CHAPTER 2:

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter will review past and present researches to identify variables of the research. The review will identify the various dimensions of the respective variables and how past researches were conducted to examine the relationship between these variables. Better understanding of these variables, will enable to chart this research further into research design

2.2 DEFINTITION OF COST OF QUALITY (COQ)

Review of literatures will provide various definitions and classification of quality costs. Terms such as "quality costs", "costs of quality", "economics of quality", "poor quality cost", "price of non conformance", "poor cost of quality", or "cost of poor quality are most commonly presented by different authors through their studies (Kiani *et al.*, 2009). In this paper, costs of quality (COQ) will be used to address quality costs and COQ reporting to reflect the measurement of quality costs.

According to Schiffauerova and Thomson (as cited in Kiani et al., 2009), COQ defined as total of conformance plus non conformance costs, where cost of conformance is the price for prevention and appraisal (detection) of poor quality and cost of non conformance is cost of poor quality caused by internal and external failure of product and service.

American Society of Quality (ASQ) quality cost committee defined COQ as a measure of costs specifically associated with the achievement or non achievement of product or service quality, including all product or service requirements established by the company and its contracts with customer and society (Rodchua, 2009).

C.C.Yang's (2008) study cited definition of COQ by different authors as below:

- Krishnan et al. (2000): costs of quality are '... those costs that are incurred to prevent a shortfall in quality and a failure to meet customer requirements, as well as costs incurred when quality does in fact fail to meet customer requirements'.
- Campanella (1999): quality costs are the difference between costs in the actual situation and costs in the 'ideal' situation (in which no failures occur).
- Chiadamrong (2003): quality costs are difference between the actual cost of a product or service and what the cost could be if the quality was perfect.
- Giakatis et al. (2001): cost of all efforts that seek to ensure that the product meets (or will meet) specified requirements.
- Mukhopadhyay (2004): cost associated with preventing, finding, and correcting defective work.

- Juran (1952, 1989): sum of all costs that would disappear if there were no quality problems'.
- Chen & Tang (1992): Poor-Quality Cost (PQC) system includes cost of inspection and prevention, cost incurred by corrective actions, and cost incurred by imperfect quality.
- Bland et al. (1998):cost of poor quality is the difference between the actual operating cost and what the operating cost would have been if there were no failures in its system and no mistakes by its staff

Ramford and Land (2006) defined COQ as the money spent attempting to achieve a quality level of 100 percent plus the money wasted through failure.

According to Chiadamrong, (2003) total COQ should represent the difference between the actual cost of a product or service and what the cost would be if the quality was perfect.

Total COQ is a comprehensive system and responding to a customer problem only with added internal operations, such as inspection or tests and ignoring other consequences of poor quality could pose danger to the organization (Chiadamrong, 2003).

Laszlo (1997), stated that the quality cost approach is based on the balancing of the cost of assuring quality against the costs associated with problems attributed

to a lack of quality. Quality improvement programs which are effective will minimize the total COQ by balancing the four categories of quality cost: prevention, appraisal, internal and external failures.

As stated by Johnson (1994), COQ programs are most effective when the information is used for identifying corrective action opportunities, presenting concrete information in dollars to management, and evaluating quality program success.

The COQ process should be viewed as a communication mechanism facilitating employees' abilities to perform their jobs more effectively. The successful of COQ program relies on effective employee participation through building trust and confidence where employees must be assured that COQ measurement will be used for system improvement and not against them (Johnson, 1994).

According to Plunket and Dale study, the classification of COQ is necessary for an organization to collect and measure COQ. "Feigenbaum" (1974), classification of quality costs into three categories (prevention, appraisal and failure costs) has been accepted almost universally and is being used widely (as cited in Kiani *et.al.*, 2009). While Juran and Grynna stated that failure costs were further divided into two categories which are internal failure and external failure (Cited in Kiani *et.al.*, 2009)

As cited in (C.C. Yang, 2008), practitioners and researchers followed categorizations of traditional COQ model established by Feigenbaum (1956, 1961) and Masser (1957) in classifying quality costs into three main categories: Prevention, Appraisal, and Failure (the so-called 'PAF model').

These categories were somewhat elaborated in BS 6143 Part 2 (1990) as:

- Prevention cost;
- Appraisal cost;
- Internal failure cost; and
- External failure cost.

This general classification is being widely used by practitioners and researchers (C.C. Yang, 2008) As stated by Campanella, Plunket and Dale (as cited in Sower et.al.,2007) the most commonly accepted typology divides quality costs into prevention,appraisal, internal failure, and external failure costs. This typology is often referred to as the PAF (prevention, appraisal, and failure) and is one of "the most commonly used general cost of quality model in the United States, Great Britain and based on the frequency of reference in the literature, world-wide. The PAF model traces back to the work of Feigenbaum (1956).

Therefore, widely used COQ model developed by Feiqenbaum (also called P-A-F model) has four categories which are prevention, appraisal, internal and external failure costs (Kiani et.al., 2009). The PAF model attempts to achieve an optimum

level of quality by balancing the trade-offs between prevention – appraisal (conformance) and failure (non conformance) costs.

The main premises of model include (Kim and Nakhai, 2008):

- Quality level is determined by conformance to specifications
- As quality level increases , the failure cost decreases at a decreasing rate
- As quality level increases, the prevention appraisal cost increases at an increasing rate
- Total quality is the sum of prevention-appraisal and failure costs
- The optimal quality level is determined by minimizing the firm's total quality cost.

The detailed explanation of four categories of COQ as below (Campanella, 1990;Sower et.al., 2007):

a) Prevention Costs

The costs of all activities specifically designed to prevent poor quality in products and services. This is a proactive to defect prevention rather than defect correction and removes the idea of quality efforts essentially being reactive in efforts to "put out fires". Prevention expenses can be recovered many times over through reduced appraisal and failure costs.

b) Appraisal Costs

The costs associated with measuring, evaluating and auditing product or services to assure conformance to quality standards and performance requirements. Appraisal techniques are used for the verification and validation. These techniques help organization to increase in quality with lower cost.

c) Internal Failure Costs

The costs resulting from products or services not conforming to requirements or customer/user needs (which) occur prior to delivery or shipment to customer.

d) External Failure Costs

The costs resulting from products or services which are not conforming to requirements or customer/user needs (which) occur after delivery or shipment of the product, and during or after furnishing of a service to the customer. Also according to Tsai and Kazaz *et.al* study, external failure includes loss of failure business through customer dissatisfaction (as cited in Kiani *et.al.*, 2009)

Meanwhile Rodchua (2009), uses the same prevention, appraisal and failure (P-A-F) model in her study and described each category of COQ as below:

a) Prevention Costs

Costs associated with quality planning, designing, implementing and managing the quality system; auditing the system; supplier surveys; and process improvements.

b) Appraisal Costs

Costs associated with measuring, evaluating or auditing products and product materials to ensure conformance with quality standards and performance requirements

c) Failure Costs

Costs associated with the production of non conforming product; they can be divided into internal and external. Internal failure costs (IFC) are associated with failures and defects of processes, equipment, products and product materials that fail to meet quality standards or requirements. External failure costs (EFC) are generated by defective products, services and processes during customer use. They include warranties, complaints, replacements or recalls, repairs, poor packaging, handling and customer returns According to Campanella's study (as cited in Ramudhin, 2008), each category of COQ model described as below:

a) Prevention Costs

The costs of all activities specifically designed to prevent poor quality in products or services

b) Appraisal Costs

The costs associated with measuring, evaluating or auditing products or services to assure conformance to quality standards and performance requirement.

c) Failure Costs

The cost resulting from products or services which are not conforming to requirement or customer/user needs. Failure costs are divided into internal and external failure cost categories:

• Internal failure costs

Failure costs occurring prior to delivery or shipment of the product, or the furnishing of a service, to the customer.

• External failure costs

Failure costs occurring after delivery or shipment of the product, and during or after furnishing of a service, to the customer. d) Total Quality Costs

Sum of the above costs (Prevention, appraisal and failure costs). It represent the difference between the actual cost of a product or service and what the reduced cost would be if there were no possibility of substandard service, failure of products, or defects in their manufacture.

Some examples of quality costs in each COQ category are (Roden & Dale, 2001; Ramdeen et.al., 2007;Ramudhin et.al., 2008):

a) Prevention costs

Recruiting, quality audits, supplier assurance, quality training, marketing research, quality engineering and equipment maintenance

b) Appraisal (detection) costs

Quality audits, production control, process acceptance, product acceptance, prototype inspection, inspection of material, inspection of production and continuous supplier verification

c) Internal failure costs

Scrap, rework, retesting, re-inspection, design changes, failure analysis, downtime caused by defects, and downgrading caused by defects d) External failure costs

Product recall, customer service, product liability cost, complaint adjustment, warranty cost, discount due to defects, reputation loss cost and lost sales.

As discussed above, various terms had been used in past researches by different authors to refer COQ. However the meaning, classification and quality costs in each category do not differ very much between different authors.

2.3 IMPORTANCE OF COQ REPORTING

Current rapid technological development and globalization has led many organizations striving for winning formula to gain market and achieve customer satisfactions which is through offering product/services at competitive prices. Price has been an important factor apart from quality to gain customer satisfaction. (Arvaiova, *et al.*, 2009).

According to Arvaiova *et al.* (2009), an ability for an organization to quantify, track and analyze quality related costs or Cost of Quality (COQ) is an important practice since the organization could capitalize the valuable information through COQ to measure the performance of their quality related activities in terms of

monetary factor, identify and prioritize quality improvement activities based on cost impact and to use as cost reduction tool.

Meanwhile, according to Kiani *et.al.* (2009), cost is one of the main drive to achieve quality and COQ reporting links improvement actions with associated costs and customer expectations which will lead to cost reduction with increased benefits in improvement activities. Measuring and reporting of these costs should be considered a critical issue for any manager who aims to achieve competitiveness in the market (Schiffauerova & Thomson, 2006)

Rodchua (2009) stated that, COQ is an effective tool to gain customer satisfaction and profits. More and more enterprises (small, medium and large) are spelling out quality cost requirements from the collection of scrap and rework costs to the most sophisticated COQ program. The total COQ from manufacturing expenses were 8 to 10 percent and 2.64 to 4 percent of sales revenues.

Setijono and Dahlgaard (2008) addressed that COQ reporting shall be based on both producer's and customer's perspective so that the measurements could assess the value of improvement activities and lead to an understanding that efforts in improving product/services will influence the way customers perceive the value of product.

C.C.Yang (2008), identified critical issues for an effective and successful COQ reporting:

- To establish appropriate categorization of various quality costs, and ensure that every item of quality costs is captured;
- To collect and analyze the relevant data thoroughly, and thus effective as well as accurate measurement of all quality-cost.
- To identify potential areas of improvement based on COQ data analysis and to allocate responsibilities for the overall cost.

Sower et. al. (2007) stated that COQ is an input or information provider on quality system of an organization, however the existence of COQ reporting alone will not improve the quality system. The success of COQ reporting implementation relies on how well the COQ reporting is being utilized to improve the quality system.

Ramdeen et.al, (2007) assessed implementation of COQ reporting in a hotel restaurant based in South Florida in USA where the COQ represent 16 and 12 percent of sales in 2004 and 2005 respectively.

The high COQ helped the restaurant quality management team to identify root causes of the COQ problems, reevaluate quality of food and services and takes action to correct them.

COQ reporting should be part of any quality program since the approach is not complicated and provide a good method for identification and measurement of COQ to initiate actions to reduce the COQ (Schiffauerova & Thomson, 2006).

Superville and Gupta (2001) stated that managers must adopt an effective COQ initiative as an integral part of any overall quality program. COQ initiatives translate quality problem into financial terms that are more easily understood by management

Any COQ initiative must identify the activities that produce the quality costs, measure the costs so that they are reportable and understood by management, and those costs will identify potential areas for improvement action that provides the greatest benefits to the company (Superville & Gupta, 2001).

COQ reporting not only reduces costs but also could assist to improve the reliability of quality. Strong relationship exists between total cost of quality and reliability of quality (Kumar & Brittain, 1995)

2.4 COQ ADOPTION

As stated in Arvaiova et al. (2009) the importance and benefits of COQ reporting which has been existence for past four decades has been recognized by many organizations as a cornerstone of quality management practices but the implementation of COQ reporting more prevalent in manufacturing industries.

As pointed out by Schotmiller and Campanella (as cited in Arvaiova *et al.*, 2009) the implementation of COQ reporting is not widespread outside USA and Arvaiova et al. (2009) further added that, there were only seven studies published on COQ reporting between 1995-2007 where two originated from USA, UK, Australia and one from Brazil.

Arvaiova *et al.* (2009) concluded that adoption of COQ reporting among telecommunication organizations were very low where only 3 percent respondents had implemented COQ reporting in their organization.

Main reasons for not implementing COQ program as cited by telecommunication industry organizations were due to their existing costing system (Enterprise Resource Planning) able to monitor and track quality related costs. Therefore quantification and analysis of quality related costs through COQ reporting seems unnecessary (Arvaiova *et al.*, 2009). Second most cited reasons were lack of awareness on concept of COQ. This is quite surprising since the COQ concept has been a common practice since last four decades. Other reasons are COQ perceived as non important measures, lack of top management commitment and due to belief COQ is low in return of investment (Arvaiova *et al.*, 2009).

According to Viger and Anandarajan's study, only half of the companies tracked quality costs (as cited in Sower *et al.* 2007) and this further added by Gupta and Campbell through two surveys where only 30 – 40 percent of companies adopted COQ reporting (as cited in Sower *et al.* 2007).

Sower *et al.* (2007) cited main reasons with clear explanation for organizations not implementing COQ reporting as below:

a) Lack of management support

Most frequent reason given was lack of management support or absence of management interest in tracking such costs. This is because of lack of concern for how much and in what way quality does pay, management philosophy and company culture not supportive of quality costing, the management does not perceive COQ has enough value b) Unfavorable economic condition of organization

Second most reason indicated that company economic conditions contributed to the lack of COQ tracking where the company being a startup company, a growing company with business practice behind the times, a lean company with little overhead, company is too small and downsizing

c) Lack of knowledge on COQ

Explanations included not knowing what elements to include in the cost of quality, lack of knowledge of quality principles from upper management on down throughout the organization and lack of experienced manpower to accomplish the task

d) Lack of adequate accounting and computer systems

Due to lack of tools to collect, organize, filter and report COQ. Accounting system mechanism in financial reporting system not compatible for tracking COQ

e) Not benefited through COQ

Last reason for not tracking COQ was the respondents did not see the benefit of COQ or they needed to focus on areas which they perceive to be more important Pusglove and Dale study has identified reasons for organizations for not adopting COQ reporting as below (as cited in Sower, *et al.* 2007):

- Lack of understanding of the concept and principles of quality costing amongst the management team;
- An acute lack of information and data; and
- The profitable nature of the business

Meanwhile Wheldon and Ross indicated reasons for not tracking COQ in Australia from accounting perceptive (as cited in Sower et al., 2007):

- quality reporting was seen to be the realm of the quality manager,
 who focuses on non financial measures of quality
- quality managers generally lack of accounting knowledge
- the concept of COQ has only been introduced in relatively recent times into the accounting discipline; and
- Changes to accounting systems will always tend to lag behind technical innovations such as quality management

In an early COQ study by Oliver and Qu (1999), revealed that COQ adoption rate among Australian firms were 26 percent. Much more earlier studies (as cited in Oliver and Qu, 1999), found out COQ adoption rate as: Roche (1981) 39%; Plunkett & Dale (1984) 50%; Duncalf & Dale (1985) 32%; and Ross (1993) 47.5%.

Main reasons for not adopting COQ reporting by organizations as identified by Oliver and Qu (1999) are lack of support/ resource for collecting quality related costs, problem with creating parallel register for collecting quality costs, too much pressure placed on employees and other managers, quality is part of company culture and COQ reporting in not necessary and due to manufacturing complexity.

2.5 DIFFICULTIES IN COQ REPORTING

Based on study by Arvaiova *et al.* (2009), one of difficulties faced by organizations during setting up of COQ reporting system was to identify new quality improvement opportunities.

According to Rodchua (2009), lack of cooperation from senior leadership team, management's negative attitude, difficulty in collecting quality cost data, hidden costs and lack of understanding of cost of quality were main difficulties experienced by organizations during implementation of COQ reporting.

Meanwhile Ramford and Land (2006) stated that availability of information for COQ data collection is the major hurdle for implementing COQ reporting where some information are not available on systems and assumptions has to be made.

Meanwhile, Eldrige *et al.*(2006), summarized some difficulties which prevent organizations from implementing COQ reporting as below:

- Lack of understanding and/or awareness of the concept and principles of quality costing among the management team;
- Unfavorable company culture;
- An acute lack of information and data;
- The confusion between levels of the organizational hierarchy over the terms used in quality costing; and
- Inefficiency of the accounting information system, which prevents firms from providing quality cost data.

According to Dale and Wan (2002), successful implementation of COQ system largely dependent on the employees' attitudes and company culture where employee attitudes refer to their interest and involvement towards COQ related activities. On top of that, COQ implementation without employee interests and participation will not achieve the expected result (Dale & Wan, 2002) Dale and Wan, (2002), also mentioned that during implementation, the COQ system shall be integrated into existing system activities rather than creating new or sophisticated COQ system based on formal guidelines. For an example, departmental COQ approach could be integrated into the monthly departmental reporting system, giving supervisors and managers a clear indication of the possible improvement in their respective areas.

Dale and Wan (2002), stressed that COQ information alone will not solve the problem, but just as a messenger to trigger improvement actions. Availability of time for employee participation in COQ related activities during implementation has been one of the difficulties due to clashes with operation schedule.

Roden and Dale, (2001), summarized difficulties in collecting COQ data faced by an engineering firm as below:

- Firm culture and employee attitudes towards COQ system is not conducive
- Lack of information and accountability makes it difficult to collect COQ data
- Complexity in existing accounting system which unable to sort data according to various division also make it difficult to measure COQ data

Based on Gupta and Campbell study, the success of COQ program requires that COQ program (as cited in Sower, et al., 2007):

- Supports the corporate strategy
- Is fully integrated with the operational strategy
- Has top management support and involvement
- Treats the source of quality problems and not the symptoms
- Is based on an accurately calculated cost of quality
- Is tied to reward and incentive programs
- Is long range in nature; and
- Is well thought out and well planned

Meanwhile Shepherd's study cited reasons for COQ reporting failure (as cited in Sower, et al., 2007):

- Limited correlation between the accounting/finance numbers and those reported as a result of COQ;
- Limited (or no) involvement of finance in creating the numbers;
- The impact of quality failure on administrative/overhead and selling costs was not well understood;
- The impact of process failure was often ignored, when this did not result in product failures (e.g. down time from lack of quality maintenance);
- no accounting for opportunity costs, such as loss of market share;

- a lack of accounting for working capital costs, such as excess levels of inventory caused by quality problems; and
- basing COQ on costing variances so that specific issues, such as increases in scrap rates, were often hidden by adjustments to the standard usage level.

According to Bamford and Land (2006), limitations in implementing COQ reporting was mainly due to in availability of required information and inadequate expertise and resources to gather and analyze such information.

Some guidelines for managers on COQ reporting (Bamford & Land (2006):

- Senior management commitment is vital for success of COQ project and must be in place before it begins
- Use existing systems instead of trying to invent new methods for COQ collection
- If there is no way to measure the cost, make an assumption provided accepted by company
- Link COQ to other measures which gives more relevance and impact
- Continually improve the COQ report

2.6 OBJECTIVES OF COQ REPORTING

Arvaiova *et al.*, (2009) has stated four main objectives of the organizations to implement COQ reporting which are to increase product/service quality, achieve significant cost reductions, prioritize improvement actions with the highest potential payoff and increase the company competitiveness.

Ramford and Land, (2006) outlines objectives of a footwear company to implement COQ reporting as below:

- Improve overall performance and make cost savings
- Identify potential areas for improvement through failure cost
- Raise overall level of quality awareness
- Measure financial impact of improvement activities
- in terms of cost saving, identify potential areas for improvement

Once the COQ reporting implemented, the COQ information used to as an indicator to reduce rejection rates. Based on COQ information, management focuses their attentions to initiate improvement action to counter the rejection rates (Ramford & Land, 2006).

Apart from that, information through COQ reporting also used for radical decision making to identify potential areas for improvement based on financial significance and also acted as stimulus to solve problems and launch improvement activities (Ramford & Land, 2006).

Dale and Wan (2002) carried out an evaluation on COQ reporting method in a flavorings manufacturing company and summarized company's interest in implementing COQ as below:

- due to low profits in sales turnover which indicated the importance to identify suitable cost savings to ensure the health of the business
- lack of in process measurement and control in production activities resulted in high rejection rates and management felt that use of COQ measurement would reveal the high costs incurred and facilitate improvement production process
- to raise level of quality level awareness by bringing to people's attention the financial significance of non value adding activities
- COQ seen as one means of measuring the success of the company's improvement efforts
- Need to identify the non value adding activities which result from external customer complaints

Some of the main objectives of organizations to implement COQ reporting as identified by Oliver & Qu (1999) are to identify high cost problem areas, improve overall quality, measure effectiveness of quality system, measure of improvement of performance against costs and strengthen the motivation of employees to work towards quality goals.

2.7 BENEFITS OF COQ REPORTING

Kiani *et al.* (2009), addressed that COQ reporting has effect on customer satisfaction where increasing in prevention costs and decreasing of external failure costs will directly improve the level of customer satisfaction. This shows that investing in activities such as quality audits, supplier assurance and other prevention activities is necessary to minimize the internal and external failure costs. The measurement of COQ reporting will give direction to the prevention or improvement activities so that identified external and internal failure costs could be minimized.

According to Kim and Nakhai (2008), the COQ measurement is very effective in identifying the value of quality improvement programs, where firms with highly effective quality improvement programs will have their quality level increasing through increasing improvement cost strategy over the long run. Firms with less effective quality improvement programs, the decreasing improvement cost strategy delivers the lowest total quality level.

Ramudhin *et al.*, (2008), stated that when COQ measurement integrated into supply chain model (suppliers), the integrated model able to expose actual overall operation and eventually produces the lowest overall cost. At the same time, integrated model enables suppliers to give attention on quality as well as cost aspect.

According to C.C.Yang, (2008) accurate and complete COQ reporting has many potentials which are identifying potential areas for improvement, enables control of overall quality and raising organizations competitive advantage through higher quality and lower costs.

Meanwhile Sower *et al.* (2007) found out that total COQ decreased over time for organizations with COQ reporting but the magnitude of decrease diminishes the longer the COQ reporting has been in place.

Ramdeen *et al.* (2007) outlined three strategic benefits through COQ reporting in hotel restaurant which are identification of potential areas for improvement, evaluation of existing operations to ensure the meeting of specific standards and failure costs (internal and external) identification enable the restaurant quality management to conduct overall assessment of food and service quality Based on Bottorff's study, advantages of COQ reporting as below (as cited in Roden and Dale (2000):

- Quality data are more readily accepted because they are gathered and analyzed with the accounting department in a team environment
- The COQ system aids in the evaluation of capital investment alternatives
- The COQ system helps justify and steer investments in prevention activities, which lowers quality costs. It also helps justify and steer other quality improvement efforts and investments
- The COQ system leads to the development of a more advanced performance measure in the areas of customer satisfaction, production and design to better target indirect quality costs
- Return on investment and sales are improved while reducing costs

According to Johnson (1994), COQ reporting enable personnel to use the information for identifying corrective action opportunities, presenting concrete information to management (using dollars, a language management understands), and evaluating improvement programs success.

COQ information should be viewed as a means of communication that will help personnel perform their jobs more effectively and, according to proponents, any serious attempt to deal with quality must consider the COQ (Johnson, 1994).

The cost information can be used to track whether the organization is improving and as a vehicle for identifying corrective action opportunities, especially those with the greatest potential payoff. A COQ reporting also helps to identify where problems exists. Without a COQ measurement organizations, often do not even recognize that quality problem exists (Johnson, 1994).

2.8 COQ REPORTING IN MALAYSIA

Despite COQ reporting has been regarded has a cornerstone of quality management practices, review on researches in Malaysia in the area of quality management revealed that none of studies had investigated the adoption or implementation of COQ reporting among organizations in Malaysia.

Most of the studies in Malaysia focused on total quality management (TQM) such as exploring TQM practices among manufacturing companies, by Agus and Abdullah (2000); survey of TQM practices among electronic and electric industry by Eng & Yusof (2003); TQM practices in ISO 9001:2000 companies by Arumugam *et al.* (2008) and TQM and customer satisfaction among service sector in Malaysia by Wen Yi Sit *et al.* (2009).

Other few studies were focused in measuring quality performance such as impact of ISO 9001:2000 registration on company performance by Naser *et al.* (2004).

Therefore this will be first research in Malaysia to investigate the COQ reporting implementation among organizations in Malaysia. This paper will provide useful insight on various issues of COQ reporting among organizations in Malaysia such as adoption rate, objectives and difficulties during implementation of COQ reporting and expected as well as achieved benefits through COQ reporting.