

# The role of the quantity surveying profession within the contemporary built envir...

[Profession](#)



Before discussing the role of the quantity surveyor, it's very important to get an idea about the built environment where the quantity surveyor works.

Simply the built environment means human made buildings, cities, roads and surroundings etc.. that could provide an environment for their activities. The concept of the built environment was introduced in Greece in many centuries ago in the process of developing their cities using grid plans. But the modern concept of built environment is far more complex than that.

Considering the contemporary built environment, with huge increase of the population in the world over the last century human desires are risen up and became more complicated. Similarly necessity to have houses, cities, roads, which is called built environment, has become compulsive aspect of human life. Since the Quantity Surveyor is a significant character of constructing that built environment, he/she has to play a vital role in it.

### The Origin of the Quantity Surveying

What is the quantity surveying? According to the Seeley (1997), Quantity Surveying is a profession which 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. But when considering the history of this profession, the origin of quantity surveying carries us way back to the 17th century. In 1666 after the Great Fire, London was under restoration process it needed huge no. of workers like masons, carpenters and other tradesmen. Before the 1666 all the workers mentioned above got paid daily basis. But the large amount of labor needed to restore

the city after the fire, it made governors to think twice and decided to pay each worker for the quantity of work they had done.

It meant on behalf of the salary workers had been paid for the amount of carpentry, masonry and other works they had done. Therefore one person had to read the drawings of the buildings and take off the quantity of work each and every trade in the construction and at the same time he had to prepare an estimate for the total cost. And the Quantity Surveying profession was evolved to the current status after that incidence.

### History of the Quantity Surveying

In early 70's there was a misunderstanding about the profession that believing the " valuation" and the " measurement" are covering the whole area of quantity surveying. Therefore quantity surveying profession was highlighted only for its " Technical" role throughout that period. But measurement and valuation are only two functions performed by quantity surveyors. Because of this nature, many people believed that the functions done by the quantity surveyor can be undertaken by any person or machine that can perform arithmetic calculations, like a computer.

" The QS is not a necessity in the order of things. Any convenient and cheap method of multiplying drawings and specifications and placing copies in the hands of each estimator would answer the same purpose and get rid of the QS for good" (Anon, 1889 cited in Wood, 2008).

### Changing roles of Quantity Surveying

Despite all the above doubts quantity surveying profession was survived and presently regarded as one of the most expensive profession in the construction industry. Also quantity surveying is being known as a dynamic profession and its skills section had gone for different changes over the last decade or so. Smith (2004) mentioned that the quantity surveying profession has faced to considerable changes over the last decade in terms of scope and the type of contributions provided within and outside the construction process. Ashworth (1981) pointed out the changing role of the quantity surveyor in recent past has been significant.

#### Traditional roles of Quantity Surveying

Quantity Surveyor Is the person who giving advices and preparing documents regarding cost estimating and financial section of the construction process. Thirty years ago the role of quantity surveyor was to prepare Bill of Quantities and providing Final Accounts only.

“ The traditional role of quantity surveyor is the professional who provides advice about cost and financial management for the construction process. The traditional services provided are considered to be of a technical basis, such as preparing the cost plan and the bills of quantities, tender documentation and tender appraisal, interim payments, measuring and valuing variations, advising on anticipated final costs and preparing the final account” (Burnside and Westcott, 1999).

#### Competencies of Quantity Surveying

Quantity surveyors are also well known as a construction economists who perform various and wide range of duties to support the cost effective construction projects. The core competencies of quantity surveying profession such as determining the budgets of projects, measuring project quantities, preparing Bills of Quantities, cost control documents, administrating contracts, and preparing final accounts, etc.. should be maintained and enhanced in order to adapt to changes in many areas of the construction industry since the quantity surveyor's success depends not only the skills which he/she has. Practitioners need to be far more adaptable and willing to change their standard work practices than in the past (Smith, 2004). Also the RICS has introduced and highlighted some basic and optional core competencies that required of quantity surveyors to enhance their ability to face the varying construction industry and they are as follows.

Competencies required of Quantity Surveyors for professional Competency (RICS)

Basic competencies

Core competencies

Optional competencies

Personal and interpersonal skills

Construction contract practice

Arbitration & other dispute resolution procedures

Business skills

Construction technology and environmental services

Development appraisal

Data, information and information technology

Economics of construction

Facilities management

Professional practice

Procurement and financial management

Insolvency

Law

Insurance

Measurement

Project management

Mapping

Property investment funding

Research methodologies and techniques

Valuation

## Taxation allowances & grants

Apart from that, Information Technology has made huge impact on quantity surveying profession as though it is spread out all over the construction industry. Smith (2004; 2006) keep emphasized that all the professionals should have the knowledge of how to use the AUTOCAD properly and accurately and be an expertise in the field of construction without delaying. (Odeyinka, 2008)

Stated that, commercially developed software packages are available worldwide to improve the performance of quantity surveyors. Frei, (2009) also stated that with the intention of developing the productivity and high performance of the industry it is necessary to invest in information technology (IT) and informationcommunicationtechnology (ICT). RICS (1991) In 1990s and 2000s, Quantity Surveyors should be more innovative, more pro-active and more mobile to solve the problems and the changing of client requirements. New skills and services will be progressively developed from continuous research and developments of new techniques.

## Evolving roles of Quantity Surveying

The quantity surveying profession has been able to evolve and diversify into new areas of practicing, providing a wider range of services, with the modern quantity surveyor covering all aspects of project cost management, procurement and contract management (Lee, Trench and Willis 2011)

(Menaha Thayaparan, et. al2011) “ Deviating from its traditional “ technical” role, during mid-80’s RICS has promoted the role of the Quantity Surveyor as  
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“ the Building Economist”, “ Cost Engineer”, “ Procurement consultant” and as a “ Cost Consultant” (RICS, 1986; RICS, 1991). These roles have attributed more of a “ managerial” image to the quantity surveying profession.”

Since that dynamic nature of the profession, it has been shaped up to provide timely needs such as cost and value management, project management, procurement consultant, quality management, risk management, arbitration, and many more non-traditional services of the construction industry without limiting to its narrow scope. QSBC (2009)

Has been suggested that the role of the quantity surveyor has outspread over time beyond its main scope of financial based concerns not only to cover the knowledge of values, cost, labor and materials, but also to include legal and contractual matters, like wise being a consultants on construction business and also has to be concern about developers, the government, contractors and the general project management. According to the facts which I have discussed so far, it has declared that Quantity Surveyors not only have to perform traditional roles by offering traditional services nevertheless also have to play contemporary roles by granting non-traditional or additional services to fill up the demand of this innovative and mutable construction industry.

Apart from those cost concerned aspects discussed above, quantity surveyors are also needed to be conversant in construction management and procurement, contractual administration and legal aspects of construction within the modern built environment.



Therefore it's important to discuss about management knowledge of quantity surveyor which gives the ability to adapt to divers conditions and to solve problems emerge in financial and contractual sectors which are very unique for each and every construction projects. In the recent past years it has been not rare for quantity surveyors to widen their scope of profession and put themselves in a position of project manager with the amount of experience they have got. The importance of the Project Management is growing worldwide and it has huge impact on productivity and quality of the project. By using this art of leading and coordinating material and human resources in construction process called project management, Quantity surveyor will be able to complete project on time within the budget.

“ Is a quantity surveyor an estimator, contract manager or project manager? The short answer to this question is yes, yes and yes. People from a quantity surveying background may find working environment compatible with any of those roles because the training qualifications acquired from the quantity surveying create the pathways” (Donald Towey , 2012, pp. 110)

It is possible to list about 5 main evolved roles of the quantity surveying profession from the information mentioned above.

1. Client advocate and representative
2. Construction designing and economics
3. Construction planning and procurement
4. Construction administration and management

## 5. Project management

### Emerging roles of Quantity Surveying

Not limiting to discussing about the changes that already has made an impact on the profession, it's better to address about changes which are going to happen in near future to the quantity surveying profession. Due to the latest economic climate over the world, there are very fewer resources available to commence new building projects. But it has become viable with the finding of new ways to handle building project more cost-efficiently by modern quantity surveyors who has given the traditional and contemporary monetary roles.

Whence, future changes of quantity surveying profession seem to be more compulsive and its influence to the construction industry should be more explored by the quantity surveyors. Sustainability, whole life costing and the building information modeling (BIM) are the three main emerging roles of quantity surveying profession.

When it comes to the whole life costing, it is a technique that use intentionally to improve efficiency, sustainability and also it provides clear information to the client whether the project is going to be financially viable or not after built. Calculating the costs of building and the items included for its whole life is called whole life costing assessment. By carrying these assessments prior to any other works which has been taken into count maintenance, operational and demolition costs of the project with the

consideration of the inflation, client will be able to get best value for his money.

The concept of sustainable construction is becoming more significant in the world as we are trying to bring down the environmental pollution and the greenhouse gases globally. By using recycled material, installing innovative natural sourced systems (solar systems) and introducing efficient material, labor and waste management, Sustainability can be admitted to the construction industry.

Building Information Modeling (BIM) compares all details about projects design and its construction and operation process to meet the maximum efficiency at any stage of the project by using a computer generated model. (BIMIWG 2011) Furthermore, capability of identifying number of variations in design and compare them with traditional measures in a second, reduces the workload of the quantity surveyor. Also the changes has being made to quantity surveying profession with BIM is enforced by the UK government as 3D-BIM modeling will be essential component of every project by 2016. (BIMIWG 2011)

## Conclusion

In brief, this report has done a critical discussion on traditional and contemporary roles of quantity surveying, origin and history of the profession, key and core competencies of quantity surveying and also changing, evolved and emerging roles of quantity surveying profession. Due

to the changing nature of client's and the market demand the quantity surveying profession has evolved continuously during recent decades.

Clients not only ask for traditional services but also request for nontraditional services like project management, procurement, construction administration in contemporary built environment. Also there are some emerging aspects like whole life costing assessments, sustainability and BIM that could add more changes to the quantity surveying profession in near future. Therefore, in order to develop their skills and practice Quantity Surveyors should be well aware of these changes and has to adapt to them quickly.