value' has a positive impact on effective ethical code implementation.

Hypothesis 5: the embeddedness of process of 'monitoring' has a positive impact on effective ethical code implementation.

Hypothesis 6: the embeddedness of process of 'accountability' has a positive impact on effective ethical code implementation.

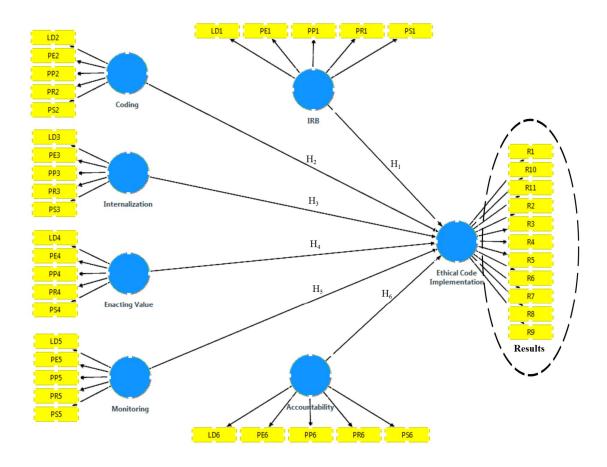


Figure 4.2: Research model and hypotheses

In testing the hypotheses, PLS-SEM is employed because its primary objective is to establish that the alternative hypothesis is significant, such that a null hypothesis is rejected by showing a high R² (Barclay et al., 1995; Gefen et al., 2000). Covariance-based SEM cannot be applied in this study due to inherent factor indeterminacy, that is, it generates more than one solution without a definite assumption of a particular solution that corresponds to the hypothesis being tested, making it unreliable in exploratory analysis essential for theory building (Chin and Todd, 1995; Lowry and Gaskin, 2014). The use of covariance-based SEM is recommended when testing an empirically tested theoretical model but PLS-SEM is suitable for exploratory analysis and developmental theory testing (Fornell and Bookstein, 1982; Lowry and Gaskin, 2014). Given the exploratory nature of the current study and relative newness of the proposed model, PLS-SEM is appropriate.

4.2.10.4 Result Approach Deployment Assessment and Review (RADAR)

RADAR is a specific logic that is commonly used in line with EFQM excellence model. It covers what an organization plans to do, the approach to deploy the planned approach, the achievement based on the approach and assessment and review of its process. RADAR is a very useful logic in construction organizations for critical self-assessment as noted by Watson and Howarth (2011). The reason for adopting RADAR logic in the current research is to help with scoring so as to know the extent to which individual indicator was implemented in the construction organization areas (i.e. enablers). This will invariably help in developing a plan of action base on the result of the analysis to focus on the area that requires more attention. RADAR logic will further contribute to the achievement of objective 4.

4.2.10.5 Fuzzy synthetic evaluation

Fuzzy concept has its origin in mathematics and is used to analyze problems characterized with uncertainty and imprecise definition (Li et al., 2013). However, the application of fuzzy techniques in construction management studies is becoming more prominent (Chan, Chan, et al., 2009). For instance, FSE was used to; evaluate performance measurement (Yeung et al., 2011), model procurement selection for construction projects (Chan, 2007), evaluate stakeholder evaluation in construction projects (Li et al., 2013), evaluate construction dispute (Cheung et al., 2001). The usefulness of FSE lies in its ability to interpret vague and linguistic variables in order to arrive at reasonable decision making (Sadiq and Rodriguez, 2004). FSE has been used in similar corporate ethics research (Sacconi, 2003). Due to vagueness and sensitivity of ethics in construction industry, FSE was adopted in this research to evaluate the extent of codes of ethics implementation in construction organizations in Hong Kong. There are five steps involved in FSE technique according to Xu et al. (2010) which was carefully followed in this study to achieve objective 4 as discussed later in this thesis.

4.2.10.6 Analysis of qualitative interview data

According to Åkerlind (2012), there are two approaches of interpreting qualitative interview data: (1) contextualized approach involving the use of the whole transcript or larger sections of it, to describe the issue under study (see: Bowden and Green, 2005); and (2) decontextualized approach where smaller excerpts or quotations are selected to signify certain meanings (Marton, 1986). The later approach was adopted in this study by separating smaller portions from the whole transcript and interpreting them within the context of the entire interview in order to reinforce particular meanings related to phenomenon being studied (Marton, 1986). The reason for chosen this approach is because contextualized approach on the contrary tends to focus more on the individual interviewee with more emphasis on individual experience, rather than emphasizing on shared understanding of the group of interviewees which decontextualized approach stands for. Furthermore, decontextualized approach enables the selection of statements which relate directly to the research themes while irrelevant or seemingly redundant statements are removed for better management of the data (Åkerlind, 2012; Svensson and Theman, 1983). Thus, in the current research, relevant excerpts were selected from within the interview and were interpreted while emphasis was laid on consensus arguments as well as contrary opinion in relation to the research aim.

4 2 10 7 Validity of interview data

Åkerlind (2012) describes validity as the extent to which particular research outcomes truly reflect the phenomenon under study. Following the widespread thought that process of interpreting qualitative research can under no circumstances be objective but rather subjective based on researcher's experience surrounding the data (Åkerlind, 2012; Bowden, 1996), the focus of researchers in maintaining research quality has shifted to balancing between the research aims and the research methods adopted, to reflect the study propositions

appropriately (Ashworth and Lucas, 2000). Basically, validity checks are grouped into two types (Kvale, 1996): 1. Communicative validity checks; and 2. Pragmatic validity checks. The later, (pragmatic validity checks) focuses on the extent to which the outcomes of the study are perceived as useful and meaningful to the target audience based on the performance of the outcomes (Kvale, 1996; Uljens, 1996).

In the context of communicative validity checks, (Marton and Booth, 1997) legitimacy of the final data interpretation is obtained from relevant research community who are capable of ascertaining the appropriateness of the interpretations, and the obvious sources of this validity include presentations at research seminars, international conferences and submission of the final interpretations to peer-reviewed journals (Åkerlind, 2012). Communicative validity checks was adopted for the current study. Prior to embarking on the empirical interview, the proposed methods were presented in an international conference (Oladinrin and Ho, 2014a) and necessary modifications were made. Subsequently, the final interpretations were also presented in another international conference (see: Oladinrin et al., 2015).

4.3 Summary of the chapter

Research methods and procedures for this study have been presented in detail in this chapter. It described how the study objectives were achieved including the data acquisition methods and the data analysis techniques employed as shown in Table 4.5. Certain steps/procedures are recommended for empirical modelling in construction management research which include: strategizing; model development (e.g. literature review); data collection and assessment; evaluation of the model; model validation; and model implementation (Flood and Issa, 2010). This research was guided by these recommended procedures to ensure proper validation of the model.

Table 4.5: Summary of methods to achieve the objectives

| Research Objectives | | Data | | | Analytical | | | | |
|--|------------|----------|-----------|----------|-------------|-----|----|----------|--|
| | collection | | technique | | | | | | |
| | QS | CS | ITW | MS | PLS- SEM | FSE | FA | RADAR | |
| 1. To identify and assess factors hindering effective code implementation in construction organizations | ✓ | | | ✓ | | | ✓ | | |
| 2. To identify and assess factors that enable proper implementation of code of ethics for effective impact on employees' ethical behaviour in construction companies. | ✓ | | | ✓ | | | | | |
| 3. To develop Process Approach Assessment Method (PAAM) that will provide strong impetus towards the implementation of corporate codes of ethics within organizational processes and routines. | ✓ | | | | √ | | | | |
| 4. To measure the implementation of the ethical codes within construction companies using a PAAM model. | | ✓ | ✓ | | | ✓ | | ✓ | |

Key: QS = questionnaire survey, CS = case study, ITW = interviews, MS = mean score, PLS-SEM = Partial Least Square-Structural Equation Modeling, FSE = fuzzy synthetic evaluation, FA = factor analysis, RADAR = Result Approach Deployment Assessment and Review

CHAPTER 5 FACTORS HINDERING EFFECTIVE³ IMPLEMENTATION OF ETHICAL CODES IN CONSTRUCTION ORGANIZATIONS

5.1 Introduction

This chapter presents the quantitative empirical findings from the questionnaire survey results addressing objective 1, which focuses on the barriers to codes of ethics implementation in construction organizations. This is a preliminary finding that further reinforced the essence of pursuing the main aim of this research. Specifically, factors that hinder effective implementation of codes of ethics based on the previous findings from literature were assessed.

5.2 Descriptive statistics

A total of 115 participants responded to the survey, of which 84 (64%) completed the entire questions. The completed questionnaires were used for further analysis. Out of 84 respondents, 13% were Engineer, 10% Architect, 47% Quantity Surveyor, 17% Builder, 13% were other professions. Also, 36% were practitioners while 64% were academics. In terms of respondents' years of experience, 37% had 0-5 years, 29% had 6-10 years and 34% had 11 and above years of experience. This indicates that good spectrum of different professionals, from different background, with diverse years of experience are represented in the survey. The respondents were asked if they have worked in construction organization before and 73% choose 'Yes' while 27% choose 'No' as their answers. Thus, majority of the respondents have industry experiences.

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³ This chapter has been published in Oladinrin, T. O., and Ho, C. M. F. (2015). Barriers to effective implementation of ethical codes in construction organizations: An empirical investigation. *International Journal of Construction Management*, (online print), 1-9, DOI: 10.1080/15623599.2015.1033816.

5.3 Reliability analysis

First of all, the consistency of the variables based on the opinions of the respondents and reliability of the survey instrument was tested using Cronbach's alpha test. The Cronbach's alpha coefficient for the 22 factors contained in the empirical questionnaire was 0.825 which is above the recommended threshold of 0.70 (Norusis, 2002). This affirms the reliability and consistency of relatedness amongst the 22 individual factors. It also indicates internal consistency of the responses derived from the questionnaire survey at 5% significant level, using 5-point Likert scale.

5.4 Ranking of the barriers to ethical codes implementation

Using statistical analysis, all the 22 barriers extracted from literature review were ranked based on mean values. Table 5.1 details the mean scores for the barriers which were used to rank the perceptions of the respondents. Chan and Kumaraswamy (1997) opine that using mean and standard deviation of each individual variable are not sufficient statistics to assess the overall rankings. For this reason, Relative Importance Index (RII) was introduced in parallel. Surprisingly, both the mean scores and RII scores gave the same ranking, hence, only the mean scores were used for explanation. In addition, standard deviation values were used to prioritize the factors, in case of ties in the mean scores, in which the variable with the least standard deviation is ranked higher (Field, 2013).

As shown in Table 5.1, the respondents ranked barrier B1 "Too much focus on profit making" (mean = 4.07); B2 "Insufficient ethics education" (mean = 4.01) and B3 "Lack of commitment to written code" (mean = 3.94) as the three most significant barriers. While barrier B20 "Impartiality in administering codes of ethics" (mean = 3.25); B21 "Organizational culture does not encourage good behaviour" (mean = 3.13) and B22 "Code contents are not clear enough" (mean = 3.04) were ranked least by the respondents. The

result reveals that the mean score for all the variables are above 3.0 indicating that the variables are relevant barriers to code implementation in construction organizations.

Table 5.1: Ranking of the factors hindering effective implementation of ethical codes

| Label | 1 Factors Mean RII Std. | | | | Ranking |
|-------|--|------|-------|-----------|---------|
| | | | | Deviation | . 8 |
| B1 | Too much focus on profit making | 4.07 | 0.814 | 1.117 | 1 |
| B2 | Insufficient ethics education | 4.01 | 0.802 | 1.000 | 2 |
| В3 | Lack of commitment to written codes | 3.94 | 0.788 | 0.974 | 3 |
| B4 | Lack of exemplary leadership | 3.88 | 0.776 | 1.113 | 4 |
| B5 | Lack of proper monitoring of code process | 3.85 | 0.770 | 1.000 | 5 |
| В6 | Lack of ethics training | 3.85 | 0.770 | 1.167 | 6 |
| В7 | Ineffective application of rewards | 3.81 | 0.762 | 0.975 | 7 |
| B8 | Poor control measures | 3.81 | 0.762 | 0.975 | 7 |
| В9 | Insufficient enforcement of codes | 3.73 | 0.746 | 0.974 | 9 |
| B10 | Inconsistent communication of code | 3.71 | 0.742 | 0.964 | 10 |
| B11 | Employees' ignorance about ethics | 3.67 | 0.734 | 1.235 | 11 |
| B12 | Fear of retaliating whistleblowing | 3.56 | 0.712 | 1.068 | 12 |
| B13 | Value conflict | 3.55 | 0.710 | 1.046 | 13 |
| B14 | Copies of the codes not available to staff | 3.48 | 0.696 | 1.187 | 14 |
| B15 | Unethical behaviours are often pardoned | 3.48 | 0.696 | 1.197 | 15 |
| B16 | Undue pressure from clients | 3.42 | 0.684 | 1.143 | 16 |
| B17 | Non-recognition for work done | 3.32 | 0.664 | 1.163 | 17 |
| B18 | Selfish interest for adopting code | 3.30 | 0.660 | 1.138 | 18 |
| B19 | Complexity of construction process | 3.26 | 0.652 | 1.204 | 19 |
| B20 | Partiality in administering code of ethics | 3.25 | 0.650 | 1.085 | 20 |
| B21 | Organizational culture does not encourage good behaviour | 3.13 | 0.626 | 1.249 | 21 |
| B22 | Code contents are not clear enough | 3.04 | 0.608 | 1.265 | 22 |

5.5 Factor analysis

In order to reduce the number of variables into a smaller number of factors, the principal component analysis (PCA) extraction method being the commonly used method (Hon et al., 2012), was adopted in this study. Referring to the results of the analysis, the correlation analysis indicates several correlations greater than the recommended threshold of 0.3 (Yang et al., 2009), suggesting suitability of the data for EFA. The value of the Kaiser-Meyer-Olkin (KMO) statistic for this study is 0.659, which is above the cut-off criterion of 0.50 (Chan,

2012), satisfying the condition for factor analysis. The Bartlett's test of sphericity should be significant (p< 0.05) for factor analysis to be suitable (Williams et al., 2012). In this case, the value of the test statistic for sphericity is large (Barlett test of sphericity $x^2 = 554.10$; d.f = 538.50) and the associated significance level is small (p = 0.000), suggesting that the population correlation matrix is not an identity matrix (Hon et al., 2012).

The factor loadings for all the 22 variables are above the minimal acceptance level (0.3-0.4) based on rule of thumb (Hair et al., 2010). One challenging decision is the number of factors to be extracted. To achieve this, three different tests were considered including; Kaiser's criterion, scree test, and Horn's parallel analysis. According to Pallant (2013), Horn's parallel analysis has an advantage over Kaiser's criterion and scree test because it is not prone to overestimation of factor numbers. Considering this fact, Horn's parallel analysis was used in this study. Both the Kaiser's criterion (Eigenvalue exceeding 1) and scree test revealed the presence of eight components which seemed too many to describe due to overestimation. With the aid of Horn's parallel analysis being the most accurate method to determine the number of factor to be extracted (Pallant, 2013), only three components were supported. The rule governing the parallel analysis holds that the actual eigenvalue from PCA (SPSS output) must be greater than criterion value from parallel analysis as shown in Table 5.2.

Table 5.2: Eigenvalues from PCA and Criterion Values from Horn's Parallel Analysis

| Component | Actual eigenvalue | Criterion value from | Decision | | | | | |
|-----------|-------------------|----------------------|----------|--|--|--|--|--|
| number | from PCA | parallel analysis | | | | | | |
| 1 | 5.040 | 2.0682 | Accepted | | | | | |
| 2 | 1.991 | 1.8606 | Accepted | | | | | |
| 3 | 1.779 | 1.7082 | Accepted | | | | | |
| 4 | 1.509 | 1.5764 | Rejected | | | | | |

The three-component solutions that encapsulated the 22 variables, explaining a total variance of 40% are listed as detailed in Table 5.3. Although, the percentage of total variance explained is considerably below the 60% threshold (Hair et al. 2010), the use of Horn's parallel analysis adds more statistical value (Hon et al., 2012). The results show that factor 1

(managerial and organizational barriers) consisted of eleven variables out of twenty two, factor 2 (planning and monitoring barriers) accounted for eight variables while factor 3 (value and interest barriers) accounted for only three variables (Oladinrin and Ho, 2015d).

Table 5.3: Results of PCA

| Factors/item components | Fa | ctor loadii | ng |
|---|--|--|---|
| | 1 | 2 | 3 |
| Factor 1 (Managerial and organizational barriers) | | | _ |
| Lack of commitment to written codes | 0.602 | | |
| Impartiality in administering codes of ethics | 0.588 | | |
| Employees' ignorance about ethics | 0.576 | | |
| Insufficient ethics education | 0.561 | | |
| Copies of the codes not available to staff | 0.526 | | |
| Unethical behaviours are often pardoned | 0.510 | | |
| Fear of retaliating whistleblowing | 0.478 | | |
| Organizational culture does not encourage good | 0.472 | | |
| behaviour | | | |
| Complexity of construction process | 0.460 | | |
| Code contents are not clear enough | 0.440 | | |
| Lack of exemplary leadership | 0.421 | | |
| Factor 2 (Planning and monitoring barriers) | | 1 | |
| Inconsistent communication of code | | 0.725 | |
| Lack of proper monitoring of code process | | 0.639 | |
| Poor control measures | | 0.630 | |
| Too much focus on profit making | | 0.591 | |
| Insufficient enforcement of codes | | 0.573 | |
| Ineffective application of rewards | | 0.552 | |
| Undue pressure from clients | | 0.494 | |
| Lack of ethics training | | 0.457 | |
| Factor 3 (Value and interest barriers) | | | |
| Value conflict | | | 0.675 |
| Non-recognition for work done | | | 0.643 |
| Selfish interest for adopting code | | | 0.461 |
| value | 5.040 | 1.991 | 1.779 |
| variance explained | 22.91 | 9.00 | 8.09 |
| | Factor 1 (Managerial and organizational barriers) Lack of commitment to written codes Impartiality in administering codes of ethics Employees' ignorance about ethics Insufficient ethics education Copies of the codes not available to staff Unethical behaviours are often pardoned Fear of retaliating whistleblowing Organizational culture does not encourage good behaviour Complexity of construction process Code contents are not clear enough Lack of exemplary leadership Factor 2 (Planning and monitoring barriers) Inconsistent communication of code Lack of proper monitoring of code process Poor control measures Too much focus on profit making Insufficient enforcement of codes Ineffective application of rewards Undue pressure from clients Lack of ethics training Factor 3 (Value and interest barriers) Value conflict Non-recognition for work done Selfish interest for adopting code | Lack of commitment to written codes Impartiality in administering codes of ethics Employees' ignorance about ethics Insufficient ethics education Copies of the codes not available to staff Unethical behaviours are often pardoned Fear of retaliating whistleblowing Organizational culture does not encourage good behaviour Complexity of construction process Code contents are not clear enough Lack of exemplary leadership Factor 2 (Planning and monitoring barriers) Inconsistent communication of code Lack of proper monitoring of code process Poor control measures Too much focus on profit making Insufficient enforcement of codes Ineffective application of rewards Undue pressure from clients Lack of ethics training Factor 3 (Value and interest barriers) Value conflict Non-recognition for work done Selfish interest for adopting code | Lack of commitment to written codes D.602 |

The factor loadings show the correlation of the variables to individual factor component. However, it cannot substantially explain the importance of the group factors. For this reason, the relative importance of the extracted factors is determined by their factor scores' ranking using the following formula (Fan and Fox, 2009):

$$Fi = \frac{\sum_{j=1}^{n} Aij}{n}$$

where Fi = factor score; Aij = mean score of the jth attribute of factor i and n = the number of attributes associated with a given factor. Referring to the mean scores of the attributes shown in Table 5.4, the factor scores for the identified factors revealed that 'planning and monitoring barriers' ranked highest with factor score of 3.78, followed by 'managerial and organizational barriers' (factor score = 3.52) and the least ranked is 'value and interest barriers' (factor score = 3.39).

Table 5.4: Factor scores and ranking

| Factors/Barriers | Factor scores | Ranking |
|--|---------------|---------|
| Planning and monitoring barriers | 3.78 | 1 |
| Managerial and organizational barriers | 3.52 | 2 |
| Value and interest barriers | 3.39 | 3 |

5.6 Discussion of the factors

Factor 1: Managerial and organizational barriers

This factor encapsulates the barriers associated with management and organizational process and procedure regarding ethics management within a construction company. It accounted for 11.91% of variance explained. Out of the eleven variables contained in this factor, 'lack of commitment to written codes' has the highest factor loading (0.602) and ranked third out of the 22 variables (mean = 3.94). This indicates the importance of this barrier indicator in the process of implementing ethical codes. Developing a code without commitment to its implementation will hinder its effectiveness. This finding coheres with Tow and Loosemore

(2009) which states that ethics practice within an organization is greatly affected by leadership commitment. Impartiality in administering ethical codes can make it unsuccessful. This involves giving undue consideration to certain people as a result of relationship, gender or tribe, in corroboration with Sakyi and Bawole (2009), it is a major reason for the difficulties encountered in code implementation. Employees' ignorance about ethical codes is another hindrance to effectiveness of ethical codes. Although, this variable ranked eleventh by the respondents, it has a high loading, signifying its importance among the observed variables, in accord with Sakyi and Bawole (2009).

Insufficient ethics education was ranked second highest (mean= 4.01) by the respondents coupled with high loading of 0.56, which implies that it is a significant barrier to code implementation. Adnan et al. (2012) argue that insufficient ethical education from schools and professional institutions is one reason for unethical practices in many construction organizations. Developing a code of ethics and keeping a copy on the self is not sufficient enough to utilize its purpose of modifying employees' behaviour. When written codes are not made available to the members of an organization, they hardly would familiarize themselves with the code contents. Ho (2013) identifies 'giving copies of code to employees' as one of the effective ways of making code works without which the code may be useless. Another barrier to code implementation is contained in pardoning unethical behaviour due to leniency and favouritism. This action makes ethical codes less effective and it accords with the findings of Sakyi and Bawole (2009). Besides the variables discussed above, other variables associated with this factor are also important but are not discussed in this thesis.

In dealing with managerial and organizational barriers, all efforts should be made to pull people together on a common platform to ensure the achievement of predefined ethical standard expressed in form of codes of ethics. For instance, issues relating to ethics should be properly addressed both at the management and organizational level through a broader

commitment to ethical codes. Most of the items under this group factor can be addressed at the top management level by creating a room for positive amendment towards ethical achievement.

Factor 2: Planning and monitoring barriers

This factor accounted for 9.00% of the total variance explained, relates to barriers emanating from planning and monitoring within construction organization which can hamper the process of code implementation. There are eight variables describing these barriers out of which three variables (B1, B9 and B16) are related to planning while five variables (B5, B6, B8, B9 and B10) are related to monitoring. Out of the overall 22 variables, B1 (too much focus on profit making), ranked first (mean = 4.07). This variable also has significant high loading (0.591). Although, profit making is the major aim of most businesses, too much focus on profit is an indication of unbalanced planning which could create rooms for unethical conduct. Most of the ethical issues in construction industry are linked to apparent effort of one party to make excessive profit at the expense of another party (Scalza, 2008). Meanwhile, on the contrary, integration of ethics into planning and decision-making process can boost the profitability of an organization (Key and Popkin, 1998).

One variable under this category having the overall highest factor loading (0.725) is B10 (inconsistence communication of code). This shows the importance of this barrier to ethical code implementation within construction organization which is in line with existing findings of Ho (2013) that claims that poor communication of ethical codes to employees within construction organizations is a major hindrance to effective implementation of ethical codes. Ethical priorities of an organization can be communicated by the leaders though effective rewards in form of monetary compensation and promotion (Ortega-Parra and Sastre-Castillo, 2013). In contrast, ineffective application of rewards (e.g. favouritism) is a barrier to ethical

code implementation (Tow and Loosemore, 2009). Undue pressure from clients to constructors can constitute hindrance to ethical code implementation. For instance, pressure from the client to complete project on time may cause construction organization to ensure that ethics are less emphasized. This is in agreement with the findings of Huang and Kung (2011).

In order to eliminate or at least, minimize planning and monitoring barriers to ethical codes implementation, ethical codes should be reinforced at any planning stage of construction activities. Looking at planning from the perspective of profit maximization, the relationship between ethics and profit could either be positive or negative depending on the way organization choose to plan these practical issues. However, too much focus on profit will hamper ethical practice. Thus, organization should embrace ethical practice in the process of maximizing profits. In the same vein, there must a long-term internal monitoring approach to the measures put in place to achieve the goal of ethical codes, such as training, proper reward of identified compliance to ethical codes and adequate enforcement of ethical codes within the organization.

Factor 3: Value and interest barriers

This factor (constituting 8.09% of the total variance of the barrier analysis) ranked least among the three group barriers and comprises of three variables B13, B17 and B18 with mean score 3.55, 3.32 and 3.30 respectively. The rankings imply that the respondents considered the variables as important barriers to code implementation in construction organization. Values are important factors to be considered with respect to ethical behaviour and can be assessed at the levels of individual and organization (Elango et al., 2010). Ethical values of an organization may directly and indirectly influence the employee's perception of how things are done in that company (Maignan and Ferrell, 2000). However, there could be

conflict between individual and organization's values (Liu et al., 2004) which may likely create frictions that can result in unethical conduct. Whenever this happens, implementation of ethical codes becomes difficult. Corruption related to construction values gives rise to indecent behaviours (Lamond et al., 2010). In order to avoid value conflict, organizations must define a set of embraced values and ensure the application of these values on daily basis (Ortega-Parra and Sastre-Castillo, 2013). Non-recognition of work done is another barrier that hinders compliance with ethical codes. Employees tend to indulge in unethical practice when the management failed to recognize their performance by giving appropriate remuneration. Similar research (Smithers and Walker, 2000) reveals that non-recognition of work done demotivates construction practitioners in the workplace.

5.7 Summary of the chapter

The research findings reported in this chapter has contributed to the achievement of objective 1, which identifies and assesses factors that hinder effective implementation of ethical codes. The essence is to unveil the barriers to effective ethical codes implementation within construction organizations. In general, the findings in this study are consistent with the argument that certain factors are responsible for the difficulties in the implementation of ethical codes within construction companies. These factors which were identified from literature were ranked based on the perceptions of the participants and were categorized into three main factors/barriers. In essence, these three factors are believed to be inhibiting ethical codes implementation in construction organizations. It is anticipated that addressing these major barriers can result in itch-free ethical code embeddedness. This chapter provides preliminary information for the researcher and the need for necessary actions to ensure effective implementation of codes of ethics in construction companies which will be discussed in the next chapters.

CHAPTER 6 ASSESSING THE ENABLING FACTORS FOR IMPLEMENTATION OF CODES OF ETHICS

6.1 Introduction

It is imperative to explore and assess the supporting factors for implementation of codes of ethics in order to determine their importance. These factors have been identified from literature review (refer to Chapter 2) and have been included in the proposed model as indicators (Chapter 3). This chapter is in relation to objective 2 which focuses on ranking the observed variables representing ethical codes implementation enablers. Resulting outcomes of proper implementation of ethical codes are equally presented.

6.2 Descriptive statistics

Out of 260 questionnaires administered, 166 were returned, representing 68% overall response rate which was considered satisfactory because it is more than the recommended minimum response rate of 30% of 107 questionnaires (Fellows and Liu, 2003). After considering the removal of outliers and missing values due to incomplete data, it was found that all the 166 completed questionnaires were deemed valid for the analysis. Table 6.1 shows the professional background of the respondents. Approximately, 46.4% were engineers (N = 77), 1.2% were Architect (N= 2), 8.4% were Quantity Surveyors (N = 14), 12.7% were builders (N = 21). 31.3% represent others in different professional categories such as Mechanical engineer, Structural Engineer, Tunnel Specialist, Plant operator (Fork-lift, excavator etc).

Table 6.1: Professional background of the respondents

| Professional affiliations | Frequency | Valid Percent | Cumulative Percent |
|---------------------------|-----------|---------------|---------------------------|
| Engineer | 77 | 46.4 | 46.4 |
| Architect | 2 | 1.2 | 47.6 |
| Quantity Surveyor | 14 | 8.4 | 56.0 |
| Builder | 21 | 12.7 | 68.7 |
| Other | 52 | 31.3 | 100.0 |
| Total | 166 | 100.0 | |

Years of experience of the respondents are presented in Table 6.2. In this study, 75.3% of the respondents have between 0-5 years of working experience, 9% have between 6-10 years of working experience and 15.7% have above 11 years working experience. As can be seen from the analysis, majority of the respondents have low working experiences. This is as result of the difficulties in reaching the senior employees which may be as a result of their busy schedule as claimed by Levitt and Samelson (1993).

Table 6.2: Years of experience of the respondents

| Years | Frequency | Valid Percent | Cumulative Percent |
|--------------|-----------|---------------|---------------------------|
| 0-5 | 125 | 75.3 | 75.3 |
| 6-10 | 15 | 9.0 | 84.3 |
| 11 and above | 26 | 15.7 | 100.0 |
| Total | 166 | 100.0 | |

Among the respondents, 4.8 per cent were top-level managers, 25.3 per cent were supervisors at various levels and 69.9 per cent were front-line employees (Table 6.3). This reflects hierarchical distribution of employees in construction organizations. In addition, the current research targets to involve members of an organization at different level in the study in order to capture necessary information needed to provide answers for the research question. A construction safety climate research in Hong Kong (Hon et al., 2013), reports 19.5% managers, 19.8% supervisors and 60% frontline workers. Thus, the distribution of the respondents for this study is considered appropriate and representative.

Table 6.3: Position of the respondents in their organizations

| Position | Frequency | Valid Percent | Cumulative Percent |
|----------------------|-----------|---------------|---------------------------|
| Senior Manager | 8 | 4.8 | 4.8 |
| Supervisor | 42 | 25.3 | 30.1 |
| Front-line employees | 116 | 69.9 | 100.0 |
| Total | 166 | 100.0 | |

6.3 Presentation and discussion of results from questionnaire survey

6.3.1 Factors enabling implementation of codes of ethics

The items contained in the questionnaire survey were statistically analyzed and further cross-referenced against past literature wherever appropriate. The Cronbach's alpha coefficient for the thirty rated enabling factors for ethical codes implementation was 0.942 which is above the recommended threshold of 0.70 (Norusis, 2002). This affirms the reliability and consistency of relatedness amongst the 30 individual factors. It also indicates internal consistency of the responses derived from the questionnaire survey at 5% significance level, using 5-point Likert scale. The 30 factors extracted from comprehensive review of existing literature were subjected to mean score analysis. Although it was indicated in the questionnaire that the respondents should suggest additional items necessary to be added, none of the respondents indicate a new item. Table 6.4 shows the rankings of the factors based on their mean scores and RII tabulated in descending order. Based on 5-point Likert scale, a cut-off point of 2.50 was used to determine factors to be removed from the list (Hsueh et al., 2009; Le et al., 2014). As shown in the results, all the factors have mean scores ranging from 3.10 to 4.05, indicating that respondents generally agreed that the factors could effectively enable codes of ethics implementation in construction organizations.

The result revealed that "Protecting anyone who exposes alleged wrongdoing" ranked first as an important factor that enables codes of ethics implementation (mean =4.05). "Managers acting as role models", "Commitment of managing director to ethics", "Giving code standards with explanation to new employees", ranked second, third and fourth (mean scores = 3.96, 3.92 and 3.91) respectively as important factors enabling codes of ethics implementation. However, respondents considered "the use of ethics committee", "creating a

forum for discussing ethical dilemma" and "the use of ethics ombudsman" as the three least important enablers for effective implementation of codes of ethics.

Table 6.4: Ranking of the factors enabling implementation of codes of ethics

| | .4: Ranking of the factors enabling implementa | | | | | |
|-------|---|------|-------|-------------------|---------|--|
| Label | Factors | Mean | RII | Std. Deviation | Ranking | |
| V3 | Protecting anyone who exposes alleged wrongdoing | 4.05 | 0.810 | 0.913 | 1 | |
| V6 | Managers acting as role models | 3.96 | 0.792 | 0.873 | 2 | |
| V1 | Commitment of managing director to ethics | 3.92 | 0.784 | 0.874 | 3 | |
| V8 | Giving code standards with explanation to new employees | 3.91 | 0.782 | 0.886 | 4 | |
| V10 | Updating code contents to reflect current issues in construction practice | 3.84 | 0.768 | 0.816 | 5 | |
| V11 | Training about the importance of codes of ethics | 3.82 | 0.764 | 0.848 | 6 | |
| V12 | Strategic planning of the company emphasizing long- term importance of codes of ethics | 3.81 | 0.762 | 0.821 | 7 | |
| V5 | Identifying situations that encourage bad behaviour | 3.81 | 0.762 | 0.838 | 8 | |
| V13 | Communicating codes with employees | 3.79 | 0.758 | 0.837 | 9 | |
| V4 | Providing financial demand of codes of ethics | 3.75 | 0.750 | 0.919 | 10 | |
| V9 | Employees ethical appraisal | 3.74 | 0.748 | 0.940 | 11 | |
| V7 | Regular revision of codes of ethics | 3.73 | 0.746 | 0.884 | 12 | |
| V2 | Consistence of codes with international standard | 3.72 | 0.744 | 0.843 | 13 | |
| V29 | Sub-contractors and suppliers subscribing to codes of ethics | 3.70 | 0.740 | 0.877 | 14 | |
| V22 | Regular ethical audits | 3.68 | 0.736 | 0.991 | 15 | |
| V16 | Addressing value conflicts with codes of ethics | 3.66 | 0.732 | 0.760 | 16 | |
| V26 | Reporting ethically sound projects within the organization | 3.64 | 0.728 | 0.861 | 17 | |
| V27 | Focusing on areas for special attention from annual ethical report | 3.63 | 0.726 | 0.834 | 18 | |
| V30 | Establishing open communication system to challenge code themes | 3.60 | 0.720 | 0.859 | 19 | |
| V14 | Regular meeting by supervisors to stimulate acting in accordance with codes | 3.60 | 0.720 | 0.920 | 20 | |
| V15 | Including guidelines for employees' decision-making in the codes | 3.58 | 0.716 | 0.780 | 21 | |
| V25 | Using indicators for detecting ethical level of organization | 3.55 | 0.710 | 0.878 | 22 | |
| V18 | Rewarding code compliance behaviour | 3.55 | 0.710 | 1.047 | 23 | |
| V23 | Fixing clear sanctions for rules of conduct | 3.54 | 0.708 | 0.912 | 24 | |
| V20 | Assessing individual value during recruitment and selection | 3.52 | 0.704 | 0.906 | 25 | |
| V28 | Conducting employees' critical self-evaluation | 3.52 | 0.704 | 0.989 | 26 | |
| V24 | The use of hotline system for reporting irresponsible behaviour | 3.51 | 0.702 | 1.008 | 27 | |
| V21 | The use of ethics committee | 3.49 | 0.698 | 0.965 | 28 | |
| V17 | Creating a forum for discussing ethical dilemma | 3.25 | 0.650 | 0.912 | 29 | |
| V19 | The use of ethics ombudsman (investigator) | 3.10 | 0.620 | 1.102 | 30 | |

6.3.2 Outcomes of implementation of codes of ethics

Following the same procedure as presented in previous section, this section focuses on the ranking of the likely resultant factors of codes of ethics integration. The mean scores for the 11 factors range from 3.25 to 4.07 while the RII scores range from 0.649-0.813, indicating that all the respondents considered the factors important and relevant results/outcomes of code implementation in construction organizations. The ranking of the factors as shown in Table 6.5 reveals that the highest ranking by all respondents was R4 "Enhanced organizational reputations" (mean = 4.07). This is therefore considered most important result of code integration. The second ranked resultant factors was R3 "Building public trust" (mean = 3.97). "Increased protection against lawsuits" ranked third (mean = 3.95), while the fourth ranked factor was R6 "Improved client's satisfaction" (mean = 3.86). Surprisingly, all respondents ranked R10 "Increased company's profitability" (mean = 3.25) as the least important resultant factor. Considering the cut-off value of 2.50 mean score, this factor was equally considered least relevant regarding resultant effect of code integration in construction organizations in Hong Kong.

Table 6.5: Mean score and ranking (resultant factors)

| Label | Factors | Mean | RII | Std. Deviation | Ranking |
|-------|--|------|-------|----------------|---------|
| R4 | Enhancing organizational reputations | 4.07 | 0.813 | 0.854 | 1 |
| R3 | Building public trust | 3.97 | 0.794 | 0.891 | 2 |
| R8 | Increased protection against lawsuits | 3.95 | 0.790 | 0.959 | 3 |
| R6 | Improved client's satisfaction | 3.86 | 0.772 | 0.887 | 4 |
| R1 | Improved employees' ethical behaviour | 3.81 | 0.763 | 0.878 | 5 |
| R2 | Subjective and inconsistent management | 3.80 | 0.759 | 0.828 | 6 |
| | standards are minimized | | | | |
| R5 | Enhancing employees' loyalty | 3.72 | 0.743 | 0.952 | 7 |
| R9 | Increased compliance with complex government | 3.72 | 0.745 | 0.843 | 8 |
| | policies | | | | |
| R11 | Enhanced mutual relationship among | 3.72 | 0.743 | 0.769 | 9 |
| | construction project stakeholders | | | | |
| R7 | Boost workforce morale | 3.63 | 0.727 | 1.058 | 10 |
| R10 | Increased company's profitability | 3.25 | 0.649 | 0.931 | 11 |

6.3.3 Discussion of results on the factor rankings

Factors enabling ethical codes implementation

In terms of factors enabling effective implementation of codes of ethics, "Protecting anyone who exposes alleged wrongdoing" ranked first. This represents organization's protection for whistleblowers which is one critical issue in today's organizational practice because, the fear of retaliation debars employees from exposing any act of unethical conduct within an organization. It is therefore imperative for organizations to have a secured means of protecting those who take the risk to unveil wrongdoings in the interest of the company or the community at large. This agrees with Lloyd and Mey (2010), although protection of whistleblowers was ranked third, it is deemed very important among ethical intervention plans. Another important factor is "Managers acting as role models". The need to set good examples by managers in terms ethical behaviour has been over flogged in literature (Suen et al. 2007; Tow and Loosemore, 2009; Appelbaum et al. 2005). Role modelling is a strategy of impacting desired ethical behaviour on the employees since members of an organization are likely to 'copy' the behaviour of their leaders. This is consistent with Appelbaum et al., (2005) which reveal that behaviour of employees in an organization can be traced to those that act as role models and have direct influence on them.

Of course, "Commitment of managing director to ethics" is imperative to achieving effective ethical codes implementation because most decisions that have direct impact on the company is either taking or approved by the managing director or the CEO. Implementation of ethical codes can be enhanced when organizational leaders are fully committed to ethics. This confirms the findings by Suen et al. (2007) which state that affective commitment of managing director to ethics will enable effective ethical codes implementation. Commitment referred to in this study should transcend ordinary intention to be ethical, rather, it should be back up with actions so that organization can reap the benefits of ethical codes

implementation. This implies that good intention being expressed in ethical codes should be adhered to, as good intension without adequate integration can lead to failure in code implementation process. This corroborates Salopek's study (2001) which informs that organizations with a more extensive commitment to codes of ethics by their managing directors recorded three times market value added, more than organizations with lesser commitments.

Due to human adaptation nature, it is expected that new employees are properly oriented to blend with the system of their new company by providing them with extensive information regarding organization's ethical standards and practice which are expected of them in their daily routines as contained in the codes of ethics. Since compliance with ethical codes is an obligation, Schwartz (2002) argues that management should provide copies of codes of ethics to new employees to inform them about ethical standard of the company and ask them to sign an agreement to indicate their intention to comply. Lloyd and Mey (2010) also suggest that ethics training should commence with formal orientation training for all new employees.

Technological advancement in the current modern day brings about some changes to the way things are done in an organization which literally may affect organizational behaviour. For this reason, codes of ethics is not expected to be static but it must be updated to accommodate changes in practice. This agrees with DiPiazza (2001) which emphasizes that organizations ought to identify relevant ethical issues at any given time and mobilize resources to address them. In essence, to revise or update the contents of codes of ethics, certain items can either be removed or added, whichever is the case, the revised copies of ethical codes should be distributed to employees to keep them abridged of any development that may require them to adjust their behaviour incrementally. This is in line with Adelstein and Clegg (2015) which opine that any employee can violate the code unwittingly provided that he/she is not aware of

code modification but acted based on the previous knowledge about the former code, which may leave the employee in an indefensible position with the organization.

Ethics training is another critical factor to codes of ethics implementation because it helps members of organizations to gain insights into rules, policies and norms that govern acceptable and responsible ethical behaviour within the organization. This is in agreement with the findings by Nelson and Treviño (2004). It can be argued that proper training of employees on codes of ethics will not only enhance code effectiveness but also increase productivity since the employees know what to do ethically in any given circumstances. This confirms the assertion by (Mamic, 2003) that training session on code of ethics can enhance employees' positive attitudes and productivity growth in an organization. For example, Mamic (2003) suggests that intensive training ranging from classroom to on-the-job might be given to those recruited to work as ethics compliance officers whilst lunch-time information sessions might be held for other staff. Similarly, Fischbach (2014) proposes the use of graphic novels as tools for ethics training by practitioners for effective code implementation.

Obviously, the findings hold supporting ground with existing literature apart from the last three factors, "the use of ethics committee", "creating a forum for discussing ethical dilemma" and "the use of ethics ombudsman" which ranked least. All respondents perceived these three factors as least important as far as ethics codes implementation in construction organizations is concerned. The reason for this could be linked to workforce shortage being experienced currently in Hong Kong which is characterized by inability to meet the demand of workload (HKCA and CIG, 2012). This situation may caution management of construction organizations against employing more personnel to function as ethics ombudsman or member of separate ethics committee which will invariably constitute additional cost to the organization. Also, stringent time to complete construction projects may not allow for

additional forum to discuss ethical dilemma. The findings differ from what have been established in the literature. For instance, good practice for maintaining ethical standards requires the use of ethics ombudsman or an independent arbiter who is saddled with the responsibility of ensuring ethical compliance within an organization (Adam, 2005). The role of ethics committee as internal watchdog in many companies in Australia, US and Canada was reported by Wood (2000). The committee is responsible for upholding vigilance regarding the behaviour of the employees and overseeing other processes of ethical codes.

Outcomes of proper implementation of codes of ethics

In formalizing the implementation of ethical codes, it is important to discuss the likely results that the companies' action and activities towards such integration would bring. Although it is difficult to measure the outcomes of ethical codes implementation internally, opinions of internal stakeholders regarding expected outcomes are considered valuable. Considering the factors regarding the results of proper implementation of ethical codes, 'enhanced organizational reputations' was ranked first by the respondents. Building a good reputation is an important aspect of managing business organization such as construction business that requires interrelationship with several stakeholders. This is in agreement with Ohrn (2002) which considers business reputation as a valuable asset in the construction industry. 'Building public trust' was ranked second by the respondents. This is another crucial outcome of ethical codes implementation. Once an organization earns public trust, its competitive position begins to improve (Kang et al., 2004). 'Increased protection against lawsuits' was ranked third. This means that compliance with ethics requirements has the advantage of reducing number of lawsuits against an organization. Although, there is difference between law and ethics, Ki et al. (2012) indicates that, proper management of ethics within an organization will limit exposure of a firm to lawsuits.

The fourth ranked factor was 'improved client's satisfaction'. Making ethics a priority in construction organization will improve the quality of project which will improve client's satisfaction. Abdul-Rahman et al. (2014) reveal that lack of proper ethics management in construction resulted into poor quality of projects. Contrary to the assertion of Kang et al. (2004) that there is positive relationship between ethicality and profitability in construction business, all the respondents in this study ranked 'increased company's profitability' as the least important resultant factor of code implementation. London et al. (2006) also indicate 'low profitability' as one of the results of unethical behaviour in construction industry. The reason for ranking the factor so low could be that respondents considered the additional cost of managing ethics which in practical terms, is lesser in value than the cost of remedying the effect of unethical conduct (Abdul-Rahman et al. 2010).

6.4 Summary of the chapter

One crucial finding from initial literature review is the development of a comprehensive list of enabling factors for ethical codes implementation. This chapter has reported the results of questionnaire survey which gleaned the views of construction practitioners, regarding enabling factors for effective code implementation. A total of 30 factors identified through a comprehensive literature review were prioritized by ranking the factors based on their mean scores and RII. While findings from the study reveal that all the enabling factors are important, the respondents considered some factors more important than the others. The most important factors include (1) protecting anyone who exposes alleged wrongdoing; (2) managers acting as role models; (3) commitment of managing director to ethics, while the least three factors are (1) the use of ethics committee; (2) creating a forum for discussing ethical dilemma; and (3) the use of ethics ombudsman. However, at variant degree though, it was found that all the factors are relevant and important to codes of ethics implementation within construction organizations in Hong Kong. Thus, presence of the factors in an

organization setting can directly or indirectly suppress the barriers identified in the previous chapter. The findings presented in this chapter has supported the achievement of objective 2, which assesses factors enabling proper implementation of codes of ethics towards effective impact of codes on employees' ethical behaviour in construction companies. Also, 11 resulting outcomes of proper implementation of codes of ethics were ranked. The grouping of these factors under the established organizational enablers and process-specific classification as shown in the PAAM model are further investigated by validating and evaluating the model as well as assessing the extent of implementation of the factors through empirical studies as described in the subsequent chapters.

CHAPTER 7 ESTABLISHMENT OF CODES OF ETHICS IMPLEMENTATION ASSESSMENT MODEL

7.1 Introduction

This chapter reports the findings pertinent to accomplishing objective 3. The structure of the implementation processes and their relationship with ethical codes implementation are established. Using the sample for the established enabling factors (Chapter 6), the research model and hypotheses presented in Figure 4.2 were validated through PLS-SEM analysis.

7.2 Analysis and results of PLS-SEM

The two models (measurement and structural) involved in this study are assessed sequentially as suggested by Anderson and Gerbing (1988), in order to reduce the likelihood of cofounds associated with model interpretation. According to Wu (2010), at least, two tasks are necessary for PLS modeling: convergent reliability and validity must be checked (for measurement model), and path coefficients as well as predictive ability (for structural model) must be assessed. Mohamed (2002) makes it clear that the validity of the constructs must be established first before investigating the hypothesized relationships. Hence, the two models are assessed based on two-stage approach as described below.

7.2.1 Measurement (outer) model

Convergent reliability and validity are conducted to measure the internal consistency to ascertain that the items associated with each latent construct based on the theoretical model actually measure the construct and not measuring another latent construct (Hulland, 1999; Rahman et al., 2013). To ascertain adequate convergent validity, all indicators on the latent construct must be statistically significant. This is achieved by using bootstrapping techniques to generate t-statistics values for the indicators. As can be seen in Table 7.1, the data set for

this study meets the criteria because the loading of each indicator is highly significant within each latent construct.

Table 7.1: T-statistics for determining convergent validity

| Constructs and indicators | T Statistics |
|---------------------------|--------------|
| LD1 <- IRB | 19.333*** |
| PE1 <- IRB | 16.309*** |
| PS1 <- IRB | 14.814*** |
| PP1 <- IRB | 14.353*** |
| PR1 <- IRB | 12.430*** |
| LD2 <- Coding | 14.442*** |
| PE2 <- Coding | 24.697*** |
| PS2 <- Coding | 10.095*** |
| PP2 <- Coding | 24.683*** |
| PR2 <- Coding | 20.775*** |
| LD3 <- Internalization | 25.504*** |
| PE3 <- Internalization | 22.869*** |
| PS3 <- Internalization | 35.282*** |
| PP3 <- Internalization | 12.084*** |
| PR3 <- Internalization | 16.704*** |
| LD4 <- Enacting Value | 16.623*** |
| PS4 <- Enacting Value | 13.076*** |
| PE4 <- Enacting Value | 10.263*** |
| PP4 <- Enacting Value | 16.026*** |
| PR4 <- Enacting Value | 16.272*** |
| LD5 <- Monitoring | 16.349*** |
| PE5 <- Monitoring | 24.702*** |
| PS5 <- Monitoring | 19.596*** |
| PP5 <- Monitoring | 37.992*** |
| PR5 <- Monitoring | 13.383*** |
| LD6 <- Accountability | 12.450*** |
| PE6 <- Accountability | 17.212*** |
| PP6 <- Accountability | 19.877*** |
| PR6 <- Accountability | 22.830*** |
| PS6 <- Accountability | 21.040*** |

^{***}*p* < 0.001

To ensure a satisfactory level of reliability and validity of a model, three common tests need to be conducted (Mohamed, 2002). First, the individual item reliability which is measured by the loadings or simple correlations of the observed indicators (manifest variables) on their respective latent constructs must be examined. Using 0.50 as a cutoff point (Chin, 1998), all the loadings are above the cutoff value ranging from 0.647-0.849 (Table 7.2) implying that the survey instrument can sufficiently measure each of the latent construct individually (Peiró-Signes and Cervelló-Royo, 2015) Second measurement property is the composite

reliability (CR) which is used to check the extent to which a latent construct is measured by its observed indicators. Composite reliability has the same interpretation as Cronbach's Alpha and the value of CR must be greater than 0.7 (Lowry and Gaskin, 2014). The composite reliability values ranging from 0.840-0.888 (Table 7.2) and the coefficients of reliability measured by Cronbachs Alpha values which must also be higher than 0.7 (Rahman et al., 2013) ranging from 0.765-0.842, show a satisfactory level of internal consistency.

Furtherance to composite reliability is the Average Variance Extracted (AVE) test, a measure of internal consistency of the construct which shows the magnitude of variance explained by latent construct from its observed indicators, compare to the size of variance imputed by measurement errors (Fornell and Larcker, 1981). The value for AVE must be higher than 0.50 as stated by Hair et al. (2011). The AVE value for each of the constructs is above the threshold as listed in Table 7.2. This implies that more than half of the measured item's variance is accounted for by the observed items while less than half of the variance is due to measurement error.

The third test is the discriminant validity which describes how a particular latent variable differs from other latent variables in a model (Hulland, 1999). There are two techniques for determining discriminant validity (Lowry and Gaskin, 2014) which are adopted in this study. The first technique is to calculate the square root of AVE for each construct which must greater than the correlation between the construct and the other constructs. The results for this technique is presented in Table 7.3 in which the square roots of AVE are asterisked and represented in bold diagonal elements, and the off-diagonal elements are the correlation values. Looking at the result in Table 7.3, one construct (enacting value) has discriminant validity issue. However, Hon et al. (2012) suggest that any construct that fails discriminant validity test in this regard could be retained if it can pass cross-loading test.

Table 7.2: Construct and discriminant validity

| Label | AVE | CR | Cronbachs | IRB | Coding | Internalization | Enacting | Monitoring | Accountability |
|-------|-------|-------|-----------|-------|--------|-----------------|----------|------------|----------------|
| | | | Alpha | | | | Value | | |
| LD1 | 0.561 | 0.865 | 0.804 | 0.788 | 0.519 | 0.386 | 0.331 | 0.303 | 0.297 |
| PE1 | | | | 0.743 | 0.517 | 0.357 | 0.258 | 0.266 | 0.250 |
| PP1 | | | | 0.722 | 0.537 | 0.503 | 0.365 | 0.336 | 0.406 |
| PR1 | | | | 0.746 | 0.478 | 0.335 | 0.356 | 0.285 | 0.362 |
| PS1 | | | | 0.744 | 0.513 | 0.408 | 0.301 | 0.263 | 0.230 |
| LD2 | 0.572 | 0.869 | 0.811 | 0.578 | 0.723 | 0.556 | 0.406 | 0.391 | 0.479 |
| PE2 | | | | 0.512 | 0.833 | 0.589 | 0.297 | 0.407 | 0.450 |
| PP2 | | | | 0.610 | 0.804 | 0.552 | 0.427 | 0.480 | 0.489 |
| PR2 | | | | 0.461 | 0.758 | 0.581 | 0.380 | 0.470 | 0.472 |
| PS2 | | | | 0.408 | 0.649 | 0.379 | 0.282 | 0.321 | 0.259 |
| LD3 | 0.614 | 0.888 | 0.842 | 0.423 | 0.635 | 0.792 | 0.463 | 0.524 | 0.493 |
| PE3 | | | | 0.362 | 0.491 | 0.806 | 0.511 | 0.527 | 0.600 |
| PP3 | | | | 0.372 | 0.484 | 0.690 | 0.599 | 0.496 | 0.517 |
| PR3 | | | | 0.474 | 0.539 | 0.771 | 0.461 | 0.500 | 0.580 |
| PS3 | | | | 0.473 | 0.629 | 0.849 | 0.497 | 0.528 | 0.559 |
| LD4 | 0.515 | 0.841 | 0.765 | 0.356 | 0.443 | 0.553 | 0.727 | 0.468 | 0.567 |
| PE4 | | | | 0.358 | 0.303 | 0.420 | 0.647 | 0.433 | 0.452 |
| PP4 | | | | 0.238 | 0.301 | 0.431 | 0.748 | 0.592 | 0.545 |
| PR4 | | | | 0.280 | 0.294 | 0.447 | 0.767 | 0.573 | 0.491 |
| PS4 | | | | 0.306 | 0.347 | 0.414 | 0.693 | 0.559 | 0.472 |
| LD5 | 0.610 | 0.886 | 0.839 | 0.331 | 0.444 | 0.561 | 0.577 | 0.747 | 0.492 |
| PE5 | | | | 0.313 | 0.488 | 0.489 | 0.577 | 0.811 | 0.587 |
| PP5 | | | | 0.307 | 0.486 | 0.631 | 0.624 | 0.840 | 0.602 |
| PR5 | | | | 0.278 | 0.273 | 0.399 | 0.575 | 0.718 | 0.506 |
| PS5 | | | | 0.300 | 0.461 | 0.467 | 0.488 | 0.782 | 0.523 |
| LD6 | 0.587 | 0.877 | 0.824 | 0.493 | 0.539 | 0.607 | 0.524 | 0.565 | 0.726 |
| PE6 | | | | 0.169 | 0.353 | 0.460 | 0.518 | 0.494 | 0.764 |
| PP6 | | | | 0.208 | 0.362 | 0.479 | 0.549 | 0.524 | 0.750 |
| PR6 | | | | 0.293 | 0.417 | 0.511 | 0.482 | 0.505 | 0.773 |
| PS6 | | | | 0.422 | 0.547 | 0.620 | 0.639 | 0.581 | 0.815 |

Therefore, discriminant validity of the indicators in this study were further determined by correlating the latent variable scores against the observed indicators (cross-loading) as discussed in Lowry and Gaskin (2014). The correlations symbolize a confirmatory factor analysis, having the same implications with the actual loadings of the indicators (Table 7.2). The general rule for this technique is that the loading of an indicator should be greater for the latent construct to which it was theoretically assigned than for any other latent construct in the model. Adequacy of discriminant validity is determined using a threshold of 0.100 for cross-loading differences, meaning that the difference between a given indicator under its

assigned construct and its loading with other latent construct must exceed 0.100 (Lowry and Gaskin, 2014). This is demonstrated as shown in Table 7.3 in which all the observed variables are correlated against the latent constructs. The result shows that all the indicators loaded strongly with their parent construct than any other constructs. Having evaluated the measurement model, it can be concluded that the constructs achieved a considerable reliability and validity. The next step is to proceed to the evaluation of structural model.

Table 7.3: Discriminant validity

| Processes | IRB | Coding | Internalization | Enacting Value | Monitoring | Accountability |
|-----------------|--------|--------|-----------------|-------------------|------------|----------------|
| IRB | 0.749* | | | value | | |
| Coding | 0.686 | 0.756* | | | | |
| Internalization | 0.536 | 0.712 | 0.783* | | | |
| Enacting Value | 0.432 | 0.480 | 0.640 | 0.718* | | |
| Monitoring | 0.390 | 0.554 | 0.656 | 0.728 | 0.781* | |
| Accountability | 0.415 | 0.580 | 0.700 | 0.710 | 0.697 | 0.766* |

^{*}Square root of AVE on diagonal

7.2.2 Structural (inner) model

Inner model measures the structural relationship between latent or unobserved constructs by testing the research hypotheses so as to assess the model's predictive power. The hypotheses in this study set to determine the influence of each established process on ethical code implementation $(H_1 - H_6)$ by examining the coefficients of determination (R^2) and the structural path coefficients. It should be noted that the indicators for 'results' which are associated with ethical code implementation were hid during the analysis, since it has been established that the indicators are not the focus of this study. The level of significance was determined by bootstrapping technique using Smart PLS 3.0. This is demonstrated in Figure 7.1 in which four out of the six hypotheses (paths) were supported (significant) in accordance with the predicted/hypothesized directions (+) as presented in Table 7.4. The paths linking process of 'identifying and removing barriers' (H_1) , 'internalization' (H_3) , 'enacting value'

(H₄) and 'accountability' (H₆) to 'ethical code implementation' (dependent variable) are positive and statistically significant (p < 0.1).

The path coefficient between 'enacting value' (observed construct) and 'ethical code implementation' (dependent construct) has the highest significant value (0.232; p < 0.1) which indicates that ethical code implementation within construction organizations could be greatly influenced by the process of enacting value. Thus, activities geared towards making organizational values explicit are very important in achieving effective ethical code implementation. Path coefficient of internalization construct also has a significant value (0.229; p < 0.1), indicating the importance of acquiring the meaning and essence of ethical codes while encouraging organizational members to act responsibly. This process should greatly influence implementation of ethical codes within construction organizations. In the same vein, the process of accountability exact significant influence on effective implementation of ethical codes with path coefficient value of $0.202 \ (p < 0.1)$. Hence, in the opinion of the respondents, various organizational activities aimed at keeping stakeholders informed about, and attuned with ethical expectation are very germane to ethical code implementation.

Also, the process of identifying and removing barriers (IRB) has positive significant influence (0.182; p<0.1) on ethical code implementation. This implies that focusing on the activities that aid gaining insight into barriers that hamper responsible behaviour, would have positive significant impact on effective implementation of codes of ethics within an organization. However, the expected influence of processes of 'coding' (H₂) and 'monitoring' (H₅) were not supported, as coding and monitoring processes were not significantly contributing to ethical code implementation. Despite the insignificant relationship, the two processes exact positive influence, which implies that an increase in coding and monitoring processes is associated ethical code implementation. The result does not connote that the two

processes are not important, rather, they are of lesser magnitude in terms of contribution. For instance, as described earlier, process of coding encompasses efforts in translating employees' behaviours into general standard within an organization, which is an important aspect of code implementation but cannot in itself, ensure responsible behaviour. Similarly, monitoring process is important to ensure that employees' behaviours are in accordance with codes of ethics, but may not have much contribution to code implementation based on the respondents' opinion.

The R^2 value of the latent construct for the inner model is 0.605 which indicates that the regression of the six independent latent constructs (processes) is substantially high, explaining about 61% of the variance in ethical code implementation. On the whole, the combination of all the six processes has predictive ability for 61% of ethical code implementation in construction organization. Following Cohen (1988) recommendation, R^2 is considered as being substantial if $R^2 = 0.26$, moderate if $R^2 = 0.13$ and weak if $R^2 = 0.02$, thus, the model in this study has a highly substantial satisfactory level. Also, with the statistical significance of the overall model, it can be concluded that the model signifies excellent predictive power.

Table 7.4: Summary of path coefficients and significance levels

| Paths | Path coefficients | T Statistics | P Values | Inference |
|--|-------------------|--------------|----------|---------------|
| IRB -> ECI (H_1) | +0.182 | 2.261* | 0.024 | Supported |
| Coding -> ECI (H ₂) | +0.050 | 0.476 | 0.634 | Not supported |
| Internalization -> ECI (H ₃) | +0.229 | 2.207* | 0.028 | Supported |
| Enacting Value -> ECI (H ₄) | +0.232 | 2.596* | 0.010 | Supported |
| Monitoring -> ECI (H ₅) | +0.052 | 0.510 | 0.610 | Not supported |
| Accountability -> ECI (H ₆) | +0.202 | 1.792* | 0.074 | Supported |

^{*}indicates significant paths p < 0.1 Note: $ECI = Ethical\ code\ implementation$

Model representation

Due to intention to use the model for further assessment in respect to ethical codes implementation within construction organizations, it is imperative to evaluate the

representation of the model. This is achieved by conducting global fit measure (GoF), which represents the geometric mean of AVE and average R² of dependent construct (ethical code implementation) as defined by Memon et al. (2013). GoF accounts for the overall prediction performance of both structural and measurement model. The essence of model representation is to assess the power of developed model for the purpose of generalizability for construction organizations in Hong Kong and elsewhere in predicting overall results of ethical code implementation within the organization. The GoF is calculated using the following equation (Akter et al., 2011):

$$GoF = \sqrt{AVE \times R^2}$$

Where the AVE and R² are the values derived for overall results (dependent construct)

$$GoF = \sqrt{0.463 \times 0.605}$$

$$GoF = 0.529$$

The model representation is *small* if GoF is 0.1; *medium* if GoF is 0.25, and *large* at the value of 0.36 (Wetzels et al., 2009). The GoF value (0.529) exceeds the large threshold (0.36). This implies that the overall model has substantial predicting power to generalize the outcomes of ethical code implementation in construction organization. Having established this, the model is considered suitable for measuring or assessing implementation level of codes of ethics within construction organization. The empirically validated PAAM model for codes of ethics implementation is shown in Figure 7.1.

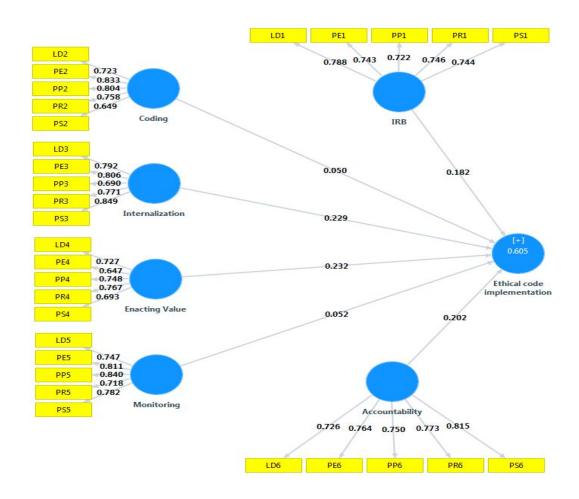


Figure 7.1: Empirically tested PAAM model

7.3 Summary of the chapter

In this chapter, the theoretical model involving six processes of ethical code implementation with 5 enablers/indicators associating with each of the six processes, as hypothesized based on literature review has been validated. The results of the analysis show that the model has an excellent predictive power and a very reliable model representation. Thus, all the six predetermined processes can sufficiently predict and measure ethical codes implementation so as to enhance ethical behaviour within construction organizations. This finding is consistent with past finding of Nijhof et al., (2003) which states that the six processes of

responsibilization are capable of enhancing positive ethical behaviour in an organization. The findings from this chapter has contributed to achievement of objective 3: to develop and establish a Process Approach Assessment Method (PAAM) that will provide a strong impetus towards the implementation of corporate codes of ethics within organizational processes and routines. Subsequently, the model will be used to measure the extent of ethical codes implementation within construction organizations in Hong Kong in the next chapter.

CHAPTER 8 MEASURING THE IMPLEMENTATION OF ETHICAL CODES AND VALIDATION OF PAAM MODEL

8.1 Introduction

While the model for ethical codes implementation has been empirically validated in the previous chapters, the model is evaluated in this chapter by assessing the extent of implementation of codes of ethics within construction organizations in Hong Kong using data collected from self-assessment questionnaire survey and interviews from various organizations, with the application of FSE statistical analysis to establish intersubjective reality. Final validation of the established model is carried out by re-evaluating its performance by means of an independent set of data to provide a final assessment of the model functionality for the affirmation of its validity. According to Flood and Issa (2010), the same data set that was used for model validation (Chapter 7) cannot be used for evaluation purpose, and it is vital that the validation process demonstrate the approach of the model application in practice. For this reason, a new set of data was collected using self-assessment questionnaire (the third set of questionnaire), directly related to the model structure, and the data was analyzed to demonstrate the way the model is expected to be applied in practice. Following this, the results from the qualitative interview conducted for the purpose of extending the range of enquiry were presented.

8.2 Evaluation by self-assessment questionnaire survey

8.2.1 Descriptive statistics

According to AMA (2006), companies regard surveys as the most suitable tool for assessing ethics programmes thus, questionnaire survey was used to achieve the objective related to this Chapter. The data obtained from the self-assessment questionnaire was used for FSE analysis. Due to sensitivity of ethics, most organizations invited to participate in the research refused to give access into their companies. To facilitate the research process, part-time students of

construction management that are working for different construction companies in Hong Kong were invited to be used for snowball sampling. Although these students participated in the initial round of questionnaire survey, they were also briefed about the research project and were asked to help in accessing their individual companies for assessment based on the content of the established model. In total, 53 questionnaires were returned after a thorough follow-up, representing 53 construction organizations and all the returned questionnaires were valid for statistical analysis. A very closed related study (Eisenbeiss et al., 2014) uses 32 sample size from different organizations for objective ethical performance and claim that data collection at the organizational level is exceptionally difficult and time-consuming, hence, small sample size is commonly used. Among the respondents that filled each questionnaire on behalf of the company, 8% were senior managers, 51% were project managers, 11% were supervisors, 9% were frontline workers, and 21% did not indicate their current position in the company (Figure 8.1). Based on the years of experience in terms of length of service with the current company, 58% has between one to five years of working experience in their current company (Figure 8.2). Some of the respondents were asked to give reasons for limited number of years of experience while returning the questionnaire and it was disclosed that most construction professionals hardly stay for a long period in a particular organization. However, it was believed that the questionnaire data is a reflection of the practices attainable in the respondents' organizations.

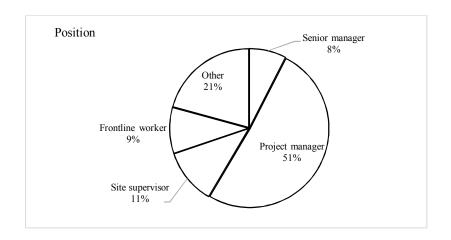


Figure 8.1: Job positions of respondents in their current organizations

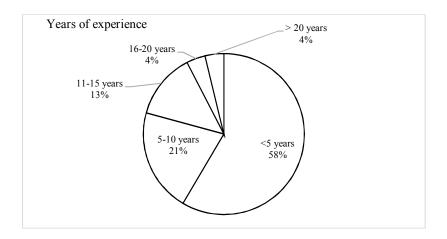


Figure 8.2: Years of experience of respondents in their current organizations

8.2.2 Results of FSE analysis

Assessment of ethics compliance processes to ascertain effectiveness and facilitate sustainable improvement of ethical codes implementation is an important hallmark to policy-makers and practitioners and most leading organizations embrace this practice on a yearly basis in order to pay necessary attention to their ethical performance (LRN, 2014). Therefore, this section demonstrated an approach for assessing ethical codes implementation within construction organizations in Hong Kong using FSE technique following the guidelines in the previous studies such as Ameyaw and Chan (2015), Chan et al. (2014) and Xu et al. (2010).

There are five steps involved in FSE technique according to Xu et al. (2010):

i. Establishing a set of basic criteria (or factors)

 $U = (u_1, u_2, \dots, u_m)$ where $u_i = (i = 1, 2, \dots, m)$ represent the evaluation of the i^{th} factor. In this study, U represents the overall implementation level, while $u_1, u_2, u_3, \dots, u_6$ represents the six processes and can be expressed as follows:

$$u_{1} = (u_{11(LD)}, u_{12(PS)}, u_{13(PE)}, u_{14(PR)}, u_{15(PP)})$$

$$u_{2} = (u_{21(LD)}, u_{22(PS)}, u_{23(PE)}, u_{24(PR)}, u_{25(PP)})$$

$$u_{3} = (u_{31(LD)}, u_{32(PS)}, u_{33(PE)}, u_{34(PR)}, u_{35(PP)})$$

$$\dots$$

$$u_{6} = (u_{61(LD)}, u_{62(PS)}, u_{63(PE)}, u_{64(PR)}, u_{65(PP)})$$

ii. Determining the membership grade of the factors/processes (Fs) and variables/indicators(Vs)

For the factors $V = (v_1, v_2, \dots, v_n)$

In other words, V represents the measurement scale for the survey. In this study the 5-point Likert scale was used, thus, V = (1,2,3,4,5) are: $v_1 =$ highly insignificant, and $v_5 =$ highly significant, for implementation of the identified items within construction organizations.

Membership functions (MFs) of a particular variable u_{in} , can be derived using the following equation:

$$MF_{u_{in}} = \frac{x_{1u_{in}}}{v_1} + \frac{x_{2u_{in}}}{v_2} + \frac{x_{3u_{in}}}{v_3} + \frac{x_{4u_{in}}}{v_4} + \frac{x_{5u_{in}}}{v_5}$$
(1)

where u_{in} denotes the n^{th} enabler (V) of a given process (F) i ($i = u_{1,}u_{2}, u_{3}$); $MF_{u_{in}}$ represents the membership function of a given enabler u_{in} ; $x_{j_{u_{in}}}$ (j = 1, 2, 3, 4, 5) is the

percentage representation of the respondents that participated in the survey who score j for the implementation of a specific enabler u_{in} , and it connotes the degree of membership. From Equation (1), MF of a given enabler can be rewritten as:

$$MF_{u_{in}} = (x_{1u_{in}}, x_{2u_{in}}, x_{3u_{in}}, x_{4u_{in}}, x_{5u_{in}})$$

$$(2)$$

The value $MF_{u_{in}}$ ranges between 0 and 1 and its addition must be unity as shown below:

$$\sum_{j=1}^{5} x_{j_{u_{in}}} = 1 \tag{3}$$

Using 'Role modelling' $u_{21(LD)}$ as an example, the result of the survey reveal that the respondents rated this enabler as: 0% for 'highly insignificant (HI)', 5% for 'insignificant (I)', 17% for 'neutral (N)', 42% for 'significant (S)' and 36% for 'highly significant (HS)'. Hence, using equation (1), the MF for $u_{21(LD)}$ is calculated as follows:

$$MF_{u_{21(LD)}} = \frac{0.00}{HI} + \frac{0.05}{I} + \frac{0.17}{N} + \frac{0.42}{S} + \frac{0.36}{HS}$$
 (4)

(Note: arithmetic signs (+) and (/) simply represent notations and not meant to be computed). This can be rewritten based on equation (2) as; (0.00, 0.05, 0.17, 0.42, 0.36). The same procedure was followed to generate MFs of other enablers (Vs) and this forms the basis for generating MFs for each process (F). Meanwhile, in relation to the MFs of the enablers, the weighting function is needed to compute the MFs of the processes (Fs).

iii. Establishing a set of weightings for each enabler (V) and process (F)

The weightings W_i are the interpretation of relative significance of each enabler based on respondents' judgment which is calculated using normalized mean method as detailed in Lo (1999) using equation (5).

$$w_i = \frac{M_i}{\sum_{i=1}^5 M_i}, 0 < w_i < 1, \text{ and } \sum_{i=1}^n w_i = 1$$
 (5)

where W_i denotes the weighting of a specific enabler or process V_i or F_i and M_i represents the mean value of a given enabler or process i. The weighting set can simply be written as:

$$W_{i} = \left(w_{u_{i1}, w_{u_{i2}, \dots, u_{in}}} w_{u_{in}}\right) \tag{6}$$

The weighting functions of the enablers (Vs) and processes (Fs) are calculated based on the mean values obtained from the survey. For example, 'process of coding' contains five enablers/indicators (Vs) with a total mean value of 18.92. The weighting function of 'role modeling' ($^{u}_{21(LD)}$) can be calculated using equation 4 as follows:

$$w_{u_{21(LD)}} = \frac{4.08}{18.92} = 0.22$$

The same procedure was followed to calculate the weightings for other enablers. The condition for normalized weighting function set (equation 4) was satisfied, i.e. the addition of all the weightings associated each process equals to unity. From Table 8.1, given that the total mean value of all the processes Fs ($u_1 = 18.79$, $u_2 = 18.92$,..., $u_6 = 18.60$ is 110.24, normalization of the mean value of each process is required to quantify its weighting function using equation 5. For instance, using the same 'process of coding' u_2 as an example:

$$w_{u_2} = \frac{18.92}{110.24} = 0.17$$
 (See Table 8.2)

This is normalized function of W_{u_2} and the same procedure was followed to obtain normalized value for W_{u_1}, \dots, W_{u_6} , and the total sum of the normalized weighting values is equal to unity.

iv. Determining a fuzzy evaluation matrix $R = (r_{ij})_{m \times n}$, where r_{ij} expresses the extent to which the basic criterion (process) u_{ij} is satisfied by an alternative v_{ij} in a fuzzy environment. The fuzzy function matrix R_{ij} represents the MFs of all the enablers (Vs) and can be expressed (with regards to equation 2) as:

$$R_{i} = \begin{vmatrix} MF_{u_{i1}} \\ MF_{u_{i2}} \\ MF_{u_{i3}} \\ \\ MF_{u_{im}} \end{vmatrix}$$
(7)

Using 'process of coding' u_2 as an example, the MFs of all the enablers (Vs) in this process can be obtained using equation 6:

$$R_{u_2} = \begin{vmatrix} MF_{u_{21(LD)}} \\ MF_{u_{22(PS)}} \\ MF_{u_{23(PE)}} \\ MF_{u_{23(PR)}} \\ MF_{u_{23(PR)}} \\ MF_{u_{23(PP)}} \end{vmatrix} \qquad R_{u_2} = \begin{vmatrix} 0.00 & 0.06 & 0.17 & 0.42 & 0.36 \\ 0.02 & 0.09 & 0.30 & 0.47 & 0.11 \\ 0.04 & 0.00 & 0.23 & 0.43 & 0.30 \\ 0.06 & 0.06 & 0.30 & 0.28 & 0.30 \\ 0.02 & 0.09 & 0.30 & 0.43 & 0.15 \end{vmatrix}$$

v. Determining the final fuzzy evaluation, by considering the weightings (step 3) and fuzzy evaluation matrix (step 4) through the following equation:

$$D = W \bullet R = (d_1, d_2, ..., d_n)$$
 (8)

where, D denotes the final evaluation matrix; W is the weighting vector; R is the fuzzy evaluation matrix; and denotes the fuzzy composition operator.

Following the example of process of coding u_2 given above, the matrix of R_{u_2} can be normalized using equation 8 by introducing the weighting functions of the enablers (Vs) for u_2 as follows:

$$D_{u_{2}} = W_{u_{2}} \bullet R_{u_{2}} = \left(w_{u_{21(LD)}}, w_{u_{22(PS)}}, w_{u_{23(PE)}}, w_{u_{24(PR)}}, w_{u_{25(PP)}}\right) \times \begin{pmatrix} MF_{u_{21(LD)}} \\ MF_{u_{22(PS)}} \\ MF_{u_{23(PE)}} \\ MF_{u_{25(PP)}} \\ MF_{u_{25(PP)}} \end{pmatrix}$$

$$D_{u_2} = \begin{vmatrix} 0.21 \\ 0.21 \\ 0.20 \\ 0.19 \\ 0.19 \end{vmatrix} \begin{vmatrix} 0.00 & 0.06 & 0.17 & 0.42 & 0.36 \\ 0.02 & 0.09 & 0.30 & 0.47 & 0.11 \\ 0.04 & 0.00 & 0.23 & 0.43 & 0.30 \\ 0.06 & 0.06 & 0.30 & 0.28 & 0.30 \\ 0.02 & 0.09 & 0.30 & 0.43 & 0.15 \end{vmatrix} = (0.03 \quad 0.06 \quad 0.26 \quad 0.41 \quad 0.25)$$

The same procedure can be used to obtain the fuzzy evaluation matrixes for other processes as shown in Table 8.1.

 Table 8.1: Weightings and Membership functions for all the enablers

| Processes (F) and Enablers (V) | Mean | Weightings (w) for enablers | Membership function MF of enablers | | | | | Membership function MF of the processes = Di | | | | | |
|-----------------------------------|-------|-----------------------------|------------------------------------|-----------|-----------|-----------|------------|--|------|----------|----------|----------|------|
| Enacters (r) | | Process of Identif | ying ana | ! remova | l of barr | iers (IRE | B) to ethi | cal code. | • | eesses | D. | | |
| $u_{11(LD)}$ | 3.96 | 0.21 | 0.00 | 0.06 | 0.19 | 0.49 | 0.26 | 0.01 | 0.05 | 0.28 | 0.45 | 0.20 | 3.77 |
| $u_{12(PS)}$ | 3.94 | 0.21 | 0.02 | 0.00 | 0.26 | 0.45 | 0.26 | | | | | | |
| $u_{13(PE)}$ | 3.77 | 0.20 | 0.02 | 0.04 | 0.32 | 0.40 | 0.23 | | | | | | |
| $u_{14(PR)}$ | 3.49 | 0.19 | 0.02 | 0.09 | 0.36 | 0.43 | 0.09 | | | | | | |
| $u_{15(PP)}$ | 3.62 | 0.19 | 0.02 | 0.08 | 0.30 | 0.47 | 0.13 | | | | | | |
| Total | 18.79 | 1.00 | | | | | | | | | | | |
| | | | I I | Process o | f Codin | g g | I | <u>I</u> | | <u>I</u> | <u>I</u> | <u>I</u> | |
| $u_{21(LD)}$ | 4.08 | 0.22 | 0.00 | 0.06 | 0.17 | 0.42 | 0.36 | 0.03 | 0.06 | 0.26 | 0.41 | 0.25 | 3.80 |
| $u_{22(PS)}$ | 3.57 | 0.19 | 0.02 | 0.09 | 0.30 | 0.47 | 0.11 | | | | | | |
| $u_{23(PE)}$ | 3.96 | 0.21 | 0.04 | 0.00 | 0.23 | 0.43 | 0.30 | | | | | | |
| $u_{24(PR)}$ | 3.72 | 0.20 | 0.06 | 0.06 | 0.30 | 0.28 | 0.30 | | | | | | |
| <i>u</i> _{25(PP)} | 3.60 | 0.19 | 0.02 | 0.09 | 0.30 | 0.43 | 0.15 | | | | | | |
| Total | 18.92 | 1.00 | | | | | | | | | | | |
| | | 1 | Proc | ess of In | ıternaliz | ation | I | I | | I | I | I | |
| $u_{31(LD)}$ | 3.74 | 0.21 | 0.04 | 0.09 | 0.19 | 0.45 | 0.23 | 0.03 | 0.07 | 0.31 | 0.42 | 0.17 | 3.64 |
| $u_{32(PS)}$ | 3.58 | 0.20 | 0.02 | 0.06 | 0.38 | 0.42 | 0.13 | | | | | | |
| $u_{33(PE)}$ | 3.74 | 0.21 | 0.02 | 0.06 | 0.32 | 0.38 | 0.23 | | | | | | |
| $u_{34(PR)}$ | 3.72 | 0.20 | 0.02 | 0.08 | 0.25 | 0.49 | 0.17 | | | | | | |
| $u_{35(PP)}$ | 3.42 | 0.19 | 0.04 | 0.08 | 0.43 | 0.34 | 0.11 | | | | | | |
| Total | 18.19 | 1.00 | | | | | | | | | | | |
| | | | Proc | ess of En | acting v | alues | | • | | • | • | • | |
| $u_{41(LD)}$ | 3.81 | 0.21 | 0.02 | 0.04 | 0.23 | 0.55 | 0.17 | 0.02 | 0.11 | 0.27 | 0.47 | 0.13 | 3.57 |
| $u_{42(PS)}$ | 3.42 | 0.19 | 0.02 | 0.15 | 0.32 | 0.42 | 0.09 | | | | | | |
| $u_{43(PE)}$ | 3.51 | 0.20 | 0.04 | 0.11 | 0.26 | 0.47 | 0.11 | | | | | | |
| $u_{44(PR)}$ | 3.64 | 0.20 | 0.02 | 0.11 | 0.21 | 0.53 | 0.13 | | | | | | |
| $u_{45(PP)}$ | 3.45 | 0.19 | 0.02 | 0.13 | 0.36 | 0.36 | 0.13 | | | | | | |
| Total | 17.83 | 1.00 | | | | | | | | | | | |
| | | | Pro | ocess of | Monitor | ing | | | | | | | |
| $u_{51(LD)}$ | 3.57 | 0.20 | 0.06 | 0.12 | 0.18 | 0.49 | 0.16 | 0.03 | 0.10 | 0.29 | 0.40 | 0.17 | 3.58 |
| $u_{52(PS)}$ | 3.71 | 0.21 | 0.02 | 0.08 | 0.27 | 0.43 | 0.20 | | | | | | |
| $u_{53(PE)}$ | 3.45 | 0.19 | 0.06 | 0.08 | 0.37 | 0.33 | 0.16 | | | | | | |
| $u_{54(PR)}$ | 3.63 | 0.20 | 0.02 | 0.12 | 0.24 | 0.47 | 0.16 | | | | | | |
| $u_{55(PP)}$ | 3.55 | 0.20 | 0.02 | 0.10 | 0.39 | 0.29 | 0.20 | | | | | | |
| Total | 17.90 | 1.00 | | | | | | | | | | | |

| | Process of Accountability | | | | | | | | | | | | |
|--------------|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| $u_{61(LD)}$ | 3.76 | 0.20 | 0.02 | 0.06 | 0.25 | 0.47 | 0.20 | 0.02 | 0.07 | 0.28 | 0.42 | 0.20 | 3.72 |
| $u_{62(PS)}$ | 3.61 | 0.19 | 0.04 | 0.06 | 0.33 | 0.39 | 0.18 | | | | | | |
| $u_{63(PE)}$ | 3.68 | 0.20 | 0.00 | 0.10 | 0.32 | 0.38 | 0.20 | | | | | | |
| $u_{64(PR)}$ | 3.78 | 0.20 | 0.02 | 0.08 | 0.22 | 0.47 | 0.22 | | | | | | |
| $u_{65(PP)}$ | 3.76 | 0.20 | 0.02 | 0.06 | 0.29 | 0.39 | 0.24 | | | | | | |
| Total | 18.60 | 1.00 | | | | | | | | | | | |

In order to obtain the impact level (IL_i) of a given process, the following equation can be applied:

$$IL_{i} = \sum_{i=1}^{5} D_{i} \times V^{T}$$

$$1 \le IL_{i} \le 5$$

$$(9)$$

Where IL_i refers to implementation level of ethical codes, D_i represents fuzzy evaluation matrix of the processes $(u_1, u_2, u_3, u_4, u_5, u_6)$ and V^{τ} is the set of grades (1,2,3,4,5).

See: Hsiao (1998) for detail.

Thus,

$$IL_{u_2} = (0.05 \times 1 + 0.03 \times 2 + 0.20 \times 3 + 0.49 \times 4 + 0.23 \times 5) = 3.84.$$

Overall implementation level of ethical codes

Basically, there three levels involved in FSE model as presented in this study. The analysis starts from level 3 which represents the MFs of the enablers, level 2 shows MFs of the processes. Both level 2 and 3 are shown in Table 8.1. Level 1 presents MF of overall implementation level. From the initial grouping, there are six processes of code implementation with each process including five enablers. Each set of enablers (level 3) form the input variables for their associated process to arrive at level 2. The six processes in turn form the input variables for overall implementation (as a single output variable).

To evaluate the overall implementation level of all the processes, equation 8 is translated into:

$$\overline{D}_{Overall} = \overline{W}_{u_i} \bullet \overline{R}_{u_i} \tag{10}$$

where \overline{D} denotes the fuzzy evaluation matrix for impact of barriers to ethical code implementation in construction organizations, \overline{W} is the weighting functions of the respective barrier factor (F) which is used to normalize \overline{R} to obtain the fuzzy evaluation matrix (See Table 8.2).

$$\overline{D}_{Overall} = \left(w_{u_1}, w_{u_2}, w_{u_3}, w_{u_4}, w_{u_5}, w_{u_6}\right) \times \begin{vmatrix} MF_{u_1} \\ MF_{u_2} \\ MF_{u_3} \\ MF_{u_4} \\ MF_{u_5} \\ MF_{u_6} \end{vmatrix} = \left(0.17, 0.17, 0.16, 0.16, 0.16, 0.16, 0.17\right) \times \begin{vmatrix} 0.01 & 0.05 & 0.28 & 0.45 & 0.20 \\ 0.03 & 0.06 & 0.26 & 0.41 & 0.25 \\ 0.03 & 0.07 & 0.31 & 0.42 & 0.17 \\ 0.02 & 0.11 & 0.27 & 0.47 & 0.13 \\ 0.03 & 0.10 & 0.29 & 0.40 & 0.17 \\ 0.02 & 0.07 & 0.28 & 0.42 & 0.20 \end{vmatrix}$$

$$= (0.02 \quad 0.08 \quad 0.28 \quad 0.43 \quad 0.19)$$

Then, equation 8 is expressed as follows:

$$IL_{Overall} = \sum_{i=1}^{5} \overline{D}_{Overall} \times V^{T}$$
(11)

Therefore, the overall implementation level of all the processes of code implementation in construction organizations is calculated thus:

$$IL_{Overall} = (0.02 \times 1 + 0.08 \times 2 + 0.28 \times 3 + 0.43 \times 4 + 0.19 \times 5) = 3.68$$

Table 8.2: Weightings and membership functions for the processes code implementation

| Processes | Weightings (w) for the processes | Membership function MF of the processes = Di | | | Membership function MF of overall implementation | | | | U | | | |
|-----------------|-------------------------------------|--|------|------|--|------|------|------|------|------|------|------|
| IRB | 0.17 | 0.01 | 0.05 | 0.28 | 0.45 | 0.20 | 0.02 | 0.08 | 0.28 | 0.43 | 0.19 | 3.68 |
| Coding | 0.17 | 0.03 | 0.06 | 0.26 | 0.41 | 0.25 | | | | | | |
| Internalization | 0.16 | 0.03 | 0.07 | 0.31 | 0.42 | 0.17 | | | | | | |
| Enacting value | 0.16 | 0.02 | 0.11 | 0.27 | 0.47 | 0.13 | | | | | | |
| Monitoring | 0.16 | 0.03 | 0.10 | 0.29 | 0.40 | 0.17 | | | | | | |
| Accountability | 0.17 | 0.02 | 0.07 | 0.28 | 0.42 | 0.20 | | | | | | |
| Total | 1.00 | | | | | | | | | | | |

To present the result of implementation processes in a linguistic form, the following interpretation is adopted (Li et al., 2013):

'very low' (IL \leq 1.50); 'low' (1.51 \leq IL \leq 2.50); 'average' (2.51 \leq IL \leq 3.50); 'high' (3.51 \leq IL \leq 4.50); and 'very high' (IL \geq 4.51), where IL is the implementation level of the processes (Table 8.3).

Table 8.3: Ranking of the processes

| Processes | Implementation level | Linguistic | Ranking |
|-----------------|----------------------|------------|---------|
| Coding | 3.80 | High | 1 |
| IRB | 3.77 | High | 2 |
| Accountability | 3.72 | High | 3 |
| Internalization | 3.64 | High | 4 |
| Monitoring | 3.58 | High | 5 |
| Enacting values | 3.57 | High | 6 |
| Overall | 3.68 | High | - |

8.2.3 Discussion of results on measuring the implementation processes of ethical codes

8.2.3.1 Overall implementation

Using FSE approach, the initial PAAM model was evaluated by measuring the extent of implementation of the six processes with the aim of identifying and acting on the processes requiring additional effort and maintaining the ones that are well implemented. Generally, the results show a *high* level for the overall implementation (3.68) of codes of ethics within construction organizations in Hong Kong as shown in Table 8.3. The findings presumably imply an improved ethical standard within construction companies in Hong Kong, although construction organizations are not to be complacent with this status. A study by Schwartz (2002) using ethical audit approach to assess ethics programs of four different Canadian companies in relation to their codes of ethics, similarly found that there was room for improvement of the ethical nature in all the companies. The current study has reported some measure of advancement, in contrast with the findings by Ho (2013) which reveal that

management of construction companies in Hong Kong pay less attention to ethical codes implementation within their activities. Similarly, the findings in the current study reflect a considerable degree of ethical standard of construction organizations in Hong Kong different from general perceptions of ethical standard of construction industry at large (Ameh and Odusami, 2009; Suen et al., 2007; Tow and Loosemore, 2009). Indeed, the findings differ from Poon (2004) which makes it clear that construction companies do not demonstrate high ethical standards. The extent of implementation of the six processes determines the overall level of implementation, which should, in turn, be an indication for ethical organization, hence, the processes are discussed as follows:

8.2.3.2 Process of coding

The coding process is a reflection of the focus of construction companies on the activities aiming at the common translation of organization's desirable behaviour into specific standards and targets. In Hong Kong, as a result of government policy requiring all contractors to have codes of ethics, almost all construction organizations now have written codes which they make available to new employees when they (newly) join the company. This might have contributed to the process of coding having the highest level of implementation with regards to ethical codes. This is in comparison with the findings of Snell et al. (1999) that most business organizations in Hong Kong are actively promoting activities towards transforming their employees' ethical behaviour via the instrumentation of codes of ethics. Nijhof et al. (2003) found this aspect of code implementation process as the second most relevant within the reported case study, a result which reveals a significant improvement in employees behaviour as a result of effort in implementing ethical codes. In essence, despite the insignificant influence (refer to Figure 7.1), the process of coding is prominent in terms of ethical code implementation within construction organizations in Hong Kong. This confirms

the assertion by Kaptein and Wempe (1998) that a code itself is nothing without a coding process.

8.2.3.3 Process of identification and removal of barriers

This process aims at identifying the risks and barriers obstructing effective implementation of codes of ethics within an organization so that they can easily be dealt with. The indicators associated with this process, as common barriers identified in previous research are demonstrated in the framework. As shown in Table 8.3, this process ranked second (3.77) in terms of the extent of implementation in construction organizations. The result is similar to Nijhof et al. (2003) in which the process ranked third in the case-organization. This means that the process is common and significant to code implementation. For instance, commitment of top management is highly important in achieving desired ethical standard but lack of leadership commitment will hamper ethical codes implementation. Tow and Loosemore (2009) and Ho et al. (2004) argue that the extent to which an organization embraces and practices ethics will be greatly affected by the leadership's commitment to ethics. Lack of provision to protect whistleblowers can also hinder effective implementation of codes, as affirmed by Suen et al. (2007), that employees will be discouraged to report unethical practice due to fear of retaliation when there is no clear provision for their protection.

8.2.3.4 Process of accountability

This process involves activities of an organization to ensure that mutual expectations about ethical codes are attuned among relevant stakeholders of the company. This process ranked third (3.72) in terms of level of implementation in construction organizations, implying that the process received some significant measure of attention within construction organizations in Hong Kong. Accountability is a major factor that can help to curb corrupt practices and raise ethical standards in construction organizations (Sohail and Cavill 2008). Contrary to the

findings in this study, Nijhof et al. (2003) found that the process of accountability received the least attention in the case-organization in the attempt to implement codes of ethics. The framework illustrates the enablers for accountability in code implementation including: establishment of open communication platform to recognize the stakeholders' voices, ensuring that sub-contractors and suppliers subscribe to the code, engaging employees in critical self-evaluation so that they can be held accountable for their ethical misconduct. All the enablers contribute significantly to the process of accountability and the process itself significantly influences ethical code implementation.

8.2.3.5 Process of internalization

This is an essential aspect of the code implementation process which aims at acquiring clear meaning of ethical codes and encouraging people to behave ethically within the organization. The result in Table 6 shows that the process of internalization ranked fourth (3.64) with regards to implementation level in construction organizations. Nijhof et al. (2003), in contrast, found that the process of internalization received the greatest attention in the case-organization as it ranked first among the six processes of code implementation. Despite the adoption of codes of ethics in most of the construction organizations in Hong Kong, Ho et al. (2004) and Ho (2013) argue that reports of unethical behaviour seem to be increasing. This implies that codes of ethics have not been effectively internalized within construction organizations in Hong Kong despite the significant level of adoption among construction companies. One of the reasons for the unabated ethical misconduct could be the lack of proper internalization of codes of ethics. For instance, ethics training is a proven enabler for code internalization as affirmed by Beeri et al. (2013). Internalization of ethical codes can also be achieved by proper communication of codes with employees which is lacking within Hong Kong construction organizations according to Ho (2013). This is an area requiring

more attention in order to achieve successful implementation of codes of ethics within construction companies.

8.2.3.6 Process of monitoring

This process helps to determine whether behaviour within a company meshes with the established codes. The process is very important to code implementation, as confirmed by Suen et al. (2007), which identifies "monitoring" as one of the structural mechanisms for managing ethics in construction organizations. Unfortunately, this process ranked fifth (3.58) in terms of level of implementation. This result is consistent with previous result reported by Nijhof et al. (2003). Nevertheless, it is important for organization to set up a mechanism for monitoring the process of integration via a responsible approach such as setting up an ethics committee to keep under surveillance and to ensure compliance of the organization with ethical standard. Murphy (1988) describes the process of implementing business ethics in an organization from two perspectives of informal and formal organizations and notes that the use of ethics committee is one the key factors ensuring adequate code implementation.

8.2.3.7 Process of enacting values

This is an integral process of code implementation involving the alignment of behaviour with the ethical code standard for further internalization. The process ranked sixth (3.57) in terms of the extent of implementation in construction organizations which contrast with Nijhof et al.'s (2003) in which the same process ranked fourth. This implies that, although the process receives less attention, it is very relevant to ethical codes implementation within organizations. Brimmer (2007) emphasizes that the best organizations in the present modern world will embrace the institutionalization of ethical values to shape its future. To ensure value enactment, certain indicators must be considered such as the use of ethics ombudsman (Mathenge, 2012). For efficiency and effectiveness, it essential that anyone selected as ombudsman must have a better understanding and appreciation of the values of the

organization. Another way of making values explicit within the organization is by creating a forum whereby ethical dilemmas can be discussed in line with the values embraced by the organization. Brimmer (2007) opines that leaders in organizations must constantly observe the values of their companies.

8.2.4 RADAR analysis and results of organizational enablers

For better understanding, the extent of ethical codes implementation through the instrumentation of organization enablers is presented using RADAR analysis as shown in Figure 8.3. The result shows the analysis of the current situation regarding ethical codes implementation within construction organizations in Hong Kong. The result revealed that "leadership" enabler scored highest (63) with respect to ethical codes implementation within construction organizations in Hong Kong. This is in agreement with the previous study by Nijhof et al. (2003) which ranked 'leadership enabler' first in the process of implementing codes of conducts. This implies that leaders of construction companies in Hong Kong support ethical development in their respective organizations. When senior management elicit support for ethical organization, implementation of codes of ethics becomes affordable (Lloyd and Mey, 2010).

The second highest score is "People/employees" enabler (50). The importance of employees cannot be undermined in the process of integrating ethical codes within an organization because the major essence of the codes is to influence employees' behaviour (Stevens, 2008). The third ranked enabler is 'Partnership and resources' (score = 46) indicating the extent to which construction companies exercise partnership as well as providing necessary resources towards achieving ethical organization. The two least significant enablers 'Policy and strategy' and 'Primary process' have the same score (38) which is an indication that they receive less attention in the process of implementing ethical codes. Thus, some of the unethical practices being witnessed in construction organizations could result from low level

of ethics policy implementation and lack of basic strategy to enhance the process of implementing ethical codes.

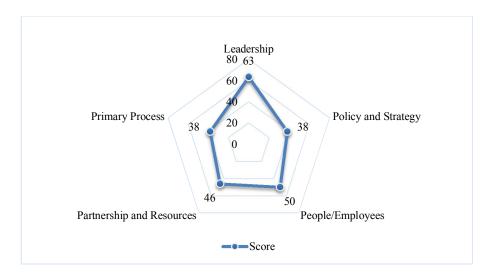


Figure 8.3: Organizational enablers for ethical codes implementation

Following the discussion of the findings from the quantitative analysis, it is important to extend the scope of enquiry by conducting qualitative interviews in order to corroborate the findings from the quantitative approach. Thus the next section reports the results from the interviews.

8.3 Findings from the interviews

The findings from the interviews conducted with employees from different construction companies in Hong Kong are discussed in this section. The guiding principle in conducting the interviews was to get the interviewees discuss salient points about implementation of codes of ethics. Interview questions for data collection were organized around six processes containing thirty items in the PAAM model, in line with questionnaire 3. However, some of the items though important, are closely related, hence the questions sound repetitive and seemingly too many. Therefore, analysis of early interviews was done to shape the systematic questions for gathering transcript data, following an approach used by Rossman and Wilson

(1994). Some of the compressed questions raised during the interview can be found in Appendix 6 and other questions were asked as deemed necessary as the interview progressed.

Prior to asking questions related to this research, the interviewees were briefed about the aim of the research and the purpose of the interview. The definition of ethical codes implementation was explained to ascertain adequate understanding and interpretation of the terms by the interviewees. After data collection and transcription were completed, decontextualized approach was adopted for the data analysis as described earlier. This was achieved by integrating "within-case and across-case analytic strategies" of qualitative data analysis (Ayres et al., 2003 p. 873). This approach was preferred due to existing pattern of ethical codes implementation processes and prior quantitative research, making the interview an elaboration of the existing findings. In this research, the first analytic task was the researcher's familiarization with the data collected by reviewing each transcript from individual respondents. This task was considered necessary to garner a feeling of contextual agreements among all participants (Kavanaugh, 1997). Then, each respondent's statement was scrutinized to identify significant accounts, including phrases, sentences, or sections that related directly to implementation of codes of ethics or ethics management in construction.

The outcome of this analytic activities resulted into a collection of significant assertions for all the transcripts in line with the results of quantitative analysis. These significant statements were then compared with the accounts of all the participants, with particular attention on the commonalities across transcripts. The essence of this across-case approach was to compare the experience of all respondents and identify significant statements common to all. Thereafter, common categories identified were linked to their original context for the purpose of validation. Using free writing style (Kavanaugh, 1997), the findings were consolidated and made explicit as presented in the following paragraphs.

Most of the identified factors and processes were mentioned and recognized by the interviewees. The common practice among organizations in Hong Kong is to give copies of written codes to employees when they sign an employment contract with their companies. The interviewees revealed that most construction companies have similar codes of ethics in terms of content, confirming the findings of Snell et al. (1999) which reveal that the contents of ethical codes of most organizations in Hong Kong are similar. Additionally, the content of the code of ethics is regarded as 'common sense' by the employees. This is due to impossibility of codifying every single issue related to ethical codes which has reduced the content of the codes to some sorts of general rule. However, employees regard general rules as common sense as noted by Pater and Van Gils (2003).

Again, as confirmed by the interviewees, although leaders in construction organizations seldom refer to codes of ethics verbally, they seem to understand the essence of ethical behaviour and the consequence of unethical practice, as such, they usually behave in an ethical manner worthy of emulation by other employees. This confirms the reason why the process of 'coding' ranked highest as explained previously as well as the process of identifying and removing barriers (IRB) which ranked second. It also affirms the reason for the 'leadership' enabler scoring highest in the previous RADAR analysis which is in agreement with the findings by Nijhof et al. (2003). However, as one manager interviewed put it: 'generally, in construction settings, it is difficult to depend on managers as role model'. This is because everybody is occupied with business and individual employee is trusted to use common sense to decide what to do regarding ethical issues. Employees only consult their superiors when the decision has to do with company's resources. Ho et al. (2004) also found that senior managers in construction organizations in Hong Kong left the implementation of codes of ethics to individual employees. In essence, there is no forum to discuss ethical dilemmas; instead, employees are expected to use common sense to judge any

situation.

When asked about any strategies to ensure that employees behave in accordance with codes of ethics within the organization apart from leaders' role modelling, it was revealed that individual companies have different ways of handling ethical issues. Most of the interviewees revealed that, ethical standards are relatively high within construction organizations in Hong Kong when compared with the general view of unethical practice in construction industry across nations (confirming the initial findings about overall assessment of codes implementation). However, this finding is contrary to previous findings by Ho (2010), which indicate that construction companies in Hong Kong still possess unsatisfactory ethical standards with regards to ethical codes implementation. Thus, this is a positive pointer to improvement in ethical code implementation within construction organizations in Hong Kong.

The interviewees agreed that employees basically apply 'common sense' to address any ethical issues arising as such issues are rarely discussed in their organizations. However, the accuracy of the application of the so called 'common sense' is rarely checked, signifying deficiency in processes of 'monitoring' and 'enacting values' as revealed earlier. The interviewees believe that ethics training is very important to enhance ethical behaviours of organization's members, but the training about ethics depends on the size of the organization. Specifically, a director interviewed observed that 'each construction project is unique and involved relating with new people in a new environment sometimes, therefore, employees should be kept abreast of ethical requirement by means of ethics information or training'. Some companies organize a yearly training course for employees, which is all encompassing, and not related to ethics in particular. Similarly, Ho et al. (2004), assert that companies rarely engage employees in ethics training unlike safety training.

Concerning mechanisms for reporting ethical misconduct within construction organizations, the interviewees stated that unethical behaviours are not usually reported; rather, the person involved will be called to order by referring to codes of ethics or any other relevant company policies. Among the reasons emphasized is that, most employees working in the same section or project usually have intimate relationships which makes it difficult for them to report one another. Another reason given by one interviewee was that, management seldom act on ethical misconduct reported by any employees and the reporter is unsure of anonymity of such report. This could explain the high score ascribed to 'people/employees' enabler in previous analytical results. Also, the interviewees mentioned the lack of mechanism to protect whistle-blowers which bring about fear of retaliation. All these have hindered adequate reporting of unethical practices within construction organizations.

However, if the case is serious, the person involved may be reported to an immediate supervisor or directly to the Managing Director. Alternatively, the case may be reported to the Independent Commission Against Corruption (ICAC), especially if the misconduct is a grievous one or when a senior official is involved. It is the prerogative of the company management to decide on the punishment to compensate for the wrongdoing by employees, which could literally be a warning letter, non-payment of due allowance or outright firing as indicated by the interviewees. However, the interviewees believed that it is difficult to sanction frontline workers in Hong Kong especially in construction companies because there is shortage of workforce in Hong Kong, so it is risky to inflict punishment on the workers such as carpenters and concreters. When a gang is disrupted due to sanctioning, it will affect the flow of the work because it is difficult to hire these workers, one interview said. This is contrary to the existing literature (Spielthenner, 2015; Stevens, 2008) which hold that codes of ethics cannot be effective without appropriate sanction or punishment impositions on code violators.

Another way of enabling integration of ethical codes is by rewarding employees who comply with the ethical standards of the company (Tow and Loosemore, 2009). Unfortunately, ethical compliance is strictly considered as an obligation for employees and, therefore, it does not attract any significant reward in the context of construction organizations as stated by the interviewees. It appears that the system of rewarding ethical compliance is not prominent in the construction companies in Hong Kong as only two of the interviewees indicated that their companies do reward ethical performance by giving a recognition award or cash coupon or by arranging special lunch to celebrate the employee. The interviewees argued that employees will naturally comply with ethical standard of their organization when serious punishment is attached to non-compliance than when compliance is rewarded. This accords with the findings of MacLean et al. (2014) which suggest that reward and punishment should go hand in hand. Similarly, Spielthenner (2015) opines that imposition of sanction or punishment against noncompliance by code is the best strategy to sustain the effectiveness of ethical codes.

Considering the relationship of contracting organizations with subcontractors and suppliers as stakeholders, it was gathered that the main contractors do bear the responsibility of any unethical behaviour of these stakeholders once the project has begun. The company may decide not to use either the subcontractor or supplier in the next project, but it is difficult to sanction them based on unethical behaviour during an on-going project due to time constraint to complete a project. Most clients in Hong Kong focus on the return on their investment notwithstanding how the contractors get the work done in terms of ethical relationship. They rather focus on the timely delivery and quality of the project. Even though companies like to improve the ethical behaviour of their employees and other stakeholders, the time frame to complete a project is a barrier.

The interviewees gave a general overview regarding ethical codes implementation in construction organizations by stating that ethical standard within construction needs to be improved upon and government should set out some policies to assist construction organizations to achieve effective implementation of ethical codes. This coheres to some extent with the initial finding in which 'policy and strategy' enabler ranked lowest and is requiring more attention. As one of the interviewees put it, "generally, implementation of ethical policies may be a bit difficult in the present situation in Hong Kong because private investors are dominating the building construction market and government can majorly influence the projects under their control". However, government can start implementation of ethical policies taking a lead from public projects as revealed by one of the interviewees.

The interviewees further suggested that ethics education should be improved at the undergraduate level, which will prepare the future graduates for any ethical challenges in the industry. Including ethics in the field of construction education by formally implementing business ethics course in university curriculum in compliance with international standards and with core values to prepare young and potential professionals to be open minded, ethical and ready to work in the construction industry, is a formidable way of embedding ethics. It was revealed that, awareness of the graduates on relevant ethical issues helps in preparing them to join the workforce with ready minds to observe all kinds of practices and behave ethically. For instance, reference can be made to a situation where ethical standards were maintained which resulted in better organizational performance and improved image with company's stakeholders as well as where ethics were violated which was followed by appropriate sanctions. This can be complemented by encouraging students to attend professional seminars and reading reports about the several cases which address real life ethical issues. This is in accordance with the recommendation by CIRC (2001) with respect to improving ethical standard of construction industry in Hong Kong.

8.4 Summary of the chapter

Using a multisource cross-sectional survey of 53 participants, this chapter, in line with the earlier validated model, presented the results of FSE approach which measured the extent of ethical codes implementation within construction organizations in Hong Kong. The results showed that the FSE approach is suitable for the measurement purpose, providing support for the application of PAAM model. The six processes are believed to accurately represent the key processes of integrating codes of ethics into the web of construction organizations and are capable of facilitating ethical behaviour if properly implemented. The findings revealed that construction companies seem to have embraced the process of coding, identification and removal of barriers and accountability as they ranked on top (Table 8.3) but, there is a limited attention on the other processes in respect to ethical code implementation, thus, they require more attention. The overall level of code implementation in construction organizations is considered relatively high but requires further improvement. The results presented in this chapter signify intersubjective analysis of general performance of construction organizations in Hong Kong. Hence, the next chapter examines the practicality and implementation of the model (in a more subjective manner) using a construction organization as case study.

CHAPTER 9 PRACTICAL IMPLEMENTATION OF THE PAAM MODEL USING A CASE STUDY

9.1 Introduction

The self-assessment results presented in Chapter 8 represent general assessment of construction organizations in Hong Kong based on intersubjective views of the respondents from different construction organizations. In order to verify the practical implementation of the PAAM model and its suitability for subjective self-assessment in a particular organization, the model was further applied in one of the leading construction organizations in Hong Kong. The choice of the case organization was guided by the assumptions identified earlier in this thesis. In this chapter, the results and discussion of document analysis, semi-structured interview and quantitative self-assessment were presented. The quantitative self-assessment approach was supplemented by semi-structured qualitative interview as suggested by Small (2011). The details of FSE analysis to arrive at the ranking of the implementation processes were not presented in this chapter to avoid duplication. The use of mixed method approach provides in-depth insight into the practices obtainable within the subject organization and the results were cross-referenced against past studies wherever appropriate.

9.2 Analysis of ethical codes of the case study organization

The case organization (hereinafter refers to as HKCSO for anonymity purpose) is one of the leading construction companies in Asia region, with its headquarters in Hong Kong. This organization was chosen for case study because of its distinct significance in the construction industry of Hong Kong. In order to garner deeper understanding about the company's ethics practice, a discourse analysis of HKCSO's codes of ethics was presented. The code is bilingual i.e. written in both English and Chinese language. The mantra that describes HKCSO's ethical believe as contained in the codes of ethics reads: "There is never a good

business reason for doing the wrong thing". Also, ethics and integrity are the core business principle of the company as stated in the code. Certain business principles underpin consistence of the organization's performance with the values indicated in the company's code. Intention to always act responsibly beyond the normal requirement of law is explicitly stated for stakeholders to emulate and challenge. It was gathered from one of the company's directors that the code was recently updated in 2014 to incorporate some necessary changes, one of which is the UK Bribery Act 2010.

In brief, a review of the company's code suggests that it's inclined towards value-based and rule-based/compliance-based. The code initially distinguished a set of three core values being guided by a set of four business principles. In addition to this, there are provisions for guiding employees towards compliance with the company's expected behaviour. Although the code is judged to be concise and specific, its content is more of compliance/rule oriented than value-based. This differs from the two dimensions (combinations) of code content by Robin et al. (1989) viz: (1) rule-based and specific (2) value-based and broad. The study (Robin et al., 1989) suggests that codes should be specific and value-based rather than broad and rule-based in order to have significant positive influence on employees' behaviours. It has been observed that the orientation of most companies' codes are compliance or rule based (Weaver et al., 1999a), however, value-based approach has a tendency to produce better results than compliance/rule based approach (Trevino et al., 1999). Another section of the company's code emphasizes on compliance with all laws which makes the code to reflect a form of legally binding tool. This according to Weaver (1993) could make people treat the code as a legal instrument and thereby pay less attention to it.

In HKCSO, it is the responsibility of the Board of Directors to develop and ensure proper implementation of the code. This contrasts with Schwartz (2004) which asserts that

employees are more committed to ethical code compliance if they were involved in the development of the code. A portion in the codes of ethics explains in detail, how to make the codes of ethics an integral part of the company's daily routine by means of effective implementation. To achieve this, the company devised some mechanisms to ensure employees' ethicality within and outside the company's premises. First, in order to foster mutual respect, HKCSO maintains channels for open communication among its stakeholders. Second, as the needs arise, employees receive necessary training regarding the code. In doing this, the company ensures that the training is tailored to relevant and contemporary circumstances.

Third, as clearly stated in the codes of ethics, violations of ethical requirement in HKCSO may result into, depending on the severity of the breach, disciplinary action, termination of employment or prosecution. Fourth, the procedures for raising concerns and filing complaints by employees are well stated in the code, likewise the procedure for seeking guidance in case of ethical dilemma. Fifth, the company embraces total confidentiality as a means of protecting anyone who reports any act of breaching the code. Sixth, the Human Resources Director is saddled with the responsibility of communicating and monitoring the code, differing from the common practices of using ethics committee or ombudsman (Rampersad, 2006). Seventh, in order to maintain ethical balance that ensures compliance, the rights of the employees are clearly spelt out in the codes of conduct. From this perspective, it is obvious that HKCSO has taken some measures towards effective implementation of ethical codes. Hence, the company was considered suitable for practical implementation of the proposed model in this study.

9.3 Outcomes of the self-assessment in the case organization

In order to verify the practicality of the PAAM model, a self-assessment was carried out in the case organization. Members of the organization at the top management level who are actively involved in the implementation of codes of ethics and employees at the lower level were contacted for interview and assessment. The essence of the self-assessment was to exchange knowledge, and to appraise the use of the model for recognizing and classifying organization's strengths and weaknesses with respect to ethical codes implementation so that the company can focus on priority areas that may require further improvement. Using the same techniques applied in Chapter 8, the results of self-assessment in the subject organization are shown in Table 9.1 and Figure 9.1. The self-assessment revealed that, generally, some of the processes of ethical codes implementation are well attended to than others.

9.3.1 Process of coding within the case study organization

As depicted in Table 9.1, the process of coding appears to attract considerable attention within the organization. Indeed, the interviewees attested to the fact that most employees rarely study the code. In this organization, the process of coding begins with giving a copy of ethical codes to new employees. During the field studies, it was found that all the employees have a copy of the code each, with individual names printed on the copy for identification and to monitor even distribution. Beyond this, the company usually organize an orientation camp for new employees which normally lasts for three days, out of which, half a day is dedicated to ethics training and discussion. The management ensures that the codes are revised as at when due as explained in the previous section. The interviewees indicated that contemporary ethical issues that are related to construction are considered in the code. This was confirmed as contained in section 5.0 of the code. Employees' rights and desired

behaviour in case of harassment, discrimination, and intimidation are explicitly stated in the code.

Further, the company adopts an e-learning system to assess and appraise employees' ethical norms coupled with appraisal interview for new employees. In line with coding process, directors and managers in this organization try to translate desirable behaviour within the organization into general acceptable standard by showing examples to junior employees and other stakeholders. One of the interviewees (an executive director) was asked to explain how the company was able to attain such a high ethical standard as claimed by the organization, the director simply puts: 'we operate in an ethical environment and the leaders have no choice than to lead by example to instill ethical culture in the followers in order to comply with the ethical requirement of the general community'. Overall, the process of coding significantly contributed to the organization's achievement in relation to ethical codes implementation.

9.3.2 Process of IRB within the case study organization

Processes of IRB is very high in this organization. This means that the management paid good attention to the risks and barriers that may hinder effective implementation of codes of ethics within the organization. For instance, the interviewees claimed that the top management is committed to ethical code implementation which is the reason why codes of ethics is managed at the top management level and necessary financial demand is provided to ensure effectiveness of the code. Another source of barrier is the fear of retaliating whistleblowing. The company ensure anonymity of any employees who report any alleged wrongdoing within the organization. Such reports are handled by the human resources manager who is saddled with the responsibility of investigating the case without necessarily involving the reporter.

9.3.3 Process of internalization within the case study organization

The role of organization's leaders in ensuring code internalization is to engage in activities that will facilitate the employees to appropriate the code so as to stimulate their behaviours within the organization. The activities are included in the model proposed earlier in this study. It was gathered from the interviewees that the company practices some of these activities. For instance, the management of the case study organization provides an e-learning platform for the employees to receive ethics training periodically and to prepare the employees to comply with ethical standard of the company. Also, codes are communicated to the employees by distributing hardcopies, or by circulating ethical codes information via email, or by using vignettes to translate ethical messages around the work environment. For instance, the management occasionally do send e-mail to all employees to remind them of the company's ethical expectation while hardcopies of ethical instructions are provided for frontline workers. Members of this organization are empowered to make right decision using their common sense but there is clear procedure for asking questions about any difficult situation.

It was claimed that the organization's ethical codes reflect international standard because it embraces certain organizational requirements for standard practice. All these practices have contributed to the level at which codes of ethics was internalized in this organization. However, one of the interview opined that 'internalization of ethical codes can be reinforced if the company can address ethics in the same way safety is being addressed'. The respondent further stated that the company on a regular basis, do engage the employees in a brainstorming quiz regarding safety management and the performances are rewarded. This opinion corroborates findings by Ho et al. (2004), from a study that compares corporate ethics management and safety practice within construction organization in Hong Kong and

concludes that there is lack of formal and unified strategy for implementing ethical codes as it is in safety management.

9.3.4 Process of monitoring within the case study organization

As observed from the case study, it appears that the company does not pay much attention to monitoring of ethical codes implementation. The process ranked third (4.34) among the six processes (Table 9.1). A good practice of ensuring effective implementation of ethical codes is the setting up of ethics committee that will be responsible for monitoring ethics-related issues. Alas, this organization considered it unnecessary to have a separate committee to manage ethics rather, the bulk of ethics responsibility lies on the top management level with full engagement of human resource manager who may not have full concentration on monitoring ethical codes implementation. This corroborates the findings by Ho et al. (2004), and, surprisingly, the situation remains unchanged after a time lag of one decade. However, the company has installed effective hotline through which any act of employee's misconduct can be duly reported by a concerned party. The hotline is managed internally and all the shareholders have access to the complaints generated over a period of time. According to the interviewees, the shareholders have the right to demand further investigation on any issues that may harm the company's reputation.

Corruption has been identified as a key issue in construction industry. One window of corruption that is common to most construction organizations in Hong Kong is the practice of giving and receiving 'red pocket' called 'lai see'. While different companies have a way of ensuring that this practice does not induce their members to engage in any form of misconduct, the case organization has a maximum stipulated amount of \$HK 100.00, that each employee can collect as red pocket from external stakeholders, otherwise, it must be reported to the management who will then decide on what to do with such money.

Meanwhile, there is no clearly stated sanctions for breaching this rule of conduct. One executive director was asked to explain the reason for lack of explicit penalties for breach of the rule, the interviewee retorted that 'such incidence is treated based on its severity, on a case by case basis'. Generally, there is room for necessary improvement to elevate this process within the organization.

9.3.5 Process of enacting values within the case study organization

Process of enacting values entails conforming employees' behaviours to the core values embraced by the organization. Contrary to expectation, the process of enacting values seems to be underdeveloped as it ranked fifth (4.13) as shown in Table 9.1. In this company, the process begins by assessing individual values during recruitment and selection. According to the interviewees, new employees are expected to answer some questions with the intention to reveal what their personal values are. For instance, a person with smoking habit may not be selected to work in an environment where smoking is prohibited. Similarly, the interviewees attested to the fact that codes of ethics has been very helpful in addressing value conflicts. It was indicated that employees do not need to read the code repeatedly because the content is concise, precise and general, such that most employees are already accustomed with it.

Concerning motivation towards enhancing compliance, the interviewees indicated that the organization does not reward exceptional ethical behaviour or compliance with codes of ethics. The reason being that ethical behaviour is regarded as duty and obligation for all employees and anything short of that is not acceptable. However, one of the directors interviewed revealed that the company has the intention to reward any exceptionally convincing ethical behaviour or outstanding compliance with codes of ethics but the intention is not explicitly stated in the company's policy. To enable the employees get more advanced in organization's values, they need to be motivated by rewarding their outstanding

performance regarding ethical requirement of the company. Murphy (2011) makes it clear that understanding the influence of reward and incentive schemes is germane to preventing misconduct within an organization as employees like to practice what gets rewarded, and incline to comply with whatever will bring such reward. Murphy (2011) also posits that aligning incentive and reward system with employees' ethical performance will positively affect behaviour within the organization.

It was also discovered in this company that ethical dilemma is rarely discussed within the organization. Encouraging open discussion about ethical dilemma can enable value enactment in an organization because it has proven to be a responsible way to resolve ethical problems (Schwenke, 2007). When discussing ethical dilemmas, the weights assigned to certain values should guide the choice of organizational policies or activities that will advocate the common good and safeguard individual's interests and rights within the company. It is therefore advisable for the organization to desist from overlooking some critical issues pertaining to organizational ethics in order to enhance ethical values. In addition to non-discussion of ethical dilemma, the company does not have an independent ombudsman who can act as confidant for employees to report or discuss any ethical dilemma or misconduct. An ethics ombudsman will enable cohesion between the leadership ethical expectation and employees' behaviour by defining a separate role for the person who should act as an ethics officer. This is similar to safety officer that is common in most construction organizations.

9.3.6 Process of accountability within the case study organization

Based on the assessment of this organization, process of accountability ranked (4.13) the same with process of enacting value. Being the least ranked process, certain practices that relate to its associated enablers in the model were investigated from the interviewees. For

instance, it was gathered from one of the interviewees that the company annual reports usually include ethics related issues but the reports are only presented to the board of directors for ratification before forwarding to other stakeholders within the company based on the priorities of the areas that need attention. This implies that ethics-related report is not transparent enough since external auditors are not involved and external stakeholder may not have access to it, thus, it is difficult to judge the ethicality of the company based on the available report. According to Ferrell and Fraedrich (2014), the best way for maintaining credibility of a company is to be accountable by increasing its transparency. Nevertheless, the observed practice in this organization is similar to what is obtainable in most organizations as reported by LRN (2014) that majority (86%) of the companies assessed for ethical compliance report their ethical investigations directly to their boards.

Regarding employees' critical self-evaluation, the interviewees unanimously indicated that, with reference to organizational ethics, there is no specific self-evaluation for the employees, rather, direct supervisors are expected to give ethical reports about their subordinates when necessary. Concerning relating the ethical codes to suppliers and sub-contractors, findings revealed that a list of key points of the organization's codes of ethics are usually attached together with invitation to tender for the subcontractors or main suppliers in order to inform them of the ethical standard and expectation of the company. While the leaders are expected to maintain just culture that will enable other stakeholders to comply with ethical requirements, the common practice in the company is that, everyone is held accountable for their conducts and any subcontractors or suppliers who circumvent the ethical expectations will be put on 'no go list' which means that such subcontractor or supplier will not be invited in subsequent contracts. Garegnani et al. (2013) highlight the benefits of relating codes of ethics to other stakeholders including; improved relationships, establishment of trust climate and enhanced organization's reputation. About the establishment of open communication by

expressly indicating organization's intention to be approached for any ethics-related issues, it appears the company is effective in this area. Apart from the company's newsletter that serves as medium for updating the stakeholders about organizational activities and developments, the company's website include a platform by which concerned individuals can submit their queries and get feedback in their emails.

Table 9.1: Ranking of the code implementation processes (Case study)

| Processes | Implementation level | Linguistic | Ranking |
|-----------------|----------------------|------------|---------|
| Coding | 4.70 | Very high | 1 |
| IRB | 4.52 | Very high | 2 |
| Internalization | 4.52 | Very high | 2 |
| Monitoring | 4.34 | High | 4 |
| Enacting values | 4.13 | High | 5 |
| Accountability | 4.13 | High | 5 |
| Overall | 4.40 | High | - |

9.3.7 Performance of organizational enablers

Correspondingly, using RADAR analysis as depicted in Figure 9.1, the results of self-assessment showed that the processes of ethical codes implementation are better supported by some organizational enablers than others. For instance, leadership enabler is integrated more than other enablers (score = 71). This outcome is the same with what is obtainable in the general assessment of construction organizations in Hong Kong in which leadership has the highest score as discussed in the previous chapter. Thus, it implies that much attention is presently given to the exemplary role of leaders in construction organizations in Hong Kong, in the effort to stimulate responsible behaviour. This is in agreement with previous study by Oladinrin and Ho (2015e) which finds that 'leadership' is the most important enabler for codes of ethics implementation in construction organizations. As one of the interviewees noted; "role modeling is highly effective in this organization" which is one of the reasons why leadership enabler has the highest score. Other activities that contributed to the

performance of leadership enabler include; top management commitment to ethics, ethics training, value conflicts management, and transparent report concerning codes of ethics.

Primary processes (score = 67) and, policy and strategy (score = 67) enablers, both ranked second, contrary to the outcomes of the general assessment (Chapter 8) where these two enablers ranked least. This fundamentally reflects the flexibility and ability of the PAAM model to produce different results in different organizations based on the common practices. Besides, the high scores attributed to the enablers implied that the company pays good attention to the strategies and processes put in place to ensure effectiveness of the codes of ethics towards enhancement of employees' behaviours. The outcome was not far from expectation as the participants in the self-assessment and interviews revealed that integrity policy embraced by the company has helped in setting the standard for ethical behaviours within the organization. Also, from the researcher's point of view, the processes appeared to be well aligned with the code of ethics in this organization.

The enablers that received least attentions based on the self-assessment results in this organization are partnership and resources, and people/employees. Compare with general assessment of construction organizations in Hong Kong as discussed earlier, people/employees ranked second, while partnership and resources ranked third based on the scores accorded to them. Findings from previous study by Oladinrin and Ho (2015c) reveal that people/employees is the third most important enabler while partnership and resources is the least important enabler. Notwithstanding, the results of the analysis in the current study reflect the points for improvement in the subject organization. The company needs to focus more on these areas in order to raise the bar for its ethical standard.

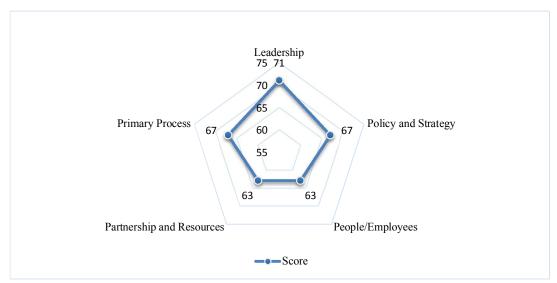


Figure 9.1: Enablers for ethical codes implementation in the case organization

9.4 Summary of the chapter

Research findings from a selected case study has been reported in this chapter. The findings further supplement the achievement of objective 4 which focuses on measuring the implementation of codes of ethics within construction organizations in Hong Kong. Document analysis, qualitative interview and quantitative results of self-assessment were presented. Based on the examination of the company's codes of ethics, it was established that the organization is suitable for self-evaluation using the proposed model in this study. From the results of self-assessment, process of coding was ranked first while processes of enacting values and accountability both ranked lowest. Also, leadership enabler scored highest among the organizational enablers and the interviewees appeared to be attributing the company's ethical achievements to organizational leaders. Partnership and resources as well as people/employees enablers both have the least scores which implies that these two organizational areas require more attention within the organization.

CHAPTER 10 CONCLUSIONS AND RECOMMENDATIONS

10.1 Introduction

This chapter summarizes the research study and the findings. The objectives of the study are firstly reintroduced; the key findings from the research are recapitulated; and recommendations on how to enhance ethical codes implementation to improve on ethical behaviour within construction organizations are provided. Prior to presentation of research limitations and suggestions for future research, contribution of the research to body of knowledge, both theoretical and practical implication are presented.

10.2 Research objectives reintroduced

As indicated throughout this thesis, corporate ethical codes have been widely accepted as management instrument for moderating people's behaviour within an organization. The evergrowing demands for a reputable construction organizations require a dynamic approach to create a formidable professional environment. The expectation of this kind of environment can be met by strict compliance with corporate codes of ethics. Most of the unethical conducts that are common in organizations nowadays (conflicts, bribery, discrimination, nepotism, etc.) are caused by a lack of embedding ethical codes within the organization activities due to too much focus on profit-making, insufficient ethics education and a lack of commitment to the codes. Although efforts have been made to implement codes of ethics in construction organizations, corporate management of some companies adopted a lax approach to implement their corporate ethical codes. Hence, there appears the need to develop a formal approach to assess implementation of ethical codes. Therefore, the main aim of this study is to: develop an approach for implementing and assessing corporate codes of ethics in the Hong Kong construction companies towards nurturing a professional workforce.

Four objectives were set out to achieve the aim as follows:

- 1. to identify and assess factors hindering effective code implementation in construction organizations;
- 2. to identify and assess factors enabling proper implementation of codes of ethics towards effective impact of codes on employees' ethical behaviour;
- 3. to develop and establish a Process Approach Assessment Method (PAAM) that will provide a strong impetus towards the implementation of corporate codes of ethics within organizational processes and routines; and
- 4. to measure the implementation of the ethical codes within construction companies using the PAAM model.

10.3 Research conclusions

In this research, all the objectives have been achieved by employing mixed research methods including; comprehensive literature review, questionnaire surveys, qualitative interviews and a case study. Findings form the study are summarized in the following categories.

10.3.1 Factors hindering effective implementation of ethical codes

Codes of ethics play a great role in influencing and modifying behaviours of employees within an organization. However, the practice of ethics management by way of implementing ethical codes is being challenged by several factors. As indicated earlier, one of the objectives of this study was carried out to identify and prioritize barriers to effective implementation of codes of ethics. A list of twenty two barriers were identified from the literature. The findings indicate that 'too much focus on profit making' was perceived by the respondents as the highest ranked barriers to code implementation, followed by 'insufficient ethics education' of construction employees; while 'code contents not clear enough', was ranked least. It can be

concluded that code contents are not the main issues constituting barriers to code implementation in construction organizations. The result of factor analysis grouped the barriers into three major factors that are responsible for difficulties in code implementation including; 'managerial and organizational barriers', 'planning and monitoring barriers' and 'value and interest barriers'. It is conceived that most of these barriers have not only impaired the image of construction organization but have also affected the implementation of ethical codes over the years. Inadequate planning and monitoring of ethical codes, such as inconsistent communication of the codes, poor control measures and ineffective application of rewards are detrimental to ethical codes implementation within construction companies. The results suggest that while many construction organizations desire the potential gain inherent in ethical practice, the required actions that will bring positive ethical changes seem to be resisted.

10.3.2 Enabling factors for implementation of codes of ethics

As reported in Chapter 6, a list of 30 enabling factors for ethical codes implementation were identified through a comprehensive literature review. The findings reveal that all the enabling factors are important for effective implementation of codes of ethics in construction organization as indicated by the respondents. Notably, certain factors were ranked highly important by the respondents including; (1) protecting anyone who exposes alleged wrongdoing; (2) managers acting as role models; (3) commitment of managing director to ethics. However, at variant degree though, it was found that all the factors are relevant and important to codes of ethics implementation within construction organizations in Hong Kong. Therefore, the results imply that all the factors can fit into the model for assessing ethical codes implementation.

10.3.3 Establishment of ethical codes implementation model

Having judged the 30 factors (as described in Chapter 6) as necessary inclusions in the PAAM model for assessing ethical codes implementation, the model was empirically validated. The main body of the model includes six processes of ethical code implementation (i.e. Identification and Removing Barriers IRB, Coding, Internalization, Enacting value, Monitoring, Accountability) with 5 enablers (i.e. Leadership, Policy and Strategy, Employees/People, Partnership and Resources, Primary Process) associated with each of the six processes. The results of the analysis show that the model has an excellent predictive power and a very reliable model representation. Although the impact exacted by the processes of *coding* and *monitoring* on *ethical code implementation* is not significant, all the six processes have a positive relationship with *ethical code implementation*. Thus, all the six predetermined processes can positively support ethical codes implementation towards enhancement of ethical behaviour within construction organizations. It can be deduced from the findings that traditionally fragmented processes of ethical codes implementation can be unified for effective implementation of ethical codes.

10.3.4 Measuring the implementation of codes of ethics

A finalized PAAM model for assessing ethical codes implementation has been statistically validated (Chapter 7). A fuzzy synthetic evaluation approach was employed for measuring the extent of ethical codes implementation within construction organizations in Hong Kong. The results showed that the fuzzy approach is suitable for the measurement purpose with a support for the PAAM model because it allows for subjective and objective assessments of ethical codes implementation. The six processes can concisely represent the key processes of embedding codes of ethics into the web of construction organizations and are capable of facilitating ethical behaviour if properly implemented. The findings revealed that construction companies seem to have embraced the processes of *coding*, *identification and*

removal of barriers and accountability as they ranked on top (Table 8.3). The process of enacting values was ranked least (Table 8.3) but it has the highest significant path coefficient (refer to Table 7.4). The process of coding which ranked highest was not significant in the model. Therefore, it can be affirmed that most construction organizations pay more attention to the less significant process but less attention to the most significant process in respect to ethical code implementation. The overall level of code implementation in construction organizations is considered relatively high but requires further improvement. This required improvement can be achieved by balancing the attention of the management on all the established processes.

10.4 Recommendations

Various barriers and enabling factors of ethical codes implementation have been identified in this study. It is imperative to elicit what construction practitioners and policy makers could do to ensure improved ethical standards within construction organizations. To enhance implementation of codes of ethics in order to improve ethical behaviour within construction organizations, some recommendations emanated from this study are presented as follows.

10.4.1 Addressing the barriers to ethical codes implementation

Having discussed the barriers to ethical codes implementation, some solutions are proposed. Giving consideration to ethics while planning for profit maximization will not only aid commitment to codes but also create better awareness to the employees about ethical stand of the company.

More emphasis should be placed on introduction of ethics into construction management education curriculum especially at first degree level by policy makers. Considering the findings from the interviews, it appears that management of construction organizations are not so keen about making employees behave in accordance with ethical standards. Thus, an

alternative way of enhancing ethical behaviour of construction workers is by making ethics a compulsory course in construction management education especially at the higher educational level. This will provide a cushion effect for ethical negligence of construction companies, and, in addition to ethics training, will help to alleviate the level of ignorance about ethics in construction organizations.

Effective planning and monitoring of ethical codes can address some of the barriers such as inconsistent communication of code, poor control measures and ineffective application of rewards. By paying more attention to these barriers, concern for ethics can become more integrated in construction organizational culture in ways that are inimitable.

10.4.2 Effective implementation of ethical codes for improved ethical standard

After reasoning for the need for a comprehensive framework for code implementation, a model for assessing effective implementation of codes of ethics is established in this study which can be applied in organizations. The following solutions are offered for effective code implementation.

To ensure ethical standards, the PAAM model should be used for regular feedback on the implementation of codes of ethics within an organization. This will provide an assurance to the organizational management about whether the company is living up to its stated ethical standard or not.

Through the process of enacting values, organizational management should make their ethical values more explicit by distinguishing between corporate ethical values and performance values and then make sure that employees must allow ethical values to prevail when there is conflict between the two values.

As suggested by the interviewees, a corporate training program in construction organizations does not always include ethical issues, hence, inclusion of ethical issues is recommended if construction companies cannot organize separate ethics training.

Setting up ethics committee to monitor codes of ethics effectiveness or appointment of ethics ombudsman who will be responsible for code implementation and proper ethics report, is highly suggested as good ethics practice recognizes these procedures.

Contradictions against these recommendations may arise to deny and refute the veracity of the model but deliberate action must be taken by considering the approach in the pursuit of ethical standard in construction organizations. Introduction of various compliance programs (related to legal actions) to prevent unethical behaviour is crucial items in the codes of ethics. For instance, following the approval of Anti-Bribery Act in many countries including; Italy, United States and United Kingdom, any organization with clear evidence of codes of ethics implementation may receive pardon for sanctions or lesser fines for misconduct (Singh, 2011). This can also be applicable to construction organizations in Hong Kong and the model can be used as a scoring tool to provide evidence of compliance.

10.5 Contributions of the research to knowledge

The aim of this study is to develop an approach for implementing and assessing corporate codes of ethics in the Hong Kong construction companies towards an enhanced ethical behaviour. This is in line with past studies (Ho, 2010; 2013) that advocate for a formal approach for corporate ethical codes implementation within construction organizations. The achievement of the research aim has contributed to the body of knowledge as follows.

10.5.1 Contribution to theory

This study has made valuable contributions to the theory by bridging the identified literature gap. The empirical findings identified three main factors that hinder the implementation of

ethical codes. The scope of the study, with its proposed approach, recognizes the complexities of ethical codes implementation for academics and therefore provides a new basis for the study of ethical codes implementation. Also, further theory development is required in the concept of assessment of codes of ethics implementation within construction organizations, which the current study has taken a step forward to achieve.

10.5.2 Implications for Practice

Demand for corporate codes of ethics is on the increase as response to corporate scandal among organizations. This study contributes to existing knowledge in this research direction by identifying barriers to ethical code implementation for practitioners to plan ahead in order to minimize potential consequences. The outcome of the study is significant since it highlights obstacles related to management and organization, planning and monitoring as well as value and interest within the construction domain. The study should therefore attract the attention of construction organizations to give special consideration to these factors in order to establish an action based strategy capable of providing value added solutions.

The findings and the model developed in this study are of managerial interest because the model presented a grounded framework that reveals the areas that need careful consideration to ensure effective ethical codes implementation, which can be used in the assessment and improvement of company's engagement with ethics. The model can also enable practitioners to device an appropriate deliberate intent to focus on strategic governance of their organizations.

10.6 Research limitations

Some of the limitations encountered in this research is related to the sensitivity of the subject of ethics. First, there is a general lack of consensus, consistency and pragmatism about the approach to code implementation due to the dearth of research in current literature of

construction management, hence, there was overdependence on literature from other disciplines. Second, it was hard to access respondents who are willing to freely participate in the study hence, limited sample size was used for the achievement of objective 1. However, in spite of the small sample size, the findings offer valuable insights. Third, the relatively small sample size of 53 organizations for the self-assessment questionnaire used for measuring the extent of implementation could be improved upon. Nevertheless, it is above the sample size used in some top-tier organizational study of between 30 and 32 entities (Eisenbeiss et al., 2014; Van Knippenberg et al., 2011) and the FSE applied indicated firmness of the results. Fourth, it was pretty difficult to select the suitable participants to access individual organization and only one participant responded to the self-assessment questionnaire, hence, the ability of the contact person was solely relied upon regarding wise choice of appropriate participants who eventually provided the ratings for the study variables.

10.7 Suggestions for further research

The positive conclusions attained in this research do not mean that the study is absolutely conclusive. Indeed, findings from this research reveal that there is an urgent need to improve the following areas. Considering a relatively small sample size used in this study, further research can be conducted by using a larger sample size comprising large pool of data from various construction organizations. Also, future research should consider different methods of data collection such as focus group meetings because this method was not feasible at the time of collecting data for this study due to time constraint and other difficulties. Although this research study was conducted in Hong Kong, the methods used can be replicated in other countries of similar nature and the findings can as well be extrapolated because of some generic terms which are likely to be applicable elsewhere. The replication will allow international comparison as well as benchmarking by comparing the level of implementation of codes of ethics across different countries. Thus, examination of the engagement of

construction organizations with ethics in other countries, is highly recommended. Furthermore, the model may stimulate interested researchers to modify and extend beyond the processes, and their associated elements as detailed in this research.

APPENDICES

APPENDIX 1: SAMPLE OF INVITATION LETTER TO PARTICIPATE IN SELF-ASSESSMENT SURVEY





Date,

Receiver's Address.

Dear Sir/Madam,

Implementation of corporate codes of ethics within construction organizations in Hong Kong - Self-report questionnaire

I am a PhD student at Department of Building and Real Estate of the Hong Kong Polytechnic University. Currently, I am undertaking research on implementation of codes of ethics in the Hong Kong construction companies. I hereby solicit for your participation in this research by kindly fill the attached self-report questionnaire. It comprises of six 'processes of responsibilization' indicating processes that organizations are expected to adhere to in order to embed codes of ethics in their daily practices. Each of these processes separately contributes considerably to stimulating responsible behaviour.

This self-report questionnaire aims at collecting information regarding the extent to which ethics in general are managed, and codes of ethics in particular are integrated in the entire operational management of your organization. The data from this questionnaire will help in analysing:

- To what extent has the organization taken action to fill in the various processes?
- ➤ Which activities deserve priority to further stimulate the implementation of codes of ethics? Participants' response is anonymous and will be treated with strict confidence and used solely for academic purposes without associating any feedback to the participants or their organizations.

Please, kindly return this questionnaire to me by email on or before April 30th 2015.

Thank you for your time and co-operation.

Oladinrin Timothy, Email: timothy.oladinrin@

Dr. Christabel Ho (Chief supervisor),

Prof. CHIANG Yat Hung (Co-supervisor),

Dr. Ng Vincent (Co-supervisor).

| APPENDIX 2: SAI | MPLE OF INVIT | TATION LETTE | ER FOR INTERVIE | W |
|-----------------|---------------|--------------|-----------------|---|
| | | | | |





Dear Sir,

Interview for Research on Implementation of Corporate Codes of Ethics within the Construction Organizations in Hong Kong

Thank you for choosing to participate in this research.

I am a PhD student at Department of Building and Real Estate of the Hong Kong Polytechnic University. Currently, I am undertaking research on implementation of codes of ethics in the Hong Kong construction companies. The aim of this research is to assess the strategy for code implementation within construction organizations and the steps required to improve it. This interview seeks to draw on the views of construction professionals within the Construction companies in Hong Kong. The research findings will be impactful in the hands of construction practitioners and academics regarding codes of ethics.

The interview seeks to gather information on ethics management in your organization, which forms an aspect of an on-going PhD research on the above topic at The Hong Kong Polytechnic University. The interview will take approximately 30 minutes to complete. Your response will be anonymous and will be treated with strict confidence and used solely for academic purposes without associating any feedback to your organization.

Thank you for your time and co-operation.

Oladinrin Timothy, PhD student,

Email: timothy.oladinrin@

Dr. Christabel Ho (Chief supervisor), The Hong Kong Polytechnic University.

APPENDIX 3: SAMPLE OF QUESTIONNAIRE 1 FACTORS HINDERING IMPLEMENTATION OF CODES OF ETHICS

Definition of term

Codes of ethics are documents which state the major behavioural principles and articulate the values embraced by an organization (Stevens, 2009).

| Section A: Background information | | | |
|---|---|--------------------------|--|
| | | | |
| 1. Professional background: Engineer□; Architec | t□; Quantity Su | ırveyor□; Builder □; | |
| Other (Please specify) Click here to enter text. | | | |
| 2. Sector category: Practitioner □; Academic □ | 2. Sector category: Practitioner □; Academic □; Management staff □; | | |
| Other (Please specify) Click here to enter text. | | | |
| 3. Years of experience: 0-5 □; | 6-10 □; | 11 and above □ | |
| 4. Have you worked for/with construction organization? Yes□; No□, if yes, answe | | | |
| question 5. | | | |
| 5. Does the organization have a written code of et | hics? Yes□; | No□ | |
| In any case, please proceed to section B | | | |
| | | | |
| Section B: Factors hindering codes of ethiorganizations | cs implementa | tion within construction | |

Question 1: Factors hindering effective codes implementation in construction organization

This section consists of the factors hindering effective codes of ethics implementation in construction organization.

Please indicate your **level of agreement** with the factors based on the following scale:

1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree

| No. | Factors militating against codes of ethics implementation | Level of agreement |
|-----|---|--|
| 1 | Complexity of construction process | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 2 | Employees' ignorance about ethics | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 3 | Insufficient ethics education | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 4 | Lack of exemplary leadership | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 5 | Lack of commitment to written codes | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 6 | Partiality in administering code of ethics | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 7 | Copies of the codes not available to staff | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 8 | Code contents are not clear enough | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 9 | Organizational culture does not encourage good behaviour | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 10 | Selfish interest for adopting code | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 11 | Unethical behaviours are often pardoned | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 12 | Fear of retaliating whistleblowing | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 13 | Insufficient enforcement of codes | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 14 | Ineffective application of rewards | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 15 | Undue pressure from clients | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 16 | Lack of proper monitoring of code process | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 17 | Inconsistent communication of code | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 18 | Lack of ethics training | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 19 | Poor control measures | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 20 | Too much focus on profit making | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 21 | Non-recognition for work done | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 22 | Value conflict | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 23 | Dissatisfaction by employees | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| | Please indicate and rate other factors if any | |
| 1 | Click here to enter text. | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 2 | Click here to enter text. | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 3 | Click here to enter text. | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 4 | Click here to enter text. | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |

APPENDIX 4: SAMPLE OF QUESTIONNAIRE 2 FACTORS ENABLING IMPLEMENTATION OF CODES OF ETHICS

Definition of term

Codes of ethics are documents which state the major behavioural principles and articulate the values embraced by an organization (Stevens, 2009).

Codes of ethics implementation refers to "the extent to which an organization attempts to communicate its code to employees and ensure compliance" (McCabe et al., 1996, p. 464).

| Section A: Background in | iormation of particip | ant | |
|---|--------------------------|-----------------|------------------------|
| Professional background: Other (Please specify) | • | .□; Quantity Su | ırveyor□; Builder □; |
| 2. Years of experience: | 0-5 □; | 6-10 □; | 11 and above \square |
| 3. Position: Director □; | Senior manager □; | Supervisor | |
| Other (please specify) | | | |
| 3. Does the organization hav | ve a written code of eth | nics? Yes□; | No□ |
| Section B: Embedding codes of ethics in construction organization | | | |

1. Factors enabling codes of ethics implementation in construction organizations

Please, indicate appropriately based on your opinion and experience.

Please indicate your **level of agreement** with the factors based on the following scale:

1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree

| 1 C 2 C 3 I 4 I | Factors enabling codes of ethics embeddedness Commitment of managing director to ethics Consistence of codes with international standard (e.g. *ILO) Protecting anyone who exposes alleged wrongdoing Providing financial demand of codes of ethics | \Box 1; \Box 2; \Box 3; \Box 4; \Box 5 \Box 1; \Box 2; \Box 3; \Box 4; \Box 5 \Box 1; \Box 2; \Box 3; \Box 4; \Box 5 |
|--------------------------|---|--|
| 3 I 4 I | Protecting anyone who exposes alleged wrongdoing Providing financial demand of codes of ethics | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 4 I | Providing financial demand of codes of ethics | |
| | | |
| | Identifying situations that an enum so had haborian | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 5 I | Identifying situations that encourage bad behaviour | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 6 1 | Managers acting as role models | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 7 | Regular revision of codes of ethics | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 8 (| Giving code standards with explanation to new employees | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 9 I | Employees ethical appraisal | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| | Updating code contents to reflect current issues in construction | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| | practice | |
| | Training about the importance of codes of ethics | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| | Strategic planning of the company emphasizing long-term | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 13 | importance of codes of ethics Communicating codes with employees | |
| | | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| | Regular meeting by supervisors to stimulate acting in accordance with codes | $\square 1; \square 2; \square 3; \square 4; \square 5$ |
| | Including guidelines for employees' decision-making in the codes | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 16 | Addressing value conflicts with codes of ethics | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 17 (| Creating a forum for discussing ethical dilemma | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 18 I | Rewarding code compliance behaviour | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| | The use of ethics ombudsman (investigator) | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| | Assessing individual value during recruitment and selection | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 21 | The use of ethics committee | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 22 | Regular ethical audits | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 23 I | Fixing clear sanctions for rules of conduct | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 24 | The use of hotline system for reporting irresponsible behaviour | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 25 U | Using indicators for detecting ethical level of organization | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 26 I | Reporting ethically sound projects within the organization | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 27 I | Focusing on areas for special attention from annual ethical report | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 28 | Conducting employees' critical self-evaluation | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 29 5 | Sub-contractors and suppliers subscribing to codes of ethics | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 30 I | Establishing open communication system to challenge code | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| | themes | |

^{*}International Labour Organization

Question 2: Results of proper embeddedness of codes of ethics in construction organization.

Please indicate your **level of agreement** with the factors based on the following scale: 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree

| No. | Results of codes of ethics embeddedness | Level of agreement |
|-----|--|--|
| 1 | Improved employees' ethical behaviour | \Box 1; \Box 2; \Box 3; \Box 4; \Box 5 |
| 2 | Subjective and inconsistent management standards are minimized | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 3 | Building public trust | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 4 | Enhancing organizational reputations | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |

| 5 | Enhancing employees' loyalty | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
|----|--|--|
| 6 | Improved client's satisfaction | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 7 | Boost workforce morale | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 8 | Increased protection against lawsuits | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 9 | Increased compliance with complex government policies | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 10 | Increased company's profitability | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 11 | Enhanced mutual relationship among construction project stakeholders | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| | Please indicate and rate other factors if any | |
| 1 | | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 2 | | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 3 | | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 4 | | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 5 | | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |

End of the questionnaire* Thank you*

名詞解釋

職業道德守則是指組織中規範重要行為準則及價值觀的文件(Stevens, 2009)。 道德準則實施是指"組織通過向其員工溝通道德準則以確保其被遵守的程度" (McCabe et al., 1996, p. 464).

第一部分: 受訪者背景資料

- 1. 職業背景: 工程師□; 建築師□; 估算師□; 營造師□; 其他(請註明)
- 2. 工作年限: 0-5年 口; 6-10年 口; 大於11年 口
- 3. 職位: 董事 □; 高層經理 □; 主管 □; 其他(請註明_____)
- 3. 您所在的組織中是否設有職業道德守則? 是口; 否口;

第二部分: 建築企業職業道德守則的實施

建築企業職業道德守則實施的影響因素

請按照您的經驗及意見作答。

請指出您對下列因素影響道德守則實施的同意程度。

1=非常不同意; 2=不同意; 3=中立; 4=同意; 5=非常同意

| 編碼 | 企業道德守則實施的影響因素 | 同意程度 |
|----|-----------------------|--|
| 1 | 總經理的道德承諾 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 2 | 道德守則與國際標準的一致性(例如*ILO) | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 3 | 對揭露不當行為者的保護 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 4 | 對道德守則的財政支持 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 5 | 對助長不良行為的情況的識別 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 6 | 經理的榜樣行為 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 7 | 對道德守則的定期修訂 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 8 | 向新職員解釋道德守則 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 9 | 僱員的道德評估 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 10 | 更新道德守則內容以反映建築業現存問題 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 11 | 培訓員工以增加道德守則的重要性 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 12 | 制定企業策略計劃以強調道德守則的長期重要性 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 13 | 向員工傳播職業道德守則 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 14 | 與主管進行常規會面以促進道德守則的遵守 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 15 | 在道德守則中加入職員決策指南 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 16 | 在道德守則中指出個人與企業的價值衝突 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 17 | 舉辦討論道德困境的論壇 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 18 | 對遵從道德守則行為的職員給予獎勵 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 19 | 使用道德督查專員 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 20 | 在招聘與選拔過程中評估員工個人價值觀 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 21 | 建立職業道德委員會 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 22 | 違反道德行為的懲處 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 23 | 對違反守則規定的行為制定清晰的處罰方法 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 24 | 使用不負責行為報告熱線 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 25 | 使用指標來檢測組織的道德水平 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 26 | 在組織內報告道德良好的項目 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 27 | 關注年度道德報告中的特別問題 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 28 | 實施員工自我批評與評價 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 29 | 分包商和供應商參閱道德守則 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |
| 30 | 建立質疑道德守則主題的公開溝通平台 | $\Box 1; \Box 2; \Box 3; \Box 4; \Box 5$ |

^{*}國際勞工組織International Labour Organization

問題2: 建築企業職業道德守則植入結果

請指出您對下列因素作為企業道德守則植入結果的同意程度。

1=非常不同意;2=不同意;3=中立;4=同意;5=非常同意

| 編碼 | 企業道德植入結果 | 同意程度 |
|----|---------------|--------------------|
| 1 | 促進職員的道德行為 | ⊠1; □2; □3; □4; □5 |
| 2 | 減少主觀的不一致的管理標準 | □1; □2; □3; □4; □5 |
| 3 | 建立公眾信任 | □1; □2; □3; □4; □5 |
| 4 | 提高企業聲譽 | □1; □2; □3; □4; □5 |
| 5 | 提高職員的忠誠度 | □1; □2; □3; □4; □5 |
| 6 | 提高顧客滿意度 | □1; □2; □3; □4; □5 |

| 7 | 提升工作士氣 | □1; □2; □3; □4; □5 |
|----|---------------------|--------------------|
| 8 | 增加在面對法律訴訟時的保護 | □1; □2; □3; □4; □5 |
| 9 | 提高對複雜政府政策的適應性 | □1; □2; □3; □4; □5 |
| 10 | 提高公司盈利 | □1; □2; □3; □4; □5 |
| 11 | 促進與建築項目其他利益相關者的相互關係 | □1; □2; □3; □4; □5 |
| | 如有企業因素請指出並評價 | |
| 1 | | □1; □2; □3; □4; □5 |
| 2 | | □1; □2; □3; □4; □5 |
| 3 | | □1; □2; □3; □4; □5 |
| 4 | | □1; □2; □3; □4; □5 |
| 5 | | □1; □2; □3; □4; □5 |

問卷的最後再次感謝您的配合!

| APPENDIX 5: SAMPLE OF SELF-ASSESSMENT QUESTIONNAIRE |
|---|
| |
| |
| |

| Section A: Background information |
|---|
| |
| 1. Name of your company (please indicate): |
| 2. Professional affiliation: |
| □ Architect; □ Quantity Surveyor; □ Project Manager; □ Builder; □ Engineer |
| Other (please specify): |
| 3. Position in your current organization (please select the most relevant option): |
| ☐ Senior manager; ☐ Project manager; ☐ Site Supervisor; |
| ☐ Frontline worker; ☐ Other (please specify): |
| 4. Years of experience in your current company: |
| \square < 5 years; \square 5-10 years; \square 11-15 years; \square 16-20 years; \square > 20 years |
| |
| Section B: Self-assessment report on codes implementation and administration |
| |
| Please, indicate appropriately, based on your opinion and experience, how significant are the indicators in the table below to your organization using the following scale by checking the |
| score boxes: |
| 1 = Highly insignificant |
| 2 = Insignificant |
| 3 = Neutral |
| 4 = Significant |
| 5 = Highly significant |
| |

Identifying and removal of barriers to ethical codes

| Leadership | Policy and strategy | Employees | Resources | Primary Processes |
|--|--|--|---|---|
| The managing director exhibits high level of commitment regarding ethical issues | The content of the code is consistent with international agreements such as the ICAC models and ILO convention | The organization has a method to protect anyone who exposes alleged wrongdoing | The organization is prepared to concede to financial needs if the code demands it | The organization makes inventory to discover bottlenecks concerning irresponsible behaviour |
| Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ |

Coding

| Count | | | | | |
|---|--|--|---|--|--|
| Leadership | Policy and strategy | Employees | Resources | Primary Processes | |
| Managers and supervisors act as role models | Based on the reactions of stakeholders there is a periodical evaluation of desirable adjustments to the code of ethics | The code comprises both themes on which individuals employees can be called to account | New employees receive the code standard with an explanation of the importance of the code | Contemporary ethical issues in line with the codes are discussed | |
| Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | |
| | | | | | |

Internalization

| Leadership | Policy and strategy | Employees | Resources | Primary Processes |
|---|---|---|--|---|
| Managers and other employees are informed and trained about the importance of the code of ethics | The strategic policy of the organization indicates the long-term importance of the code of ethics | Ethical codes are communicated to the employees using effective medium. | Supervisors always find out which actions are required to further stimulate acting in accordance with the code | Employees are empowered to make ethical decisions |
| Score: | Score: | Score: | Score: | Score: |
| 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 10; 20; 30; 40; 50 |

Enacting values

| Leadership | Policy and strategy | Employees | Resources | Primary Processes |
|---|---|--|--|---|
| Value conflicts are addressed with reference to codes of ethics | Forums are organized to discuss ethical dilemmas relevant to the organization | Exemplary ethics in compliance with the code is rewarded in the organization | Within the organization there are confidants (ethics ombudsman) with whom moral and ethical issues can be discussed. | Individual ethical values are assessed during recruitment and selection |
| Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ |

Monitoring

| Leadership | Policy and strategy | Employees | Resources | Primary Processes |
|--|--|--|---|---|
| Leavership | Toncy and strategy | Employees | Resources | 1 Timary 1 Tocesses |
| There is ethics committee who addresses ethical matter arising | There are sanctioning policies for ethics violation which are familiar among the employees | Ethical audits are regularly held to check whether employees stick to the code | There is a complaint system (hotline) where internal and external stakeholders can report irresponsible behaviour | Indicators have been fixed to measure ethical performance |
| Score: | Score: | Score: | Score: | Score: |
| 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 10; 20; 30; 40; 50 |

Accountability

| Leadership | Policy and strategy | Employees | Resources | Primary Processes |
|--|--|--|---|---|
| Exemplary projects are transparently and widely communicated within the organization | In the annual report, the organization indicates the areas for special attention in the code of ethics | The organization creates a culture in which people are prepared to make a critical self-evaluation | Based on agreements, sub- contractors and suppliers also subscribe to the content of the code of ethics as much as possible | In relations, it is communicated that the organization wishes to be approachable about the various themes from the code of ethics |
| Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ | Score: 1□; 2□; 3□; 4□; 5□ |

| Please insert your personal | email here for follow-up and update | . |
|-----------------------------|-------------------------------------|----------|
| | | |

Thank you for participating.

| 第一部分: 背景信息 |
|---|
| 5. 企業名稱(請註明):6. 職業: |
| □建築師; □工料測量師; □項目經理; □建造師; □工程師; □其他(請註明): |
| 7. 在企業內的職位水平(請選擇最貼切的選項): □ 高級管理水平; □ 項目管理水平; □ 施工現場主管; □ 施工人員; □ 其他(請註明): |
| 8. 工作年限: □ 少於5年; □ 5到10年; □ 11到15年; □ 16到20年; □ 多於20年 |
| 9. 您是否有貴企業的職業道德守則 |
| 第二部分: 道德守則實施和管理的自我測評報告 |
| 請按照下列評分標準,在表格中填寫您認為表中的指標對貴企業的重要程度 |
| 1=非常不重要 |
| 2=不重要 |
| 3 = 中等 |
| 4=重要 |
| 5=非常重要 |

識別和排除道德守則的障礙

| 領導力 | 政策與戰略 | 職員 | 資源 | 主要過程 |
|--------------------|--------------------|--------------------|--------------------|--------------------|
| 管理者對道德事件展現出 | 守則內容與一些國際公約 | 企業有辦法保護對不道德 | 如果守則實施需要,企業 | 企業通過制定詳細清單以 |
| 高的關注度 | 一致,如廉政公署模式或 | 行為進行揭發的職員 | 會做出經濟上的讓步 | 發現不道德行為治理的瓶 |
| | 國際勞工組織公約 | | | 頸 |
| | | | | |
| 評分: | 評分: | 評分: | 評分: | 評分: |
| 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ |
| | | | | |

制定守則

| 領導力 | 政策與戰略 | 職員 | 資源 | 主要過程 |
|---------------------------|-----------------------------------|-----------------------------------|-----------------------------------|---------------------------|
| 經理和主管的榜樣行為 | 根據利益相關者的反應調 整道德守則,并進行階段 性評估 | 道德守則的主題應涵蓋企業所有的個人及職員 | 新職員會收到企業的道德 守則以及該守則的重要程 度聲明 | 討論現時符合守則的道德 事件 |
| 評分: 1□; 2□; 3□; 4□; 5□ | 評分: 1□; 2□; 3□; 4□; 5 □ | 評分: 1□; 2□; 3□; 4□; 5 □ | 評分: 1□; 2□; 3□; 4□; 5 □ | 評分: 1□; 2□; 3□; 4□; 5□ |

守則內在化

| 領導力 | 政策與戰略 | 職員 | 資源 | 主要過程 |
|--|--|--|--|--|
| 對經理和其他職員進行培訓 | 企業的戰略政策指出道德準 | | 主管發現並且鼓勵遵守道 | 職員被授權進行道德決策 |
| 以了解道德守則的重要性 | 則的長期重要性 | [德守則 | 德守則的行為 | |
| | | | | |
| | | | | |
| 評分: | 評分: | 評分: | 評分: | 評分: |
| $1\square; 2\square; 3\square; 4\square; 5\square$ | $1\square$; $2\square$; $3\square$; $4\square$; $5\square$ |
| | | | | |
| | | | | |

體現守則價值

| 領導力 | 政策與戰略 | 職員 | 資源 | 主要過程 |
|--|--|--|--------------------|--------------------|
| 主管在任何新項目上都能夠 | 舉辦論壇討論與企業有關的 | 獎勵企業中遵守道德守則的 | 企業中有道德專員,遇到 | 在招聘時對個人的道德價值 |
| 清楚牢記道德守則的要求 | 道德難題 | 行為 | 道德問題時可以同他/她討 | 進行評價 |
| | | | 論 | |
| | | | | |
| 評分: | 評分: | 評分: | 評分: | 評分: |
| $1\square$; $2\square$; $3\square$; $4\square$; $5\square$ | $1\square; 2\square; 3\square; 4\square; 5\square$ | $1\square$; $2\square$; $3\square$; $4\square$; $5\square$ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ |
| | | | | |
| | | | | |

道德守則的監控

| 領導力 在企業中設置道德委員 會,以應對道德事件的發 生 | 政策與戰略 對職員中常見的不道德行 為設置處罰政策 | 職員 進行常規道德審查以檢查 職員是否遵守道德守則 | 資源 提供報告系統(如熱線電話)以供內部或外部的利益相關者報告不道德行為 | 主 要過程 制定指標體系以測量道德 績效 |
|--|--|---------------------------------|---|--------------------------------|
| 評分: | 評分: | 評分: | 評分: | 評分: |
| 1□; 2□; 3□; 4□; 5 □ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ | 1□; 2□; 3□; 4□; 5□ |

守則解釋

| 1) パ1加土4手 | | | | |
|-----------------------------------|---------------------------|---------------------------|--------------------------------------|---------------------------|
| 領導力 | 政策與戰略 | 職員 | 資源 | 主要過程 |
| 在企業內廣泛宣傳道德榜 樣的項目 | 在年度報告中指出道德守則中需要特別注意的問題 | 營造進行嚴格自我評價的 企業文化 | 在協議基礎上,分包商和 供應商也應該盡量遵守道 德守則的規定 | 對外宣傳企業願意接受有關 道德守則的各種議題 |
| 評分: 1□; 2□; 3□; 4□; 5 □ | 評分: 1□; 2□; 3□; 4□; 5□ | 評分: 1□; 2□; 3□; 4□; 5□ | 評分: 1口; 2口; 3口; 4口; 5口 | 評分: 1□; 2□; 3□; 4□; 5□ |

| 請提供您的電子郵箱以便後續調查與反饋 | |
|--------------------|--|
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感謝您的參與!

| APPENDIX | 6: SAMPLE OF | RESEARCH | INTERVIEW | QUESTIONS |
|----------|--------------|----------|-----------|-----------|
| | | | | |

Semi-structured questions

| 1. | What is your position in this organization? |
|-----|--|
| 2. | How long have you been with this company? |
| 3. | Are there any strategies to ensure that employees behave ethically in your company? What are they? |
| 4. | Do you discuss ethical issues in any of your meetings? |
| 5. | How does your company internally communicate the existence of its code of ethics? |
| 6. | Do you think a code of ethics has influenced your behaviour? How? |
| 7. | Can you mention some ethical instructions within your company that help you to conform to ethical standard of your organization? |
| 8. | What is the position of the top management in relation to codes of ethics? |
| 9. | How do you handle ethical dilemma that arises during your activities in your company? |
| 10. | Can you share your experience about ethical issues/dilemma you know of and it was resolved? |
| 11. | Do you think ethics training is important in your company? |
| 12. | How would you handle a case of unethical behaviour by other employees? |
| 13. | Is there a formal mechanism for employees to raise ethical concerns/ask questions about your code confidentially? |

| 14. | Is there a provision for protecting anyone who exposes alleged wrongdoing in your company? |
|-----|--|
| 15. | Were you briefed/informed about code of ethics when you newly joined your company? How? |
| 16. | Do performance appraisals in your company include ethics? |
| 17. | How does your company handle unethical practice by employees? |
| 18. | Does your company reward compliance with code of ethics? How? |
| 19. | Does your company relate codes of ethics to suppliers and subcontractors? |
| 20. | Do you think a code of ethics is effective in ensuring ethical behaviour in construction organizations? |
| 21. | How does your company monitor the effectiveness of code of ethics? |
| 22. | What best practices would you recommend for implementing codes of ethics? |
| 23. | What do you think are the major barriers to implementation of codes of ethics in construction organizations? |
| | |

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