

The Roles of Graduate Quantity Surveyors in the Malaysian Construction Industry

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Abstract: The profession of quantity surveying has evolved as a result of clients' additional needs and market requirements. Clients not only request for traditional services but also asking for the contemporary services such as project management, risk management, feasibility study, construction financial practice, arbitration and productivity improvement in today's innovative and changing construction industry. The scope of works for graduate quantity surveyors is no longer limited to the regular practices of measurement, tendering or estimating but something further beyond than 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. Overall, this paper 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.

1. Introduction

The quantity surveying profession in Malaysia has progressively 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 evolving roles of quantity surveying profession together with the changes in the construction industry (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 a 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.

2. Literature review

During the last thirty years, there are many authors who have commented on the future roles of the QSS within the construction industry. Hence, this section will present and discuss the quantity surveying profession in the Malaysian construction industry, the traditional roles of graduate QSS, threats to graduate QSS, and methods to improve their practice in view of the contemporary roles that are expected from them in future.

2.1 The quantity surveying profession in Malaysia

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In Malaysia the quantity surveying profession is governed by the Quantity Surveyors Act 1967 (incorporating all amendments up to 28 February 2002) and Regulations promulgated in relation to the Act. As at January 2012, 942 registered QSs and 1153 registered graduate QSs were registered with the Board of Quantity Surveyors (BQSM).

2.1.1 Traditional and contemporary roles of graduate quantity surveyors

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). 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 scope of services provided by firms can be summarized as; 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, Facilities 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/oil and gas etc).

Due to this, Zakaria *et al* (2006) also agreed that the roles of quantity surveyors have been diversified to areas such as taxation, insurance valuation and several others. Quantity surveyors (QSs) need to expand and include an ever-widening scope of services. As a result, it has showed that QSs not only need to play traditional roles by offer traditional services but also have to play contemporary roles by giving additional or non-traditional services to fulfill the demand for this innovative and changing industry.

2.1.2 Threats to graduate quantity surveyors’ practice

There are still a lot of major factors inducing change in the 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). In addition, Computer Aided Design (CAD) (Frei, 2009), the attitude of conservatism or inability to change toward application Information Technology (Shen *et al.*, 2003; Smith, 2004), competition from others professions which provide similar services and “one-stop shop” package (Smith, 2004; Frei, 2009) and including poor marketing can be considered as a threats to quantity surveyors even though they are 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 it (Low and Kok, 1997; Smith, 2004).

Furthermore, 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 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).

In essence, threats can be summarized as follows: fees, new technology, poor marketing etc. While the quality of students, there is another area which may have caused it, i.e. the changing of the curriculum by institutions of higher learning to place more emphasis on management subjects rather than on the traditional roles. This is happening to UK where they now need to look for QSs from other countries.

2.1.3 Methods to improve graduate quantity surveyors' practice

Qs have to be aware that their success does not only depend upon their current abilities, but also needs to adapt to changes in many areas and repackaging it in order to maintain and enhance competitive advantage and profitability. Therefore, first and foremost firms need to ensure that their Qs 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 (Smith, 2004). Furthermore, Smith (2004; 2006) keep mentioned that all construction professionals need to utilize and gain expertise in CAD sooner rather than later.

Today, there are many commercially developed software packages targeted at aiding the performance of quantity surveying duties (Odeyinka, 2008). Therefore, it is vital to invest in information technology (IT) and information communication technology (ICT) to improve productivity and performance (Frei, 2009). Specialization is also a method which was identified as necessary to the profession quantity surveying services. 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. Anyway, despite diversification is important but it need to take a long time frame. So it is depends to the training for them and how fast they can adapt with the new knowledge and technology to apply in their practical.

Additionally, other methods like the five pillars of a learned profession (education, research, training, mentorship and continuing professional development (CPD) (Verster, 2004), involvement in *alternative* procurement methods (Frei, 2009), knowledge management (Davis *et al.*, 2007), marketing strategy (Low and Kok, 1997), competency-based review (Nkado and Mayer, 2001) and developing and cultivating the quantity surveyor's attribute for meeting the client's expectation (Zou *et al.*, 2005) also been proposed to improve the graduate quantity surveyors' practice.

3. Conclusion

In summary, this paper has shown 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. Clients not only request the traditional services but also ask for the additional or non traditional services such as value management, project management, and knowledge management in the current construction industry. The results presented would remind the graduate quantity surveyors about the changes and possible threats faced by the quantity surveying profession. Therefore, graduate quantity surveyors should be aware of the changes and willing to adapt these changes in order to improve their practice. The critical review presented in this paper could be used by the graduate quantity surveyors to equip themselves with these additional knowledge.

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5. References

- [1] Boon, J. (1996). Management of quantity surveying practices in a changing market, *COBRA 1996*. RICS Research.
- [2] Boon, J. (2001). New Zealand quantity surveying practices – continuing to adapt in a changing environment, *COBRA 2001*. RICS Research.
- [3] Bowen, P. and Rwelamila, P. (1995). Marketing of professional service by quantity surveying consultancy practices in South Africa, *COBRA 1995*. RICS Research.
- [4] Davies, R. (2006). The QS Transformation. *RICS Business*, March.
- [5] Davies, R., Watson, P., Man, C. L. (2007). Knowledge management for the quantity surveying profession. *FIG Working week 2007*, Hong Kong SAR, China, 13-17 May.

- [6] Fadhlin, A. and Ismail, H. (2006). Profile of the Quantity Surveying Practice in Malaysia. International Conference on Construction Industry 2006, June.
- [7] Fellows, R., Liu, A. and Fong, C. (2003). Leadership style and power relations in quantity surveying in Hong Kong. *Construction Management and Economics*, 21(8), 809-818.
- [8] Frei, M. (2009). *A New Zealand perspective on the future of quantity surveying: likely changes, threats and opportunities*. URL: http://www.nzio.org.nz/global/files/Images/Documents/QS_survey_questionnaire.pdf. Accessed on 28th July 2009.
- [9] Grant, M. (2004). Competitive Strategies for the Professional Quantity Surveyor in South Africa. ICEC 4th World Congress, Cape Town, South Africa, 17-21 April.
- [10] Hardie, M., Miller, G., Manley, K. and McFallan, S. (2005). The quantity surveyor's roles in innovation generation, adoption and diffusion in the Australian Construction Industry. The Queensland University of Technology Research Week International Conference, Brisbane, Australia, 4-8 July.
- [11] Hasmawati, H. and Johan, V. T. A. (2006). Drivers of Changes: New Challenges for the Quantity Surveyors. International Conference on Construction Industry 2006, June.
- [12] Hiew, H. and Ng, P. (2007). How the QS Can Create Values in the Procurement of Construction Works in Hong Kong. Strategic Integration of Surveying Services, FIG Working week 2007, Hong Kong SAR, China, 13-17 May.
- [13] Lay, R. (1998). *The Agenda for Change: 1998 Presidential Address*. London: RICS.
- [14] Low, S. P. and Kok, H. P. (1997). Formulating a strategic marketing mix for quantity surveyors. *Marketing Intelligence & Planning*, 15 (6), 273-280.
- [15] Mann, W. (2008). Job Opportunities: Quantity Surveyors. *Contract Journal*, 30 July, 444, 6686, pp. 18.
- [16] Nkado, R., and Meyer, T. (2001). Competencies of professional quantity surveyors: a South African perspective. *Construction Management and Economics*, 19 (5), 481-491.
- [17] Odeyinka, H. A. (2008). An Evaluation of Quantity Surveying Software Usage in Northern Ireland. *COBRA 2008*. RICS Research.
- [18] Page, M., Limeneh, M., Pearson, S., and Pryke, S. (1999). Understanding innovation in construction profession service firms. RICS Foundation, London.
- [19] Page, M., Pearson, S., and Pryke, S. (2001). Innovation, business strategy and the quantity surveying firm in the UK. RICS Foundation, London.
- [20] Seeley, I. H. (1997). Quantity Surveying Practice Second Edition. *The Building Team and the Design Process* (pp. 36-65). London: Macmillan Press Ltd.
- [21] Shen, Q., Li, H., Shen, L. Derek, D., and Jacky, C. (2003). Benchmarking the use of information technology by the QS profession. *Benchmarking*, 10 (6), 581-596.
- [22] Smith, P. (2004). Trends in the Australian Quantity surveying Profession: 1995-2003. ICEC 4th World Congress, Cape Town, South Africa, 17-21 April.
- [23] Stacey, N. and Wood, B. (1996). An analysis of potential future demand for building surveying services. *COBRA 1996*. RICS Research.
- [24] Verster, J. J. P. (2004). Managing cost, contracts, communication and claims: a quantity surveying perspective on future opportunities. ICEC 4th World Congress, Cape Town, South Africa, 17-21 April.
- [25] Vester, J. J. P., Kotze, B. G., and Hauptfleisch, A. C. (2008). The Pillars of Quantity Surveying for a Learned Society. *AACE International Transactions*, DE.13.1-DE.13.12.
- [26] Zakaria, N., Munaaim, M. E. C., and Khan, S. I. (2006). Malaysian Quantity Surveying Education Framework. BEECON 2006, Bloomsbury, London, 12- 13 September.
- [27] Zou, P. X. W., Scoufis, M., Earl, G. and Kim, J. (2005) "Developing Graduate Attributes in Construction Management and Real Estate Studies", Proceeding of the 30th Annual Conference of AUBEA, Brisbane, Queensland, Australia, (in press), 4-8 July.