THE ROLES OF GRADUATE QUANTITY SURVEYORS IN THE MALAYSIAN CONSTRUCTION INDUSTRY

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ABSTRACT

The quantity surveying profession has evolved since changing of clients' need and market requirements. Today, clients not only request the traditional services but also ask for the additional services such as project management, feasibility study, construction financial practice, arbitration, quality management, conflict management and risk management in the innovative and changing construction industry. The scope of works for graduate quantity surveyors is no longer limit on measurement and the regular practices but is some things beyond this boundary. Hence, the objective of this paper is to present a critical review on the traditional and contemporary roles of graduate quantity surveyors, the threats to graduate quantity surveyors and also the methods to improve graduate quantity surveyors' practice. In summary, this critical review would provide insight knowledge to construction industry players for better understanding of graduate quantity surveyors' roles.

Keywords: Graduate Quantity Surveyors; Malaysian construction industry; traditional and contemporary roles; threats; methods to improve.

INTRODUCTION

Seeley (1997) defined a quantity surveyor (QS) as a professionally trained, qualified and experienced in dealing with these problems on behalf of the employer. He is essentially a cost expert whose prime task to ensure that the project is kept within the agreed budget and that the employer obtains value for money.

The quantity surveying profession in the Malaysia has largely developed since building work increased in volume and complexity over the last century. As described by Seeley (1997), QS is a profession who would prepare an accurate bill of quantities to be priced by tendering contractors and who would measure and value any variations that might occur during the progress of the works. However, the environments for quantity surveying practice today have changed along with the country's rapid economic development. In recent years, many authors have reported on the roles of quantity surveying profession in the construction industry have evolved along with the changes (Page *et al*., 1999; Page *et al*., 2001; Boon, 2001; Fellows *et al*., 2003; Hardie *et al.*, 2005; Fadhlin and Ismail, 2006).

The objective of this paper is to present the critical review on the traditional and contemporary roles of graduate quantity surveyors (QSs), the threats to graduate QSs and also the methods to improve graduate QSs' practice.

LITERATURE REVIEW

There are many authors reported the future roles of the QSs in last thirty years. Hence, this section will present and discuss the general quantity surveying profession in the Malaysian construction industry, traditional and contemporary roles of graduate QSs, threats to graduate QSs, and methods to improve their practice.

The Quantity Surveying Profession in Malaysia

In Malaysia the quantity surveying profession is governed by the Quantity Surveyors Act 1967 (incorporating all amendments up to 28 February 2002) (LJBM, 2002) and Regulations

promulgated in terms of the Act. Only persons registered with the Board of Quantity Surveyors (BQSM) and The Institution of Surveyors, Malaysia (ISM), the Statutory Body, are permitted to call themselves "Registered Quantity Surveyors" (Reg. QS) and perform work reserved for registered quantity surveyors. The requirements for registration generally consist of the holding of a degree in quantity surveying, two-year's practical experience under the mentorship of a Reg. QS, and must have passed the test of Professional Competence conducted jointly by the BQSM and ISM.

At the same time, a registered graduate QS must hold a qualification in quantity surveying recognized by the Board (Section 10(1)(a) of the Act). This is open for those who are fresh graduates from the institute of higher learning which recognized by BQSM. As at July 2009, 873 registered QSs and 883 registered graduate QSs were registered with the BQSM.

The Roles of Graduate Quantity Sureveyors

It has been suggested that with the growth of comprehensive user-friendly estimating software for instance, the QS is dead, or "re-engineered" as a Construction Economist (Stacey and Wood, 1996).

Moss (2004) described quantity surveyors is a person skilled in all aspects of the construction process and building life cycle. He or she able to manage cost efficiently, equating quality and value with individual client needs. Besides, must also have strong financial analytical, interpretive and teamwork skills. In his report, the roles of quantity surveyors are divided to three stages: historic, contemporary and future roles of quantity surveyors.

Traditional and Contemporary Roles of Graduate Quantity Surveyors

The changing role of the quantity surveyor has come about due to the demands of both the construction industry and the construction client. The changing role of the quantity surveyor includes, fast track procurement which necessitates faster bills of quantities production as well as cost planning; value management, risk management, commercial, etc (Cartlidge, 2006).

Zakaria *et al* (2006) agreed that the roles of quantity surveyors have been diversified in areas such as oil and gas, taxation, insurance valuation and several other areas. Thus quantity surveyors need to expand and include an ever-widening scope of services.

Smith (2004) pointed out the quantity surveying profession has experienced significant changes over the past decade in terms of scope and type of services provided within and outside the construction sector. As a result, quantity surveying firms expand and adapt their scope of services to meet changing industry demands. According to him, one of the largest Quantity Surveying firms in Australia provides a good example of these changes; in 1980 Bills of Quantities accounted for approximately 80% of their total workload whereas in 2003 this had declined to less than 10%. Nevertheless, rather than leading to the firm's demise, the firm has adapted accordingly and now provides a greater volume and wider range of services. The scopes of services provided by firms are summarized; Traditional Services (e.g. Contract administration, Specification preparation, Builders Quantities, Bills of Quantities and Estimating/Cost Planning), Non-Traditional Building Services (e.g. Cost benefit analysis, Due diligence reports, Premises Audits, Post Occupancy Evaluation, Facility management, Quality management, Value management, Project management, Risk management, Insurance valuation, Expert witness, Arbitration/mediation, Tax advice, Construction Planning, Life Costs, Feasibility study and other), Non-Building services (e.g. Research/Publishing, Civil works, Infrastructure works, Marine works, Transport, Ship Building, Aeronautical, Mining, Manufacturing, Petrochemical and other).

Threats to Graduate Quantity Surveyors' Practice

There are a lot of major factors inducing the change in quantity surveying profession. Many authors have identified intensive or severe fee competition is the significant factor that influences current market (Bowen and Rwelamila, 1995; Boon, 1996; Smith, 2004; Hasmawati, 2006; Davies, 2006). Smith (2004) explained that insurance premiums have increased anywhere from 100% to 800% for QS firms in the last few years despite QS is relatively low risk compared to other professions in the industry.

Besides, Frei (2009) expounded that the Computer Aided Design (CAD) is a potential threat to the quantity surveyors particularly in terms of the technical role of quantity surveyor (Smith, 2004). The attitude of conservatism or inability to change for graduate quantity surveyors toward application Information Technology also is one of the potential threats in current quantity surveying profession (Shen *et al.*, 2003; Smith, 2004). Smith (2004) and Frei (2009) also found that competition from others professions which provide similar services and "one-stop shop" package is a potential threat to graduate quantity surveyors. Smith (2004) explained that poor marketing also considered as a threats to quantity surveyors since it is important in quantity surveying profession. However, Low and Kok (1997) expressed that quantity surveyors aware of the need to improve the way their services ought to be promoted, yet many QSs still do not seem to pay enough attention to marketing.

In addition, Lay (1998) also indicated that the graduate quality is declining in surveying profession. The core competencies and skills in the profession were declining generally (Smith, 2004). "QSs are still hard to find, so we snap up good candidates whenever we can find them," says Morgan Est HR director Andrea Walton (Mann, 2008). Apparently, the quantity surveying profession attracts fewer graduates (Lay, 1998). Obviously, it is lack of interest from school leavers. Additionally, QSs still do not function well in their traditional services. As pointed out by Hiew and Ng (2007), chief architect is not satisfied toward the services of QS. Lastly, another threats be identified is the clients today began looking for new ways of managing contracts (Davies, 2006).

Methods to Improve Graduate Quantity Surveyors's Practice

QS must aware that their success not only depends to their abilities, but also need to adapt to changes in many areas and repackaging in order to maintain and enhance competitive advantage and profitability. According to Smith (2004), first and foremost firms need to ensure that their quantity surveyor (QSs) have sufficient professional expertise in the core competencies and skills of the profession and continue to develop this expertise. Practitioners need to be far more adaptable and willing to change their standard work practices than in the past.

Furthermore, Smith (2004; 2006) mentioned that all construction professionals need to utilize and gain expertise in CAD sooner rather than later. CAD systems such as AutoCAD, Micro station, ArchiCAD, etc will be at the centre of future information management system and virtual projects and, consequently, professionals will need CAD capabilities and expertise just to be a player.

Today, there are many commercially developed software packages targeted at aiding the performance of quantity surveying duties (Odeyinka, 2008). Therefore, it is vital investment in information technology (IT) and information communication technology (ICT) to improving productivity and performance (Frei, 2009).

Diversification or specialization of services also is a method which identified as necessary to profession quantity surveying. Grant (2004) proposed that quantity surveyors requires a continuous income stream enabling the professional to become more independent and less

dependent on the rise and fall of traditional income areas. Diversification may therefore be part of further strategies.

Verster *et al.* (2008), the quantity surveying profession in South Africa is experiencing change with a strong emphasis on improving education, research and training. It is proposed that to be seen as a learned society, a profession must ensure that the five pillars of a learned society are developed to its highest levels and on par with world-class professions. The five pillars of a learned profession (education, research, training, mentorship and continuing professional development (CPD)) may assist the quantity surveying profession to develop its position as a learned society. The quantity surveyor also may promote the multi-procurement method to enable the client to control the effects of time and cost, continuing to allow space for sustained design, development, effective professional service and contractor involvement (Verster, 2004). Thus, procurement options are very important to fulfill clients' need. As mentioned by Frei (2009), quantity surveyors shall increase the involvement in *alternative* procurement methods such as managed and cost plus contract, package deals, turnkey offers and design and build contracts.

Additionally, knowledge management also is an important method to improve graduate QSs' practice. Davis *et al.* (2007) explained that clients have an increased expectation of the service offered by quantity surveyors and this coupled with greater competition both internally (from the profession) and externally has resulted in a challenge to their professional status. To meet these challenges quantity surveyors need to enhance their professionalism and status that can maintain a competitive advantage. Knowledge is a key feature of the quantity surveyor's portfolio and therefore effective knowledge management skills can help to improve their expertise.

To achieve a successful marketing strategy, the quantity surveying firm has to focus not only a target market but also creating a marketing programme. This programme plans how each of the seven marketing mix variables (i.e. the seven Ps) can be used as a guide to arrive at the competitive position that the firm wants to occupy in the target market. The seven Ps can be adopted by professional QS are product, price, place, promotion, people, physical evidence and process (Low and Kok, 1997).

Moreover, a competency-based review of professional quantity surveying is important for service excellence (Nkado and Mayer, 2001). Refer to Simpson (1996), there are some practical methods to gain competencies, such as through Practical Work Experience, Foster Firm schemes, Work Shadow, Year Out Period, Simulated Exercises, Role Play and Problem Based Learning.

Lastly, it is essential to implement strategies for developing and cultivating the quantity surveyor's attribute for meeting the client's expectation. Quantity surveyors shall place significant emphasis on assignments and activities that have real-life relevance or that are authentic in some way like group-work, site visit and guest lecturers (Zou *et al.*, 2005).

CONCLUSION

In essence, this paper has presented a critical review on the traditional and contemporary roles of graduate quantity surveyors, the threats to graduate quantity surveyors and also the methods to improve graduate quantity surveyors' practice. The quantity surveying profession has evolved due to changing of clients' need and market requirements. Today, clients not only request the traditional services but also ask for the additional services such as project management, value management, facilities management, knowledge management and other services in the innovative and changing construction industry. The critical review presented in this paper could be used by the graduate quantity surveyors to prepare them for the demands of this profession.

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