Quality as a Tool to Achieve Competitive Advantage in the Private Health Industry for the Oil and Gas Sector of Southern Iraq

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Abstract: Iraqi is an Arabic Middle Eastern country which has largely been isolated from the world due to years of conflict and political turmoil. The results led to Iraq not having full knowledge and exposure to international business practices including that of quality being used as competitive advantages in business practices. Previous work by Iraqi academics on the impact of international QMS (Quality Management System) practices have deduced that there were many barriers to implementation of international QMS standards such as ISO 9001, whereas the benefits of international proficient QMS on the international arena are clearly demonstrated by international academics and modern business practices. A major industry in Iraq is that of oil and gas production which the hub of this activity is situated in southern Iraq (Basra). Recently there has been a huge influx of international oil & gas companies and its associated support companies into Iraq. The oil and gas industry is regarded as a very regulated industry which clearly has high standards for quality, health and safety practices. Due to the lack of government medical infrastructure in the region, oil industry organizations have sought to enlist the services of private international and sometimes local medical companies to facilitate their medical needs. This has resulted in many private medical organizations offering services, which requires these companies to acquire competitive advantages in order to attract oil and gas clients and stay competitive.

This dissertation researched the dynamics of quality in achieving competitive advantages for the niche sector and the importance it plays with oil and gas industry organizations in choosing their medical providers in theatre. It uncovered a lack of understanding of international quality philosophy and practices subsequently highlighting a clear need for training in the topic. Research demonstrated the clear need for proficient internationally benchmarked QMS in private medical companies to achieve competitive advantages in theatre whilst also discussing the potential benefits of proficient QMS for organizations seeking to operate in theatre.

1. Introduction

1.1: Background

Iraq is developing country struggling from past years of isolation as a result of conflict and embargos as put forward by Pfanner (2012). Even currently in 2014 one notices an increase in hostile activities by armed groups which threatens to plague Iraq in another series of isolation by international business organizations due to uncertainty regarding security in the country.

This isolation has resulted in Iraq falling behind in the development of international business practices such as quality, which has subsequently resulted Iraqi companies not being able to benefit from using business imperatives such as quality to achieve competitive advantages in industry (Al-Najjar & Jawad, 2011).

A major factor which has resulted in the attraction of business to Iraq is the presence of huge crude oil resources in Iraq as described by Birdsall & Subramanian (2004). This has seen many international oil companies willing to accept certain risk levels for security and noticeable low standard of international business practice. These international oil companies (IOC’s) and the associated oil service companies enter Iraq in the hope of attaining high profits however, they are often faced with perceived substandard service quality delivery of local Iraqi contractors as research in this paper will show.

Internationally, organizations use a number of different quality management systems (QMS) to be able to meet the requirements of customers satisfactorily in cost effective ways. However, the concept of investment into QMS in Iraq has seen to be met with a number of barriers (Al-Najjar & Jawad, 2011). In their research, it was found that only few Iraqi companies had the ability to significantly boast proficiency in QMS which are commonly demonstrated by the companies attaining ISO 9001 certification. However, it was also found by research conducted in this study that the Iraqi companies had a general less understanding of QMS and other quality
management philosophies in its entirety. Many Iraqi organizations also having perceived negative beliefs of QMS (Al-Najjar & Jawad, 2011). It is highlighted that the amount of availability of QMS educational facilities is incredibly low in Iraq as advised by Al-Najjar & Jawad (2011) and this can also be attributed to lack of understanding of other QMS models such as Total Quality Management (TQM) and European Foundation of Quality Management (EFQM). This has subsequently led to Iraq having the among the least amount of ISO certified organizations amongst the Arab- Middle Eastern and North African regions.

The table below shows the estimated amounts of Arab- Middle Eastern and North African countries which can demonstrate a proficient use of international QMS as according to research by (Al-Najjar & Jawad, 2011). A more in-depth research project into this will need to be covered for reasons amounting to this however, that will exceed the focus of this research project.

Table 1.1: Amount of ISO 9001 certified companies in specific countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated ISO 9001 Certified Companies</th>
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<tbody>
<tr>
<td>United Arab Emirates</td>
<td>3500 – 3000</td>
</tr>
<tr>
<td>Egypt</td>
<td>1500 – 2000</td>
</tr>
<tr>
<td>Kingdom Saudi Arabia</td>
<td>1000 – 500</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1000 – 500</td>
</tr>
<tr>
<td>Oman</td>
<td>500</td>
</tr>
<tr>
<td>Morocco</td>
<td>500</td>
</tr>
<tr>
<td>Jordan</td>
<td>500&gt;</td>
</tr>
<tr>
<td>Syria</td>
<td>500&gt;</td>
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<tr>
<td>Kuwait</td>
<td>500&gt;</td>
</tr>
<tr>
<td>Lebanon</td>
<td>500&gt;</td>
</tr>
<tr>
<td>Bahrain</td>
<td>500&gt;</td>
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<tr>
<td>Qatar</td>
<td>500&gt;</td>
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<tr>
<td>Algeria</td>
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<tr>
<td>Sudan</td>
<td>500&gt;</td>
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<tr>
<td>Libya</td>
<td>500&gt;</td>
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<tr>
<td>Iraq</td>
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</tr>
</tbody>
</table>

Internationally quality has seen to benefit organizations which can demonstrate high levels of organizational quality which, as discussed, has a primary customer focus and is centred around consistently meeting the needs of customers satisfactorily in cost effective ways. The central process in this is that of the PDCA (Plan - Do - Check- Act) cycle which requires the organization to ensure consistent proficient planning, proficient execution of actions, continual monitoring, ability to react to findings of the monitoring system and as the last step, ensure continual improvements in all operations as Dhalgaard- Park (2004, pp. 494- 496) discuss. However, as mentioned, the use of any formidable QMS in Iraq companies has proven to be challenging.

The international oil and gas companies have a number of regulations, specifications and recommendations with regards to health care being afforded to oil and gas workers. Upon perusal it can be deduced that the oil and gas industry advocates a high quality standard of health care systems for their workers regardless of the area in which they are working as advised by the International Association of Oil and Gas Producers (IAOGP) (2011). A central theme of this doctrine is that of continual improvements and dictates certain key performance dynamics which should be incorporated in a health care system. As discussed earlier, a very important dynamic of quality is that of meeting customer specifications, hence, it is deduced that the health system requirements for the oil and gas sector are clearly put forward by IAOGP (2011) and will need to be met satisfactorily for any medical provider wishing to succeed in providing medical service for the industry. Thus, from consideration of the above, it would be clear that for an institution seeking to provide health care for the oil and gas theatre, that considerable efforts would be made to invest in quality and meet the requirements satisfactorily. This can be understood to be in the interest of creating longevity for client provider relations. If this is done consistently, it would create potential competitive advantages for relevant organizations seeking to operate in the sector (Salvatore, 2012).

1.2: Aims of Paper

Al-Najjar & Jawad (2011) have advised as seen above, that specifically in Iraq, the use of internationally accepted quality standards are low. However, a more specific perusal of this is needed which could require this area to be assessed being industry specific, which is a key aim in this project. As noted, Iraq is a developing country which would need to promote economic growth and stability, taking into consideration that the oil and gas sector is currently the biggest and most developing sector in Iraq. Birdsal & Subramanian (2004) have postulated that there is a need for Iraq, which has considerable oil reserves to improve development of performance in oil operations and subsequent organizational quality standards in order to reap the true benefits of their operations and improve economic status of the country and its people. As discussed above, this would have clear benefits for Iraqi and international organizations operating in theatre who embrace international quality standards, with the primary potential benefit being that these organizations can then achieve competitive advantages in the sector.
Dividing the large oil and gas sector into even further small denominations, a major niche area which is largely important and concentrated on in the oil and gas sector is that of management of health care (IAOGP, 2011). As discussed in this paper, this will require relevant company organizations to demonstrate specific quality dynamics in relation to health care including internationally recognised corporate organization quality dynamics in order for a medical company operating in this industry to achieve desirable quality levels. This is in the hope of achieving a potential competitive advantage over their competitors.

1.3: Research Objectives

The primary objectives of this paper and the research compiled are to explore the concept of quality practices internationally and establish its relevance to the private medical industry within the oil and gas industry for southern Iraq, which is the central point for most oil and gas production within Iraq. The focus will be concentrating on the southern region of the Iraqi oil sector. It must be remembered that Iraq is a multicultural country in which different cultures exists regionally, hence this can effect the overall operations of any sector due to cultural backgrounds and beliefs. Thus, for the purposes of this, the specific region which will be concentrated on is that of the southern oil fields (Basra area) which are all governed by one government entity as opposed to other areas. Other areas can be compared and contrasted to in further research which exceeds the parameters of this work.

1.4: Research Questions

It has been identified that the study and research objectives will allow for the following important questions to be asked and understood

a) What are the factors which define a quality service for private health care organizations in oil and gas sector of southern Iraq?

b) What actually constitutes a quality private medical service desired by oil and gas companies in southern Iraq?

c) Will reaching these quality standards allow for competitive advantages to be obtained by relevant organizations?

Internationally, quality frameworks and certifications such as ISO 9001: 2008 standards are being used in ever increasing occurrence and becoming largely regarded as international criteria to assess organizational quality standards and can indirectly relate to organizational competitiveness (Nair & Prajogo, 2009). Nabitz, Klazinga and Walburg (2000, p. 191) also highlight the potential beneficial use of the European Foundation Quality Management (EFQM) module as a base quality module in health care internationally, as well as other resources referring and demonstrating to the use of other recognized modules for quality in organizations.

This study will allow for this to be assessed specifically to the Iraqi sector for private health care in the oil and gas industry comparing its influences with both Iraqi national companies and international companies operating in theatre. As quality is developing as a key strategic tool to be used by many organizations to achieve competitive advantages internationally as discussed above and highlighted, the paragraphs which follow will also assess the relevance of these trends to the specific sector of private health care for southern Iraq's oil and gas industry. Dynamics of how quality has developed and been utilised positively in international organisations as Freiesleben (2009), Yong & Wilkinson (2002) and Dhalgaard- Park (2011) discuss, will be assessed for relevance in the specific sector for which is concerned in the paper. Recommendations will be put forward as to how quality can be achieved in theatre if organizations and industry have no experience in quality as advised by Calingo (1996) after analysis of relevant research.

1.5: Feasibility of project

As research by Al-Najjar & Jawad (2011) have advised that in Iraq the adherence to international quality standards are low, it is put forward that there is a need for further investigation into this dynamics especially with the influences of international company’s industries and their practices. Birdsall & Subramanian (2004) also advise that there exists a clear need for countries which are rich in resources such as crude oil to develop their levels of organisational quality and performance in order to establish significant economic growth stimulated by the involvement of international companies. The use of quality to be used as competitive advantage for the intended industry will be assessed and analysed as it is seen in trends internationally. This will also allow for relevant organizations in the specific theatre to learn to orientate their strategic organizational business practices in attempts to improve customer delivery, promote longevity and allow for organizations in relevant sector to potentially gain from learning from international quality practices.

As the International Association of Oil and Gas producers (2011) postulated that all companies in the oil and gas sector need to ensure that their...
workers have access to health systems which possess the highest standards in relation to quality health care, at present no research has been made available to ascertain if this has been accomplished within the specific sector for the southern Iraq oil and gas industry. Hence, this paper will allow for the research conducted to ascertain as to whether this has been achieved with regards to the relevant role players in sector and also allow for companies operating in this niche sector to understand how best to achieve competitive advantage for the sector by using quality as an organizational strategic tool. The research conducted will allow for industry stakeholders to gauge the following:

a) Understanding the strategic organizational objectives which will have to be met for a private health service to be deemed to provide a quality service in the oil and gas industry of southern Iraq.

b) Can international quality frameworks such as ISO 9001 & EFQM including other frameworks assist in achieving quality for the concerned sector thereby assisting in creating organizational competitive advantages?

In summary the project has also been designed to meet the below objectives for organizational strategic planning for companies concerned in the sector to use in the following ways:

a) Ascertain the components and meaning of quality for private medical care for the sector and area,

b) Determine what quality means to both oil and gas companies and the private medical companies offering the service in Iraq and as to whether this is in line with international practices and understanding,

c) Potential to assist relevant Iraqi small and medium enterprises (SME’s) in understanding what may be required to do business with international companies in theatre, thereby creating an environment of organizational and continual learning for organizations especially Iraqi SME’s.

2. Literature Review

2.1: International Business Quality Dynamic

The influence of quality in organizations are resulting in many organizations around the world to benchmark on quality management theories, principles and practices such as the ISO 9001 series for quality management, European Foundation Quality Management (EFQM), Total Quality Management (TQM) or other widely published quality models. This resulted in wide spread demand for organizations to be certified according to these type of quality standard (Heizer & Render, 2009). Nair & Prajogo (2009) highlight that over recent past years there has been a significant increase in the amount enterprises, in an ever increasing variation of countries, in which quality frameworks such as the ISO 9001 framework have become part of the business processes and also formed many countries national standards on quality. Al- Najjar & Jawad (2011) discuss the influence of a quality management framework in the country of Iraq which can be regarded as a developing nation and one in which formal quality standards still need to be determined. With quality being ever increasing in its usage by organizational business strategists in the aim of achieving competitive advantages, it is suggested that Iraq business can benchmark and learn from these international practices especially in the specific Iraqi business sector of private health intended for the oil and gas sector of southern Iraq.

The research will make reference to internationally accepted quality dynamics for organizations in the international arena, analyse current and propose new dynamics for quality in a specific sector in Iraq which would have great potential effort to benefit the socio economic status for Iraq. To be able to understand the influence of quality in international business organizations especially in the interest of achieving organizational competitive advantage, there will be reflection on accepted business and academic quality dynamics which will be discussed in the following sections of this work. The relevance of these international practices will then be demonstrated for its significance in the concerned industry using this information to apply to the specific industry and theatre which is being concentrated on for in this study.

2.2: What is Organizational Competitive Advantage?

According to Singh (2012), competitive advantage can be seen to be the dynamics leading to a organization achieving a clear advantage over the organization’s competitors. This is often highlighted as being possible by using certain quality imperatives in the organization’s operational structures and philosophies. Singh (2012, p.19) postulates that almost synonymous with the term organizational competitive advantage is that of organizational quality which will be discussed in the sections which follow. It must be understood that simple benefits of organizational competitive advantage is that the possibility exists with the company which has achieved clear competitive advantage to increase profitability by reducing wastage, increasing cost of services or products and increase value to the customer for the goods or
services being tendered for purchase (Singh, 2012). Singh (2012, p. 19) highlights that market dominance can be established by a business organization if it is deemed by the market shareholders (i.e. the customers) that goods or service being sold are in fact that of a high value of quality. Hence this aid in signifying that the good or service is more reliable, cost effective and able to meet customer satisfaction at higher levels than that of similar services or goods being offered by alternate organizations.

2.3: What is Quality Management?

Yong & Wilkinson (2002) advise that quality management in an organizations can have a number of different dimensions, however the main dimensions of what is required in a quality management system include the dimensions of quality being excellence, quality being value, quality being conformance to specifications and quality being the ability to meet and exceed the specifications of the customer.

Yong & Wilkinson (2002, pp.101-104) discuss these dimensions mentioned above which are summarised so as to understand the background to quality management in the international arena. Quality as an excellence regards the impression of a service or product being that of a particular high standard. Yong & Wilkinson (2002, p. 102) further advise that many interpretations can exist in the market in this regard especially in relation to costs involved. A general impression which exists is that a higher cost will be associated to the product if it is of a higher quality. This also touches on the next dimension which of quality being value which is concerned with cost of products and services being afforded to the market.

In general terms, market players can decide to either invest in purchasing the higher quality products which are often more expensive or buy cheaper product due to budget constraints- taking the knowledge that cheaper may impact on quality. These dynamics and philosophies, through research, will be investigated perusing these parameters to determine specifically if relevant role players involved in the private health care of the southern oil and gas sector of Iraq places an emphasis on quality or is emphasis based solely on budgetary constraints- as these dynamics can greatly influence the competitiveness of the provider. International research points to the clear advantages of high quality standards for organizations to achieve competitive advantages, however, its relevance in the specific sector being concentrated will need to be established.

Yong & Wilkinson (2002) also point out that it must be understood that a simple statement of the level of quality of a product can not necessarily be the same definition which exists for all customers in the market. This is also a reason as to why this research will only be concentrating on the private medical providers servicing the oil and gas sector for southern Iraq, as this can be seen to be niche sector and the reasons for this will be discussed later in this paper. Hence, the data associated with this project will also seek to identify what exactly constitutes a high quality of private health services for the niche sector of oil and gas companies operating in southern Iraq.

This follows suit into the dimension of conformance to customer specification and deals with the standards quality for health services in southern Iraq’s oil and gas sector. As will be highlighted later in this chapter, the oil and gas sector does have relevant specifications, standards and recommendations regarding the provision of health services to employees of the sector. Hence, for a medical service to be deemed one which is of high quality for the specific sector, it is essential that the health service meets the relevant specifications, standards and recommendations needed by the sector as also implied in generality by Yong & Wilkinson (2002) with regards to quality in organizations. The dimension of the service being able to meet and exceed specifications will also be concerned in this regard with the understanding that quality does also possess the understanding of continual improvement in product and service to the customer.

Through research conducted and analysed, deductions will be put forward relating to the significance of the latter 2 dimensions discussed above with regards to quality for the specific sector, and its relevance in assisting relevant companies in achieving competitive advantage in the specific sector being concentrated on.

2.4: International Corporate Quest for Quality

Freiesleben (2009, p. 1263) puts forward that quality can have direct impacts on profitability of any organization keeping in mind the principles that quality is often regarded as a way in which a service or business entities meets the demands of their customers satisfactorily and in cost effective ways. This thereby aids in promoting longevity in client / provider relationship and hence, promoting longevity for a corporate entities to exist in industry as highlighted by Both Salvatore (2012) and Oakland (2003). In the international arena it has also been put forward by Calingo (1996, p.20) that a commonality which exists in most profitable
and successful companies is that of focus on quality, hence sees the impact of focusing on quality internationally in organizations.

Calingo (1996, p. 20) strongly postulates that business organizations which do not embrace the influence of quality in their operations and to gauge quality as a measure to assess corporate success in its efforts, will probably fall behind their competitors in the future of international business. In relation to this Calingo (1996, p. 20) has put forward that quality has gained the form of generating new perspectives and dynamics to the concept of quality in business and in them reaching competitive advantages. These perspectives include: 1) Organizations which embrace quality have to ensure that continual market research is done as this ensures that customers perceptions and expectations are understood whilst also assessing the works of competitors. 2) Initial prices of product are to be viewed in lieu of life cycle costs and not as a stand alone dynamic. 3) Customer complaints can be used positively instead of negatively as it can be used to determine information as to what makes customers unhappy about delivery or service or product. 4) In determination of organizational success, the dynamics of organizational profitability and effectiveness can not be viewed in isolation in not determining customer loyalty to product / service and the organization providing the product/service. 5) Continual steps, time and investment need to be taken by business entities in that to ensure competitive actions on quality. 6) Adherence to continual quality actions and philosophies should be regarded as a more formidable strategy than opposed to just submitting and complying with specified quality outcomes. In addition to this it is imperative that quality strategies are introduced to an organization from holistic organization wide approach ensuring that all facets of the organization are made aware of the quality strategies and are aware of how to meet them satisfactorily (Calingo, 1996).

In order for organizations to meet their quest for quality adequately, it is suggested that the implementation of quality strategies in the organization are led from senior management downwards towards the lower ranks. Calingo (1996, pp.22- 23) strongly postulates that for quality frameworks to be integrated into quality strategies for an organization, then the following objectives should be met in the planning phase. This includes: a) continual quality improvement being led from the top down. i.e. from senior management to the lower ranks of employees, b) increased responsiveness in the supply and development chains to ensure that the highest levels of quality are met at all levels thereby reducing the chances of product/service defect, c) ability to understand and adapt to customer needs, d) ability to reduce cost by reducing defects thereby reducing chances of product/service wastage and in essence improving on the quality of the product.

The need for adequate planning for the above is also paramount for the success of the entire quality implementation package as suggested by Calingo (1996, p. 23). In this regard it is mandatory for the quality strategies to fulfil the below requirements in order to be successful in the implementation and integration of quality in an organization. These include: a) to have quality dynamics as being an integral part of the corporate plan b) the quality strategies are to be included in high detail as part of the corporate plan and there is no chances of differences to be evident in the corporate/organization strategic plans including the relevant quality plans. Hence, it can be seen that for the implementation of quality in an organization to be successful, quality actually becomes the central point to be included in everything that the organization does and plans for (Calingo, 1996).

For this phase to be successful in organizations it is also necessary for the quality programmes to have personnel who are suitably trained to provide insight into quality perspectives, to provide support in understanding and carrying out the quality and strategic goals and to review the implementation process for quality in the organization (Calingo, 1996). It is seen to be very essential for companies to invest and spend time in challenging their operations to promote quality in organizations as its is agreed by many business consultants and business academics that that high quality in the organization will place the organization in a very positive position in the market place. This thereby enables such an organization to sustain a formidable corporate advantage over competitors. However, it can also be argued that quality should not just be seen as a mere means that an organization employs to sustain competitive advantage but rather understood to be a degree of continual improvement in excellence in an organization accomplishing its tasks, satisfying the needs for the customer whilst at the same time proving and implementing systems to be cost effective both internally and externally (Calingo, 1996).

2.5: Quality Management Systems in International Organizations

According to Dhalgaard -Park (2004) for many years organizations have utilised some form of quality management system to handle and provide a framework for quality imperatives in the
organization. This provides the opportunity for quality practitioners in the organization to benchmark and subsequently streamline processes in order to orientate and steer their respective organizations to be in-line with best quality practices in order to attain industry competitive advantages over competitors.

Dhalgaard- Park (2004, pp. 494-496) reflect on the use of Total Quality Management (TQM) and other quality frame works such as Six Sigma, Business Excellence etc on its influence in international business practices within international organizations to attain high quality standards and achieve competitive advantage through quality. It has been established that for the last quarter of a century, TQM has been seen to be the most dominant approach to organizational quality practices, however, the new millennium has also seen the introduction of terminology such as Six Sigma, ISO 9001, Business Excellence etc to enter the realm of organizational business practices as Dhalgaard- Park (2004- pp. 494- 495) advise. The common denominator that is seen in this is that organizations have seen the basic need for quality frameworks to be used in its management systems of international organizations. The main focus in this will be on achieving the competitive advantage in the organization as highlighted earlier.

According to Dhalgaard- Park (2004, pp. 494- 496) TQM revolves around the quality wheel principle in which the PDCA (Plan - Do- Check- Act) philosophy are to be incorporated in all work practices in the organization, and as discussed earlier, can have a direct impact on creating a competitive advantage for the organization through the use of quality. All other quality management systems do as well include some relevance to the TQM module as mentioned above with the inclusion of continual improvement to be incorporated as part of the strategy. The continual improvement facet thereby allows for continual market research to take place and for organizations to actively attempt to improve on already existing standards. If this is performed adequately, one will find that organizations continually understand the needs of the customer and market and thereby becoming able to satisfy the needs of the customer satisfactorily whilst still being able to be in touch with the trends of the market for the specific industry in which the organization works. Hence, competitive advantage is then easily understood to be beneficial with an organization who demonstrates quality as opposed to an organization which does not invest in quality at all (Dhalgaard- Park, 2004).

There does exist five core principles which every organizational quality management system requires to operate which will also be assessed later to see for its relevance in the specific Iraqi sector concerned. This can then also be used to assess for relevance for achieving competitive advantage in Iraq for the sector specifically intended for this research.

According to Dhalgaard- Park (2004, p. 496) the five principles which are needed for any organizational quality management system or TQM are a) the commitment of management of the organization for quality, b) primary focus on customer satisfaction and the work operations of the organization’s employees, c) methods for continual improvements in organizations service delivery or production of product, d) level of participation of everyone in the organization to quality dynamics and e) being able to measure the impacts of quality. Through research findings relating to the specific industry in Iraq, this will demonstrate the impacts of this theory to quality and its subsequent competitive advantage for industries in the relevant sector in later sections which follow.

2.6: Implementation of Quality Management Systems in International Organizations

As mentioned earlier, there exists a number of different quality management systems which organizations can choose from in order to attain quality in organizations operating in the international arena. ISO 9001, EFQM, TQM, etc are all examples of quality management systems which each attract a number of compliments and criticism from academics and business consultants. A major criticism of these philosophies is that after successful theoretical implementation by an organization of a specific type of QMS, some organizations report that there has been no benefit to creating competitive advantages or increase in profitability margins by these organizations as advised by Dhalgaard- Park (2004). Through research into relevant organizations and evaluation of accredited academics resources, there will be highlights for possible reasons and impacts to this for the specific area and industry being concentrated on for research in this work.

Garengo & Biazzo (2012) discuss some of the challenges of integrating QMS into organizational operating systems creating an integrated management system (IMS) framework and highlights this phenomena with the use of the ISO 9001 system. Nair & Prajogo (2009) in their work, investigate the potential reasons as to why ISO 9001 certification is sought for in companies and mention that the ISO 9001 certification for quality management creates a presumption that an organization which can demonstrate an ISO 9001
certificate probably has reached high levels of organizational quality. In the Iraqi perspective, Al-Najjar & Jawad (2011, pp. 118-132) indicate that there is a desire for organizations within Iraq to achieve ISO 9001 certification in efforts to attain and secure further business whilst also attaining competitive advantages over their competitors. The parameters and specific barriers to this in the Iraqi theatre and in relation to the specific industry being concentrated on will be discussed in later sections. It is deemed clearly appropriate and necessary for the reader to first understand the international trends to quality integration in organizations to then be able to establish relevance of the information to the specific industry sector in Iraq. This will then allow for possible adaptation of information for use by interested parties or for the potential for use in future research projects.

The successful implementation of a QMS in any organization internationally, including Iraq, will require all aspects of the QMS to be understood and supported by all levels of the organization, and working in unison to achieve the outcomes and objectives of the QMS (Garengo & Biazzo, 2012). Garengo & Biazzo (2012, p. 4546) refer to this concept as the 'Internalization', which basically ensures that all the process and strategic decisions of the organization are made with the central thought of being able to reach the outcomes of the QMS as seen in their example of the internalization of ISO 9001 in organizations. Hence, one is able to see by this example, that the QMS will become part and parcel of other process, thereby giving rise to the concept of the IMS framework. The IMS will ensure facets such as employee training, drafting and communication of corporate policies and procedures, the use of continuous improvement drivers and the ability of the organization to operationally meet the strategic goals will be assessed, continually monitored and if required amended to satisfactorily meet requirements and goals (Calingo 1996; Garengo & Biazzo 2012).

Progressing further into implementation of QMS in international organizations with the associated use of the IMS frameworks, Calingo (1996, p. 27) has proposed a model for which a QMS system such as TQM can be implemented into an organization strategically with the objective being to improve on organizational quality and hence, achieve competitive advantage. The stage process consists of 5 stages which are discussed below as postulated by Calingo (1996, pp. 27-29).

According to Calingo (1996) the first stage is signified as the budgeting or initial strategic planning phase. In this phase companies are commonly new in start up with a strong buyer and demand market. Here organizational quality is characterised by just meeting customer requirements and only basically meeting product/service specifications. Primary objectives is on creating small profit margins in order for the organization to meet its overheads and start producing a profit. Auditing is very basic where the primary focus is to meet customer specifications with not a number of resources available to enhance customer delivery even though the need is there. It is strongly put forward that it is in this phase that quality indicators need to also be indentified for later use with the intention being to start to organise towards embracing quality as the company develops. It is also understood that in this phase it could almost be commercial suicide if a new company over spent capital into advanced quality frameworks as the organization is still at start up and may not have available to them large monetary resources. Hence, this can also seen to be indicative of most new private Iraqi medical companies operating within the oil and gas sector of southern Iraq.

Calingo (1996) advises that the second stage is characterised by long term forecasting in which the leaders and strategists of the organization consider long term implications and forecast strategic plans to reach the organizational goals. It is in this stage that longer term quality objectives can be determined with the desire of the organization to achieve competitive advantages, improve customer relations, increase desire for the organizations services/product and maximise profitability. The actions of senior management at this stage are very important in determining in if the organization will embrace quality management at the levels which are needed and thus, introduce quality as a central theme in the organizations. Al-Najjar & Jawad (2011) discuss many barriers to the implementation of quality management dynamics for private companies in Iraq and list failure in senior management involvement as one of these main reasons which create a failure in the QMS of an organization. This results in organizations not being able to achieve sufficient competitive advantages. The section which follow later will be discussing this dynamics in relation to medical companies operating within the oil and gas sector of southern Iraq, and through research will be analysing the findings on the impacts on competitive advantage for these companies.

Calingo (1996) advises that the third stage involves the organization planning strategically with regards to quality. This is where there is an ever increasing involvement of senior managers into market research in which new innovative ideas are determined to enhance quality and in essence achieve competitive advantage. Important actions
which are required to take place at this stage are incorporating customer requirements into the organizations own benchmarking and strategic planning initiatives which if accomplished satisfactorily will result in an increase in quality and subsequent achievement of competitive advantages in specific markets. These parameters will again be assessed for relevance in the sector for Iraqi medical companies operating within the oil and gas sector of southern Iraq to establish if these would be applicable for organizations in theatre to accomplish in order to achieve competitive advantages.

The fourth stage as described by Calingo (1996) involves senior management devising policies and procedures in order to accomplish quality objectives determined in earlier stages. Integration of strategic quality imperatives involves the formulation of strategic policies and integrating this with appropriate quality plans. This stage success is largely dependant on the capability of senior members of the organization who are tasked in devising the mentioned policies and their capabilities in leading these to be incorporated in the organization. If accomplished successfully, organizations are seen to be able to reach a higher level quality and strategy integration thereby leading to these companies being able to demonstrate a higher level of quality and potentially being able to achieve higher levels of competitive advantages. Al- Najjar & Jawad (2011) indicate in their works that that in Iraq many senior stakeholders do not possess the sufficient skills and knowledge in QMS therefore it is postulated that this can cause the demise of QMS integration which has an adverse effect on quality. This therefore impacts negatively on organizations achieving competitive advantages. Through research into the specific industry in Iraq assessments as to whether this philosophy holds true for the mentioned industry will be made, analysing the consequences and benefits of this for the mentioned industry.

Calingo (1996) advise that the fifth stage deals with the success of the entire QMS system and should clearly demonstrate entire integration of the QMS with the strategic imperatives of the company in a clear IMS. It is essential that in this stage there is a clear focus on customer satisfaction with all elements of the operation being driven to accomplish this with a zest for continual improvements. This stage also highlights clear business processes in relation to organizational quality which can be followed and are often benchmark from good industry practices.

The level as to which these parameters are addressed by the relevant Iraqi sector will be researched, analysed and findings to this will be discussed later. It is clearly demonstrated that in the international arena, companies which have successfully implemented the steps as per above have enjoyed the fruits or high levels of organizational quality and achieved desirable levels of competitive advantages in their specific industries (Calingo, 1996).

2.7: Quality Management in Health Care

Nabitz, et al (2000) discuss the importance of QMS and in private health care and discuss the specific system of EFQM in it uses in health care organizations internationally. In this it has been postulated that QMS in health care will deal with the quality of service/ product of health care organization which will, as seen in other sectors, have a great impact on the competitive stances of health care providers in the market. In addition, other dynamics related to health care such as costs, patient benefit and improvement of health to the population can also play an integral part.

The EFQM module still has the basics of any QMS system in that it possess processes to ensure benchmarking, auditing and assessments against frameworks, continual improvements and a desire to meet customer satisfaction as postulated by Nabitz, et al (2000, p.191). It can also be seen to posses processes which can derive results from specific parameters which will have an overall impact on the key performance results of the organization. As an over arching view into the requirements of EFQM in health care, the adapted diagram below as provided by Nabitz, et al (2000,p. 193) clearly demonstrates how EFQM can be and is currently used as an effective QMS in health care internationally:
Figure 2.1: Inputs

Figure 2.2: Outputs

2.8: EFQM in Health Care Quality Internationally

Research by Nabitz, et al (2000) shows that a common successful module which has been used to achieve quality in health care organizations internationally especially in Europe has been the EFQM module. The benefits of QMS in health care organizations have been discussed above and the same benefits of quality being used to achieve competitive advantages exist for organizations operating within the health care sector. Salvatore (2012) indicates and demonstrates that virtually all organizations operate to achieve some sort of economic reward let it be monetary or positive impact on society. Hence, the requirements exists for organizations internationally to be regarded as the organization of choice to sustain economic dominance and market favour for which the same principles apply to the health care sector as well.

Nabitz, et al (2000, p. 192) put forward that to assess for quality in health care using the EFQM module, specific criteria can be used to assess to level of quality of the organization. Each specific criteria will deal with a certain parameter for the assessment of quality in the health care organization. These include as per Nabitz, et al (2000, p.192) and shown in the diagram above: a) Leadership, b) People, c) Objectives, d) Resources, e) Processes, f) positive results from people, g) positive results from customers, h) positive results from customers, i) positive results from society, j) key performance results. From perusal of the diagram above it can be seen that the impacts of the inputs section have direct impact on the output section, hence the author deduces that it is imperative for the parameters of the inputs to firstly be positive and requirements met satisfactorily as this will have direct impact on the overall quality performance of the organization. This will have direct effect on the organization's competitive advantage for its specific industry in the market.

Quality has to be able to be assessed according to a framework in order to be measurable which has been regarded as one of the most important activities in relation to quality management in an organization (Nabitz, et al, 2000). In health care it has been put forward by Nabitz, et al (2000) that the EFQM system can be measured in health care according to the RADAR system i.e. R- Results, A- Approach, D- Deploy, A- Assess, R- Review. This can be regarded as an update to the PDCA cycle (Plan - Do - Check- Act) which is as a basic foundation for most QMS in today's organizations.
The author would like to reiterate that upon perusal of the PDCA system and the RADAR system one can clearly see that the actions following the system require quality to be continually measured/assessed and actions then have to be taken from the analysis of these measurements/assessments.

The use of the EFQM module in international health care organizations follows the same trends as that of other well-recognized QMS as highlighted by Nabitz, et al (2000) in that a) Senior management make the executive decision to implement EFQM in the organization and lead the EFQM QMS in the organization, b) Basis of introduction for QMS is that of being competitive in industry, c) Introduction of EFQM in the organization is influenced by the organization's strategic objectives. The EFQM criteria supply a standard framework which allows health care organizations that use the EFQM framework to perform self-assessment benchmarking on international trends. Again, this allows for organizations to assess/benchmark against industry best practices and allows for organizations to be competitive with one another (Nabitz, et al, 2000).

In the Iraqi context for health care which will be discussed in the following sections, private health care organizations will want to attract business of the ever-growing increase in oil & gas companies. With many private health care organizations operating in theatre it would be reasonable for the private-health care organizations to benchmark on international standards, provide medical services to the international companies based on international quality frameworks and by doing so should allow for the health care organizations to achieve competitive advantages. Hence these organizations would then be achieving subsequent market favour. The research will be assessing and analysing to see if the QMS system such as EFQM, ISO 9001, TQM etc. are currently used in the specified theatre and if so, if such actions resulted in these organizations achieving competitive advantages in theatre.

2.9: The Iraqi Oil Industry Perspective

Birdsall & Subramanian (2004) points out the clear dominance of potential wealth Iraq can derive from its huge oil reserves. Iraq has the potential to become a major player with regards to oil and gas production however, Birdsall & Subramanian (2004) point out that it may not be entirely easy for Iraq to reach its potential in this regard. Due to past years of conflict and even now with the ever-increasing violence in Iraq, the security situation has isolated Iraq in many regards to the rest of the world and international business practices (Pfanner, 2012). However, due to most of the oil reserves being isolated, it has attracted attention of most international oil companies which has resulted in many of the international oil and gas companies entering Iraq with the desire to attract profits. This subsequently has the ability to rapidly stimulate the economy by providing job opportunities for Iraqi nationals and providing potential for Iraqi local companies to contract their services to the international companies entering the area. Birdsall & Subramanian (2004) also highlights that services which are required to stimulate growth in Iraq cannot just always be merely imported, but should rather be domestically attained which creates the further opportunity to stimulate local businesses, thereby also subsequently reducing the cost of operations to the international companies. Hence, it can clearly be understood the importance of local Iraqi companies in securing business with the oil and gas companies in which competitive advantages by the local Iraqi companies can become a key factor.

It is noted by Birdsall & Subramanian (2004) that Iraq is not entirely unique in being in the situation and clearly makes examples of other countries such as Libya, Democratic Republic of Congo, Nigeria and the former Soviet Union which have striking similarities of former isolation, unrest and failures in political governance although being rich in oil reserves. For many of these countries, Birdsall & Subramanian (2004) research points out that the countries which have been in similar situation as Iraq, which amount to 34 countries internationally, have not been able to reach their full potential. Birdsall & Subramanian (2004) claims that for Iraq to avoid such disaster it is essential for Iraq oil and gas sector to be monitored by the international community. As discussed earlier in this paper, it has put forward the clear influence and benefits of QMS in international organization and hence, postulates the clear need and importance for QMS in organizations seeking to do business in the Iraqi oil and gas sector understanding that this has the potential to create a clear competitive advantage over competitors if the implementation is successful. Through research, there will be analysis if current demands of international oil and gas companies (and their associated international service companies) place any influence on the quality aspects dynamics in the selection of private entity organizations and specifically private medical organizations working in the oil and gas sector. The importance of the provision for international medical services in the oil and gas sector of southern Iraq will be discussed and highlighted in the next section.
2.10: Health specifications for oil and gas industry

The resource published by the International Association of Oil and Gas Producers (IAOGP) (2011) points out the specifications and recommendations which needed to be met to provide medical service to oil and gas field workers internationally. Above, it has been discussed and highlighted that oil and gas companies have been entering Iraq due to its high level of oil resources, subsequently this will lead to an increase of international oil workers who would need medical care to specific standards. IAOGP (2011) recognises that internationally oil and gas workers are working in a very dangerous environments and requires that oil workers have access to a high standard of health services working in a very proficient health system. The IAOGP (2011) consider it essential that these high standards of medical care are available to workers at all times and sets out specifications and recommendations for which should be met to ensure a high level of quality is achieved in providing medical care and an essence of continual improvement is achieved in doing so (IAOGP, 2011).

It is postulated by IAOGP (2011, pp. 1 - 3) that there are certain dynamics and aspects which need to be specifically present in a health management system in order to ensure high quality of services, this will be highlighted below and in the case of private organizations offering health services to the oil and gas industry, these should also include the other organizational quality dynamics as discussed earlier in order to ensure organizational competitive advantage through quality.

Specifically in regards to health care, IAOGP (2011) highlight that the following dynamics should be met in order to ensure a quality health system in the oil and gas sector: a) Senior commitment and leadership, b) development of strategic objectives and policy, c) identification and specification of appropriate standards, benchmarks and documentation, d) risk management philosophy, e) procedural planning, f) continual monitoring of system g) auditing, h) review and i) continual improvement strategy. Hence, it is postulated that if a private organization is due to offer medical services to the oil and gas sector, in addition to the widely published and sought dynamics of organizational quality, the onus is on the mentioned medical providers to be able to also meet the criterion discussed above. In doing so, it can be understood that the mentioned organization will be able to meet the desired specifications need for proficient a proficient health system and quality in the oil and gas sector. Hence, this would be able to theoretically ensure a competitive advantage for a medical service provider providing medical services to the oil and gas sector of southern Iraq.

Also according to IAOGP (2011) there is also a clear business case advantage of having a health system which meets the above requirements and is listed as: a) reduction in absence from work b) reduction in possible litigation stemming from medical cases c) increased work efficiency d) better work ethic e) reduction in accidents f) improved employee commitment g) Improved reliance from staff h) improved corporate image which can have beneficial financial benefits.

The aspects discussed in this section clearly highlight specific criteria which are needed by health care providers to ensure a quality service as deemed necessary by the International Association of Oil and Gas Producers. As seen above, the oil and gas sector also attributes a clear business benefit to having a health care system which meets their requirements, hence, medical providers seeking to operate in this sector will have to meet these in addition to meeting other organization imperatives discussed earlier in order to be deemed as a proficient and quality health service which offers a quality health system.

This study will through research, gather information, analyse and review if private health care organizations in southern Iraq meet these standards and if the ability to do so allows for the private health care organization operating in theatre to be able to achieve competitive advantages over their competitors. In addition, the relevance of the above dynamics put forward by IAOGP (2011) will also be indirectly assessed for relevance for Iraq as the country does have multiple barriers to achieving levels of quality across all industries as will be seen in the following chapters. It is also highlighted that it is necessary to understand that the information put out by IAOGP (2011) as discussed above relates specifically to the section of quality health care as deemed necessary by the oil and gas sector internationally, for which this study and project are concentrating on its relevance to southern Iraq oil and gas sector. It is important to have in mind that in the relation to quality, this deals with the over arching requirement of meeting customer specifications if seen through the private medical service perspective offering its services to oil and gas. In addition an in relation to the over arching organizational quality dynamics which exist internationally as discussed, it is also essential for quality to be assessed in terms of organizational quality dynamics and the specifications discussed above to assess the level of quality a private health
care organization has in offering its services to southern Iraq oil and gas sector which will be assessed and analysed.

2.11: Quality Management in Iraq

As mentioned, Iraq is a country which has been isolated from the rest of the world due to many years of war and conflict. International oil and gas organizations have entered Iraq with the hopes of profiting from its reach oil resources however, there have been a number of reasons as to why QMS has not been successfully implemented in Iraq. Al–Najjar & Jawad (2011) research and analyse this situation and specifically peruse the barriers involved in the implementation of ISO 9001 as a QMS in Iraq.

At the start of 2012, there had been less than 5 Iraqi companies which were able to achieve ISO 9001 certification for QMS whereas it has seen that there has been a clear increase in this in the rest of the world especially in the middle eastern countries as put forward by Al–Najjar & Jawad (2011, p. 119). As advocated by Najjar & Jawad (2011), internationally many organizations have realised the clear benefits and competitive advantages which can be created through the use of QMS in organizations including the fact that Al–Najjar & Jawad (2011) also discuss how demonstration of a ISO 9001 certificate by an organization can assist in attracting more business in Iraq. It is understood that an organization with an ISO 9001 certificate can be presumed to have an effective QMS system in place, and as highlighted earlier, this constitutes to the organization being customer driven, embracing the philosophy of continual monitoring, action and improvements. Through lack of exposure and educational facilities to educate on international business practices, this can lead to the subsequent lack of knowledge on other QMS programmes by Iraqi players. However, as Al–Najjar & Jawad (2011, pp. 121 -122) advise there are also specific factors which lead to the barriers for the successful implementation of ISO 9001 as QMS. Through current research performed in Iraq for the purposes of this study in relation to oil and gas companies, it has been found that many international companies desire for ISO 9001 certificates in theatre however, this is not mandatory for most cases. The result of this has been for many Iraqi role players to adopt ISO 9001 as their basis for QMS however, as postulated by Al–Najjar & Jawad (2011) there are a number of barriers to this as will be summarised below.

According to research conducted by Al–Najjar & Jawad (2011) relating to barriers for ISO 9001 implementation in Iraq, it has been found that the most significant barriers to ISO 9001 implementation in organizations operating in Iraq are due to: a) Commitment of senior managers to QMS b) Resistance to adoption of QMS by employees c) Barriers to implementing internal audits d) Lack of consulting boards and educational facilities on QMS in Iraq e) Lack of financial resources to refine business processes to meet QMS standards f) Lack of proficient human resources g) Lack or insufficient employee training in QMS. In essence it can be seen that the research conducted by Najjar & Jawad (2011) showed a high incidence of lack of knowledge and benefits of organizational QMS for Iraqi companies especially.

This study will often benchmark on the preliminary research of Al–Najjar & Jawad (2011) relating to organizational QMS as there is not much other significant recognised research into this topic for Iraq region. According to research conducted for the purposes of this study, it is assessed that this research project is the first type of research relating to QMS as competitive advantages for the specific sector of private health care for oil and gas sector in southern Iraq. Through research conducted, it will be analysed if the same dynamics which are discussed by Al–Najjar & Jawad (2011) are also present for the specific sector being concentrated on in this work and through research conducted, will be able to also establish the relevance of QMS for the specific sector. The question as to whether effective QMS would be able to allow relevant organizations to achieve competitive advantages in the specific area and industry will be able to be investigated and analysed. The research will also allow to determine the importance of effective QMS in the specific theatre and ascertain if international business practices relating to quality including its associated theoretical competitive advantage exist in the specific theatre and industry being concentrated on for the purposes of this study.

3. Research Methodology and methods

3.1: Research Introduction

The research for this paper was conducted using a number of modern day research techniques. The over arching research approach was to have combination of 2 new modern day epistemological stances, namely that of adopting a combination of constructionist and that of the positivist epistemological stances. Easterby- Smith, Thorpe and Jackson (2012, p. 746) summarizes the characteristics of the 2 approaches which are needed to be included in this discussion for readers
to establish the reasons and relevance of the approach to this specific research study. Easterby-Smith, *et al* (2012, p. 746) advises that with the positivist approach, the researcher will be completely independent of the sample that the researcher is seeking to research. With the constructionist approach the researcher is part of the actual sample being researched. It has been assessed that this approach of adopting both constructionist and positivist methods can ultimately have beneficial effects to the research study. This is due to the fact that it can provide a holistic all rounded perspective to the research dynamics, which is also postulated by Easterby-Smith, *et al* (2012). It is further advised that in this approach, perspectives can be drawn from both and internal and external standpoints. Thus, this creates an all rounded assessment to the research perspective and aids in reducing levels of subjectivity in the research sample.

3.2: Research Approach

The research for this study has used The University of Liverpool online library to access international journals and academic works relating to the topic of research. Free academic search engines such as Google Scholar have also been used to identify relevant works. This has allowed for assessment to be made using a vast amount of accredited academic research and analysis from a truly international perspective. This has then be used to assess if the international quality theories, models and perspectives postulated in these works (e.g. ISO 9001, TQM, EFQM) are relevant to the sample being researched for the purposes of this study. In this method of research, there has been an adoption the positivist approach in that the researcher is completely independent of the research works being analysed.

In addition to this approach and method, there has also been an adoption the constructionist approach in that the companies which have been selected for study are currently operating in the research theatre concerned, with the author being involved professionally with these companies due to professional work dynamics. These companies are major international oil and gas companies, international oil service companies and international medical companies operating in the area of southern Iraq. For reasons of confidentiality, upholding corporate integrity and associated legal reasons, these companies have all been allocated an individual phonetic alphabet so that the companies will not be named publically. All respondents of a particular company will be under one specific phonetic alphabet which has been allocated to that company for the purposes of this study. It is highlighted that this will have no impact on the outcomes of the research as the research is intended to be for academic purposes only, whilst not to be used to empower or disempower any company participating in the research exercises. However, companies are invited to use the findings and analysis of the subsequent research for their own strategic planning objectives.

The research methodology to be employed in this study will have a combination of both quantitative and qualitative research methodologies. The positivist approach will make use of more quantitative methodologies as this approach will deal with more of the analysis of existing quality philosophies which have often provided its own interpretation of quality with an associated numerical or assessable value to the parameters of quality such as EFQM scorecards. The qualitative approach for this study will deal with more of the constructionist approach which is used to analyse business, practices, perceptions and philosophies related to quality in which currently there is no numerical or assessable value. Hence, this will require the research data to be analysed, interpreted and explained in depth and from scratch as this data has not been specifically assessed in such a study prior to this project. Thus, it is assessed that in lieu of this, qualitative research methodologies will be employed when constructionist stances are used in this project.

3.3: Primary Data Collection

As discussed, research has firstly been conducted by the investigation and perusal of existing international academic resources relevant to this study. This has been conducted through investigation and analysis of many accredited academic works. Industry specific accredited documentation has also been investigated and is concentrated on in this study as well. In addition to this method, efforts have been made to obtain data from specific organizations operating in this specific theatre. This has been conducted through the primary use of a electronic and paper surveys which have been used to analyse business trends, practices and perceptions relating to quality in the specific area of private medical care for the oil and gas community in the southern area of Iraq. Data was obtained from international oil and gas companies, service companies operating in the oil and gas sector and private medical companies themselves, which are all operating in the southern Iraq region. The findings of the research derived from the use of the survey will also be used to gauge the understandings and importance of the
concept of quality in the specific organizations operating in theatre, comparing and contrasting this to models and philosophies discussed under the review of literature section derived from the positivist research approach.

3.4: Questionnaire / Survey Design

In designing the questionnaire/survey, the consideration has been given in regards to the remoteness and austerity presenting some of the oil gas operations in southern Iraq. This fact in association with the current security situation and lack of first world technology infrastructures has left the region to often have inadequate reliability on internet networks and connectivity. In lieu of this, the survey was approached by having it available in both electronic (via internet connectivity) and paper format so that a participant in the project can opt to complete the survey/questionnaire manually on paper should they have problems associated with accessing the internet. The electronic format has proven to be beneficial for participants who have adequate internet connectivity however are remote in the location of their operations. The electronic format for the questionnaire/survey was completed via an accredited internet survey provider.

The survey was designed so as to be able to ascertain the importance of the concept of quality in the respective organizations taking part in the survey. In designing the survey, it was assessed that the survey has had to take a predominantly inferential survey approach in that the primary tasks were to identify the predictor and dependant variables followed by attempting to establish if any relationships existed between the variables, concepts and strategic objectives in the organizations in relation to quality, as described by Easterby-Smith, et al (2012). In performing these tasks, the requirements were to have investigated and analysed accredited academic resources including accredited industry specific documentation to establish the variables and concepts thereby attempting to understand their relevance and importance in the specific industry being investigated in this study. To measure the degrees of relevance, importance and understanding of this placed amongst the sample research population, questions were asked in scales of 'most - to- least' to establish importance, relevance and understanding of quality imperatives in the organizations being studied.

3.5: Research Population and Sample

As mentioned, there has been an adoption of 2 epistemological stances to the research, namely that of the positivist stance which dealt with the investigation of international sources with the second stand being that of the constructionist approach which concerned itself with investigation of relevant international and local organizations operating in theatre. Hence, this has allowed for the research population to be rather international in nature. The positivistic stance which deals with the internationally accepted philosophies and practices for quality in international organizations has resulted in studies choosing their research samples from a multitude of different type of business organizations internationally for which quality dynamics have been investigated and analysed. These are often the research samples for which there will be benchmarking from in relation to the quality philosophies which are used internationally.

In relation to the research done specifically for and covered in this study, the target population for the research sample has been that of relevant organizations operating in the oil and gas industry of southern Iraq. This list includes that of international oil and gas companies, oil and gas service companies and companies concerned with the provision of medical services in the specific theatre. The participants in the research were reserved for the specific company representatives whom were concerned specifically with the provision of medical services in the oil and gas sector of southern Iraq. This resulted in the respondents being both of senior and junior stakeholders in their respective companies, however, it was assessed that all participants had a degree of responsibility for medical services in theatre ranging from a multitude of different roles. This has assisted in allowing the findings of the study to gain a more holistic perspective with regards to quality concerns for the specific theatre and to investigate all areas in which quality has an effect on competitive advantages.

In total, representation for the research of this study extended to 13 companies with 130 people responding to the research questionnaire/survey.

3.6: Survey Administration

The survey for the research project was done in both electronic and hard copy formats for reasons mentioned above. The survey was comprised of 05 parts with there being a combination of multiple choice and open answer questions. The electronic survey was conducted using an accredited internet survey provider 'Survey Monkey' (www.surveymonkey.com). For respondents of the
electronic survey, a secure weblink to 'Survey Monkey' would be sent to the intended respondent which would then link the intended respondent to the survey via the 'Survey Monkey' platform. The respondents had to answer the questions and upon completion results of the survey were saved which then allowed for secure access to results for analysis. By sending the link to the intended respondents email address, efforts were made to ensure that the respondents had private access to the survey taking the fact that the respondents would have to access their relevant emails using their unique usernames and passwords.

With regards to the survey being completed in the hardcopy format, survey were handed to the intended recipients in sealed envelopes. The respondents were then given a 24 hour period in which to answer the survey. Upon completion, respondents resealed the completed survey and were returned to be perused and analysed.

All of the results were then consolidated thereby making final analysis after the results from both the electronic survey and hardcopy formats were analysed together.

3.7: Data Analysis Plan

As mentioned the questions which were selected to be used as part of the survey were chosen so as to allow measuring the degrees of relevance, importance and understanding of quality in the specific industry and the then to determine if the same attributed to attaining competitive advantages. The questions were asked to determine the degree of relevance a specific quality dynamic will have or play in the survey respondent's organization. The relevance was assessed from 'most - to least' by respondents choosing the level of relevance a specific dynamic will have in their organization. Each question in the survey dealt with one specific quality dynamic.

Once the questions were answered, analysis from the responses could be performed by grouping the responses in groups of levels of relevance to each specific question/ quality dynamic. The findings of this data would allow determining if similarities existed between internationally recognised organization quality dynamics and the specific industry being researched. This would also allow to determine how relevant quality dynamics are in theatre and determine if this has previously or has potential to in the future, have bearing on private medical companies in theatre achieving competitive advantages through organizational quality.

3.8: Reliability and validity

It has been assessed that the level of reliability and validity of the project are of high standards as discussed below. With regards to the literature review which provides for the accredited information on quality to be benchmarked for international corporate quality dynamics, the sources of this information have been be gathered from accredited and recognised resources. This includes recognised academic journals available through the University of Liverpool's online library, as well as industry specific accredited information by internationally recognised bodies. In this regard, it is postulated that the information gathered and analysed from the use of these sources are internationally recognised, validated and accredited thereby increasing the reliability of this information.

With regards to the questionnaire/ survey for which has been used, the survey was completed using accredited online formats which have been authenticated and widely recognised for integrity. In consideration of the survey which were conducted using the hard copy paper formats, the completed survey was sealed in an envelope and only opened to investigate the information gathered and complete the relevant analysis.

This entire approach has led to mitigating against other parties from tampering with the completed survey which could have affected the reliability and validity of the survey negatively. Hence, it can be seen from the procedure discussed above that the sources of information which were used are reliable and valid.

3.9: Research Ethics

It has been ensured that the requirements for research as prescribed by the University of Liverpool will be followed stringently. The biggest hurdle which has been encountered is that of privacy and confidentiality for the participants of the research. Many of the participants are also high ranking officials in their companies and were concerned about divulging information about strategic imperatives in their respective companies which could entail them being used against their company by competitors. In this regard, company names have been replaced by international phonetic alphabet which will prescribed specifically to individual companies. This ensures confidentiality as well as ensures finding relating to a specific company can still be grouped in one category. No participants name will be publically displayed and
all forms of communication including email addresses has been kept confidential.

All completed surveys which have been completed via electronic means will be stored via the 'Survey Monkey' site as well as being electronically backed up. All hard copy completed surveys will be stored for a period of 5 years in secured relative files.

4. Results and Discussions
4.1: Part 1.1 General Information
a) I am employed or engaged in the following position in the Oil and Industry of southern Iraq:

Table 4.1: Responses to survey question 1.1 a)

<table>
<thead>
<tr>
<th>Position</th>
<th>% Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>10 %</td>
</tr>
<tr>
<td>HSSEQA Professional</td>
<td>80 %</td>
</tr>
<tr>
<td>Medical Clinician</td>
<td>8%</td>
</tr>
<tr>
<td>Oil and Gas Engineer</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>0 %</td>
</tr>
</tbody>
</table>

Figure 4.1: Response to survey question 1.1 a

b) I am involved in Iraq’s oil and gas sector for the following number of years:

Table 4.2: Responses to survey question 1.1 b)

<table>
<thead>
<tr>
<th>Years</th>
<th>% of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3 years</td>
<td>0 %</td>
</tr>
<tr>
<td>3-5 years</td>
<td>10 %</td>
</tr>
<tr>
<td>5-8 years</td>
<td>90 %</td>
</tr>
<tr>
<td>8-10 years</td>
<td>5 %</td>
</tr>
<tr>
<td>10+ years</td>
<td>5 %</td>
</tr>
</tbody>
</table>

Figure 4.2: Response to survey question 1.1. b)

c) My education level is:

Table 4.3: Responses to survey question 1.1 c)

<table>
<thead>
<tr>
<th>Level</th>
<th>PhD Level</th>
<th>Master’s Degree</th>
<th>Bachelor Degree</th>
<th>Associated Degree Level</th>
<th>On Job Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 %</td>
<td>2 %</td>
<td>75 %</td>
<td>10 %</td>
<td>13 %</td>
</tr>
</tbody>
</table>
Figure 4.3: Response to survey question 1.1 c)

d) I work for an:
Table 4.4: Responses to survey question 1.1 d)

<table>
<thead>
<tr>
<th>International Oil and Gas Company</th>
<th>Oil Services Company</th>
<th>Medical Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 %</td>
<td>60 %</td>
<td>10 %</td>
</tr>
</tbody>
</table>

Figure 4.4: Responses to survey question 1.1 d)

e) I have formal training in quality:
Table 4.5: Responses to survey question 1.1 e)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 %</td>
<td>90 %</td>
</tr>
</tbody>
</table>

Figure 4.5: Responses to survey question 1.1 e)
4.2: Part 1.1 Discussion
Part 1 a) is concerned with the educational, vocational and experience background of the respondents. The survey, as discussed earlier, was only sent to the niche respondents who deal primarily with HSE and medical related dynamics in the Iraqi oil and gas sector of southern Iraq. The results from the respondents indicated that the respondents are primarily HSSEQA Professionals who are directly responsible for selecting, utilising and constantly monitoring medical contractors for specific projects and emergency response plans. Only 10 percent of the respondents were from medical contractor companies and it was noted that there was more of a willingness for participation from oil and gas associated companies than from medical companies. Due to the seniority of the participants and the importance of the positions, there was also a clear correlation with the work experience and educational levels, in that 87% of the respondents had a formal tertiary educational background and only less than 15% had vocational on job training as highest qualifications. Most respondents indicated that they have 5-8 years experience which is conducive with them being at mid-level management which is seen in similar positions in industry. Only 10% of respondents indicated that they have formal training in quality which can lead to a uniform understanding of quality in organization being ambiguous.

4.3: Part 1.2 General Understanding on 'Quality' in Oil and Gas Industry associated organizations
a) I feel I understand the components needed for a quality service
   Table 4.6: Responses to survey question 1.2 a)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 %</td>
<td>59 %</td>
<td>5 %</td>
<td>10 %</td>
<td>26 %</td>
</tr>
</tbody>
</table>

   Figure 4.6: Responses to survey question 1.2 a)

b) I know of internationally accepted quality standards which are able to be used in different business organizations
   Table 4.7: Responses to survey question 1.2 b)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 %</td>
<td>61 %</td>
<td>5 %</td>
<td>10 %</td>
<td>24 %</td>
</tr>
</tbody>
</table>

   Figure 4.7: Responses to survey question 1.2 b)

c) I know of my company specifically benchmarking on international quality standards eg. ISO 9001, TQM, etc.
Table 4.8: Responses to survey question 1.2 c)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 %</td>
<td>10 %</td>
<td>5 %</td>
<td>0 %</td>
<td>0 %</td>
</tr>
</tbody>
</table>

Figure 4.8: Responses to survey question 1.2 c)

d) My organization clearly strives to provide the best quality service to its clients / stakeholders.

Table 4.9: Responses to survey question 1.2 d)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 %</td>
<td>40 %</td>
<td>5 %</td>
<td>50 %</td>
<td>0 %</td>
</tr>
</tbody>
</table>

Figure 4.9: Responses to survey question 1.2 d)
e) My organization invests time into understanding its customer requirements and also invests into informing service providers about our organizations quality expectations.

Table 4.10: Responses to survey question 1.2 e)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 %</td>
<td>41 %</td>
<td>5 %</td>
<td>30 %</td>
<td>20 %</td>
</tr>
</tbody>
</table>

Figure 4.10: Responses to survey question 1.2e)
f) I feel that all level quality in my organization leads to success over competitors.

Table 4.11: Responses to survey question 1.2 f)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>3 %</td>
<td>45 %</td>
<td>2 %</td>
<td>30 %</td>
<td>20 %</td>
</tr>
</tbody>
</table>

Figure 4.11: Responses to survey question 1.2 f)

g) Quality systems are continually monitored to ensure operational efficiency in my organization.

Table 4.12: Responses to survey question 1.2 g)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 %</td>
<td>45 %</td>
<td>2 %</td>
<td>30 %</td>
<td>20 %</td>
</tr>
</tbody>
</table>

Figure 4.12 Responses to survey question 1.2 g)

4.4: Part 1 b) Discussion

Part 1 b) concentrated on the understanding of quality dynamics in oil and gas associated industry of southern Iraq. A 59 % of participants indicated that they feel that they understand the requirements for quality, even though the previous section showed that most of these respondents have not had any formal training or education into quality. 61 % of respondents indicated that they know of internationally accepted standards for quality with more than half of this indicating that they do not which can correlate to the lack of formal training in quality. More than 80 % of the respondents indicated that they know of their companies benchmarking on standards such as TQM or ISO however it can be said that the for many of the respondents judging by the lack of training in quality do not understand the components of quality but rather just that the standards exist and are important to relevant organizations. It was also indicative that respondents felt that quality was not constantly monitored in their organizations however, 45 % of participants did indicate that quality does lead to a degree of superiority to competitors.

4.5: Part 2 Understanding factors defining a ‘Quality Service’

a) Market/ customer research is continually done in my organization

Table 4.13: Responses to survey question 2 a)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 %</td>
<td>41%</td>
<td>5 %</td>
<td>30%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Figure 4.13: Responses to survey question 2 a)

b) Organizations are expected to embrace longevity principles in terms of pricing strategies between client and contractor instead of short term maximization goals

Table 4.14: Responses to survey question 2 b)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 %</td>
<td>10 %</td>
<td>60 %</td>
<td>15 %</td>
<td>5 %</td>
</tr>
</tbody>
</table>

Figure 4.14: Responses to survey question 2 b)

c) Quality needs to be embraced by everyone in an organization

Table 4.15: Responses to survey question 2 c)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
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<tbody>
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<td>86 %</td>
<td>14 %</td>
<td>0 %</td>
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</tr>
</tbody>
</table>
d) Quality principles need to be educated to staff

Table 4.16: Responses to survey question 2 d)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
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<td>80 %</td>
<td>20 %</td>
<td>0 %</td>
<td>0 %</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 4.16: Responses to survey question 2 d)

e) Quality requires people in an organization to be adaptable to customer requirements

Table 4.17: Responses to survey question 2 e)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
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<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>60 %</td>
<td>20 %</td>
<td>0%</td>
<td>15 %</td>
<td>5 %</td>
</tr>
</tbody>
</table>

Figure 4.17: Responses to survey question 2 e)

f) Quality dynamics play an important strategic part in the organization's corporate plan

Table 4.18: Responses to survey question 2 f)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
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<tbody>
<tr>
<td>10 %</td>
<td>50 %</td>
<td>20 %</td>
<td>10 %</td>
<td>10 %</td>
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</tbody>
</table>

Figure 4.18: Responses to survey question 2 f)

g) Competitive advantage can be achieved through an organization's high quality standards and practices
Table 4.19: Responses to survey question 2 g)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tbody>
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<td>20 %</td>
<td>30 %</td>
<td>10 %</td>
<td>30 %</td>
<td>10 %</td>
</tr>
</tbody>
</table>

Figure 4.19: Responses to survey question 2 g)

h) Quality requires benchmarking from industry best practices and internationally accepted quality frameworks

Table 4.20: Responses to survey question 2 h)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 %</td>
<td>44 %</td>
<td>2 %</td>
<td>15 %</td>
<td>15 %</td>
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</tbody>
</table>

Figure 4.20: Responses to survey question 2 h)

4.6: Part 2 Discussion

The concentration of Part 2 of the survey was on concentrated on the factors concerning a quality service. There was a noticeable 50 – 50 split with regards to quality dynamics and consumer research being continually conducted in the organizations of the respondents with most respondents choosing to be in the neutral gap when it comes to their organizations choosing to embrace longevity or maximising profits on short term maximization goals. Majority of respondents again depicted that quality training is needed to be provided by organizations whilst + 80 % respondents have depicted that they understand quality should be part of strategic plan and that it needs to be embraced by all levels of the organization to be successful. With regards to quality being seen as competitive advantage for the organizations in question, 50 % of respondents advocated this in the positive with 40 % advocating the opposite. Interestingly, 10 % depicted to choose neutral for this question in the survey. In perusal of the past questions in which it is highly advocated by the respondents that quality training is needed, it can be deduced that the 10 % which chose to stay in neutral opinion did so as they probably feel they did not have sufficient training to answer this question satisfactorily.

4.7: Part 3 Quality dynamics for private health care in the southern Iraq’s oil and gas sector

a) Quality health care is defined as being the cheapest health care available

Table 4.21: Responses to survey question 3 a)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 %</td>
<td>45 %</td>
<td>10 %</td>
<td>25 %</td>
<td>15 %</td>
</tr>
</tbody>
</table>
Table 4.21: Responses to survey question 3 a)
   b) Health care is afforded at a western first world level as a minimum standard

Table 4.22: Responses to survey question 3 b)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
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<tbody>
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<td>36 %</td>
<td>44 %</td>
<td>5 %</td>
<td>10 %</td>
<td>5 %</td>
</tr>
</tbody>
</table>

Figure 4.22: Responses to survey question 3 b)

Table 4.23: Responses to survey question 3 c)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
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<tbody>
<tr>
<td>40 %</td>
<td>50 %</td>
<td>0 %</td>
<td>5 %</td>
<td>5 %</td>
</tr>
</tbody>
</table>

Figure 4.23: Responses to survey question 3 c)

Table 4.24: Responses to survey question 3 d)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 %</td>
<td>35 %</td>
<td>5 %</td>
<td>5 %</td>
<td>5 %</td>
</tr>
</tbody>
</table>
Figure 4.24: Responses to survey question 3 d)
  e) Use of other accepted quality management standards are mandatory if ISO 9001 certification is not present for medical provision companies e.g TQM, EFQM

Table 4.25: Responses to survey question 3 e)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 %</td>
<td>35 %</td>
<td>30 %</td>
<td>15 %</td>
<td>0 %</td>
</tr>
</tbody>
</table>

Figure 4.25: Responses to survey question 3 e)
  f) Senior Management in health care organizations leads continual quality initiatives

Table 4.26: Responses to survey question 3 f)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 %</td>
<td>5 %</td>
<td>43 %</td>
<td>28 %</td>
<td>22 %</td>
</tr>
</tbody>
</table>

Figure 4.26: Responses to survey question 3 f)
  g) All processes in medical organizations are centred around improving quality service to clients/ patients

Table 4.27: Responses to survey question 3 g)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 %</td>
<td>38 %</td>
<td>22 %</td>
<td>22 %</td>
<td>18 %</td>
</tr>
</tbody>
</table>
4.8: Part 3 Discussion

In relation to quality in private health care organizations in theatre, respondents initially showed that cost did play a factor into determining quality with 50 % respondents agreeing with this sentiment, 40 % respondents not agreeing with this and 10 % staying neutral in this poll. Benchmarking plays a significant role as well, as most respondents agreed that benchmarking on international first world standards are essential for private medical organizations in theatre to be deemed as a professional service. 85% of respondents have indicated that ISO 9001 certification is a necessity for health care organizations to possess to highlight quality. In the absence of ISO 9001 certification 55 % of respondents indicated that another approved QMS such as TQM etc can be used. 30 % stayed neutral in this regard which can be attributed to not having significant training and knowledge of other quality dynamics, however, the need for internationally accepted quality standards to be present or benchmarked on is clearly present. Majority of respondents indicated that specifically in health care organizations, quality is not seen to be led from senior management which is contrasted on earlier responses in which majority of respondents agreed that senior management leads quality in an organization. 65% of respondents indicated that quality is assessed not on medical proficiency alone with only 35 % disagreeing with this view hence indicating the importance being placed on organizational quality and that quality in private health care for the specific theatre is not assessed on clinician proficiency alone.

4.9: Part 4 High Quality levels have resulted in competitive advantage for private health care in sector

a) Quality is assessed as being central strategic objective to achieve competitive advantages in theatre

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>44 %</td>
<td>32 %</td>
<td>10%</td>
<td>9 %</td>
<td>5 %</td>
</tr>
</tbody>
</table>

Table 4.29: Responses to survey question 4 a)
Figure 4.29: Responses to survey question 4 a)

b) ISO 9001 certification or equivalence are highlighted in bidding processes to attract clients in oil & gas theatre

Table 4.30: Responses to survey question 4 b)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>54 %</td>
<td>32 %</td>
<td>10 %</td>
<td>3 %</td>
<td>1 %</td>
</tr>
</tbody>
</table>

Figure 4.30: Responses to survey question 4 b)

c) ISO 9001 certification or equivalence are stipulated as mandatory for provision of medical services in theatre

Table 4.31: Responses to survey question 4 c)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>64 %</td>
<td>20 %</td>
<td>0 %</td>
<td>6 %</td>
<td>10 %</td>
</tr>
</tbody>
</table>

Figure 4.31: Responses to survey question 4 c)

d) Evidence in reduction of costs with the implementation of high QMS practices

Table 4.32: Responses to survey question 4 d)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 %</td>
<td>42 %</td>
<td>15 %</td>
<td>5 %</td>
<td>5 %</td>
</tr>
</tbody>
</table>
e) High QMS level of practices is known to improve longevity between private health organization and oil & gas industry clients

Table 4.33: Responses to survey question 4 e)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 %</td>
<td>24 %</td>
<td>30 %</td>
<td>15 %</td>
<td>9 %</td>
</tr>
</tbody>
</table>

f) High level of QMS practices have resulted in improved customer satisfaction and feedback in theatre

Table 4.34: Responses to survey question 4 f)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>54 %</td>
<td>32 %</td>
<td>8 %</td>
<td>4 %</td>
<td>2 %</td>
</tr>
</tbody>
</table>
g) Investment in resources for quality improvement initiatives are seen as an investment into staying competitive in market

Table 4.35: Responses to survey question 4 g)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
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<th>Strongly Disagree</th>
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</thead>
<tbody>
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<td>23 %</td>
<td>23 %</td>
<td>15 %</td>
<td>15 %</td>
</tr>
</tbody>
</table>

Figure 4.35: Responses to survey question 4 g)

h) High QMS standards have resulted in my health care organization being regarded as being synonymous with high quality service in theatre

Table 4.36: Responses to survey question 4 h)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
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<td>40 %</td>
<td>30 %</td>
<td>10 %</td>
<td>10 %</td>
<td>10 %</td>
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</tbody>
</table>

Figure 4.36 Responses to survey question 4 h)

4.10: Part 4 Discussion

In assessing quality being used as competitive advantage specifically for private health care in sector, the respondents indicated that quality play an important dynamic in being able to achieve competitive advantages. Greater than 50 % have indicated that quality certifications such as ISO or equivalence are either used by private medical providers in theatre to attract clients or are often stipulated as being mandatory in bidding processes in oil and gas industry of southern Iraq. Majority of respondents indicated that an investment into QMS is seen as an investment into staying competitive thereby showing the growing culture and of demand of quality in theatre. 70 % of respondents have indicated that high levels of QMS for private medical organizations in theatre attribute to these organizations being known and regarded as offering quality services.
4.11: Part 5 Open Ended Questions on 'Quality'- Participants may answer these objectively, freely and elaborate on their answers

a. How important is quality to your organization?

Figure 4.37: Responses to survey question 5 a)

b. Is demonstration of quality standards important in choosing your contractor or supplier?

Figure 4.38: Responses to survey question 5 b)

c. Quality service is only based on value for money. Do you agree with this statement?

Figure 4.39: Responses to survey question 5 c)

d. Quality service is based on ability to continually meet customer specifications satisfactorily in a cost effective manner.
e. Quality health care should be based on international recognised certifications. Why do you feel international benchmarks are relevant or irrelevant?

f. How often are quality management principles assessed in your organization?

g. Are there barriers to proficient QMS in Iraq which has resulted in your organization lowering QMS standards?
4.12: Part 5 Discussion

Part 5 of the survey was open ended questions relating to the entire survey. The outcomes of the survey were assessed with the graphs above depicting the outcomes relating to the data found to be most prevalent in the respondents’ answers. +80% indicated that quality was held very important to their organization and that a demonstration of quality standards is very beneficial in selecting contractors. An almost 60/40 split exits in the dynamics of monetary considerations being placed as the primary consideration for selecting or deeming a contractor in being able to offer a quality service, whereas +80% deem the ability to meet customer satisfaction satisfactorily and still being able to be cost effective as being appropriate. Specifically in relation to the quality of health care, respondents indicated that there is a high demand and relevance for health care to be benchmarked on international standards.

Majority of respondents indicated that there organizations review QMS internally every 1-2 years with a 35% - 30% range indicating that QMS is reviewed within a 12 month period in their organization. Majority of respondents indicated that there are significant barriers to high QMS standards in theatre, with 40% - 45% indicating this is due to cost and the other significant factor being that of culture in relation to quality in work practices. It is also seen that the need for ISO 9001 certification or equivalence is higher than the need to not demonstrate this in the selection of contractor companies in theatre.

5. Conclusion & Recommendations

5.1 Conclusion

This study set out to achieve the following: a) Ascertain the relevance of the work by Al-Najjar & Jawad (2011) in relation to quality standards in Iraq for its relevance in southern Iraq Oil and gas industry specifically the private health care sector. b) What are the factors which define a quality service for private health care organizations in oil and gas sector of southern Iraq. c) What actually constitutes a quality private medical service desired by oil and gas companies in southern Iraq? d) Will reaching these quality standards allow for competitive advantages to be obtained by relevant organizations?

As the literature review has shown, internationally there has been a push for organization’s to adopt or
bench mark on international used QMS standards and practices which the benefits have clearly been shown. The survey set to ascertain if these dynamics had any relevance in the specific industry and sector and if adoption of international QMS standards can assist in achieving competitive advantages in for the private medical sector for southern Iraq’s oil and gas industry.

With regards to the practical contribution for the research, the participants for the research were selectively chosen from being part of the southern Iraq’s oil and gas sector directly concerned with the provision of private medical services. The participants ranged from IOC’s, to oil gas service companies and private medical organizations operating in theatre. This allowed for a holistic perspective into the dynamics of quality being able to achieve competitive advantages for private health care in sector to be ascertained and further analysed.

With respects to the theoretical components which formed part of the research, research was gathered from academically authentic sources or from authentic industry specific organizations ensuring that the theory discussed and put forward in this dissertation was current, authentic, and practical and fit for purpose. Most of the theoretical research was based on internationally published academic resources and practices on quality management systems which served as resources from which to benchmark. This included analysing and subsequently comparing and contrasting this to the works of Al- Najjar & Jawad (2011) in which barriers to the implementation of QMS in Iraq were postulated as well as doing the same for research specifically conducted for this dissertation research project. Hence, the dissertation analysed international QMS findings and practices to the specific sector intended for this project as well as comparing international perspectives to region specific facets of QMS through the analysing the works of Al- Najjar & Jawad (2011).

Through research conducted specifically for this research project, it was seen that there is firstly a clear need for training in international quality standards to be available to relevant stakeholders as there was clear lack of knowledge in this dynamic. However, there seems to still be clear need for medical organizations working in this theatre to be able to demonstrate high levels of QMS either by ISO 9001 certification or equivalence in order be competitive. Many international oil and gas organizations in theatre require their contractors to be able to demonstrate this, and is thereby often required in bidding processes as well as is often displayed by contractors is attempting to attract business. This also holds true for private medical providers, however, it appears that the other factors which also play a role are cost efficiency and clinician proficiency. Cheaper health care and medical proficiency have shown to be significant dynamics which are also perused prior to selecting medical providers in theatre, however, it has also clearly been seen that there is also a need for quality dynamics and demonstration of international quality practices to also be needed.

Hence, it is put forward that high QMS levels, benchmarked on international standards and clear demonstration of this can definitely place a significant competitive advantage on private medical providers offering cost efficient and medical proficient medical services. Private medical providers in theatre should also ensure that they have in their employ proficient clinicians, operating on internationally accepted standards and that the organizations themselves place more of an emphasis on longevigity in business relationships as opposed to short term maximization strategies. Private medical providers in theatre should also be investing resources into understanding the needs of their customers thereby investing time into market customer research. The above and embracing of other widely used quality strategies internationally can assist in ensuring competitive advantages for private medical organizations operating in the oil & gas industry of southern Iraq.

5.2 Recommendations

From the perusal of the survey which was sent out to relevant stakeholders in theatre, it was clearly highlighted that the need for formal training in quality is needed which is evident in the responses of the participants. The need for formal training with regards to quality can also be seen to be a potential limitation in this dissertation as a majority of survey respondents had indicated desire for more formal training on quality. Thus, intricate understandings with regards to international QMS could be in defecit with regards to survey population leading to a potential misunderstanding or incorrect perceptions with regards to quality in answering the survey.

Cost and culture with regards to quality was also shown to be of relevance in the barriers associated with the adoption of international and high level QMS practices. However, this can again be through the inability to see the potential benefits of quality in organizations. The author deduces that with the potential inclusion into formal training on quality, the benefits of benchmarking on existing quality
standards can be understood and used to its full potential. The benefits of investment into quality would be able to be further understood. The provision of training in quality for the specific sector concerned in this dissertation and its subsequent impact on the specific sector can be an area for further future study. The follow on impact on organizational performance, competitive advantages and quality being used to achieve competitive advantages in other sectors can also be basis for future potential research projects.

Reference List:


Appendix A:

Survey Questionnaire - Quality in Private Health Care for southern Iraq Oil and Gas sector

Part 1.1: General Information about respondent

a) I am employed or engaged in the following position in the Oil and Industry of southern Iraq.
   i) Manager
   ii) HSSEQA Professional
   iii) Medical Clinician
   iv) Oil and gas engineer
   v) Other

b) I am involved in Iraq’s oil and gas sector for the following number of years.
   i) 0 - 3 years
   ii) 3 - 5 years
   iii) 5 - 8 years
   iv) 8 - 10 years
   v) 10 + years

c) My education level is
   i) PhD level
   ii) Master Degree level
   iii) Bachelor Degree level
   iv) Associated degree
   v) On job training

d) I work for an
   i) International oil and gas company
   ii) Oil services company
   iii) Medical company

e) I have formal training/ training in quality
   i) Yes
   ii) No

1.2) General Understanding on ‘Quality’ in Oil and Gas Industry associated organizations

a) I feel I understand the components needed for a quality service
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

b) I know of internationally accepted quality standards which are able to be used in different business organizations
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

c) I know of my company specifically benchmarking on international quality standards eg. ISO 9001, TQM, etc.
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

d) My organization clearly strives to provide the best quality service to its clients / stakeholders
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

e) My organization invests time into understanding its customer requirements and also invests into informing service providers about our organization's quality expectations
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

f) I feel that all level quality in my organization leads to success over competitors
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

g) Quality systems are continually monitored to ensure operational efficiency in my organization
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

Part 2: Understanding factors defining a ‘Quality Service’

a) Market/customer research is continually done in my organization
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

b) Organizations are expected to embrace longevity principles in terms of pricing strategies between client and contractor instead of short term maximization goals
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

c) Quality needs to be embraced by everyone in an organization
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree

d) Quality principles need to be educated to staff
   i) strongly agree
   ii) agree
   iii) neutral
   iv) disagree
   v) strongly disagree
e) Quality requires people in an organization to be adaptable to customer requirements
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

f) Quality dynamics play an important strategic part in the organization's corporate plan
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

g) Competitive advantage can be achieved through an organization's high quality standards and practices
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

h) Quality requires benchmarking from industry best practices and internationally accepted quality frameworks
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

Part 3: Quality dynamics for private health care in the southern Iraq oil and gas sector

a) Quality health care is defined as being the cheapest health care available
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

b) Health care is afforded at a western first world level as a minimum standard
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

c) Medical organization benchmarks on international first world medical practices continually
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

d) Medical organization must receive ISO 9001 certification only to highlight quality
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

e) Use of other accepted quality management standards are mandatory if ISO 9001 certification is not present for medical provision companies e.g TQM, EFQM
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

f) Senior Management in health care organizations leads continual quality initiatives
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

g) All processes in medical organizations are centred around improving quality service to clients/patients
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

h) Quality service is assessed on level of medical proficiency alone
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

Part 4: High Quality levels have resulted in competitive advantage for private health care in sector

a) Quality is assessed as being central strategic objective to achieve competitive advantages in theatre
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

b) ISO 9001 certification or equivalence are highlighted in bidding processes to attract clients in oil & gas theatre
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

c) ISO 9001 certification or equivalence are stipulated as mandatory for provision of medical services in theatre
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

d) Evidence in reduction of costs with the implementation of high QMS practices
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

e) High QMS level of practices is known to improve longevity between private health organization and oil & gas industry clients
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree

f) High level of QMS practices have resulted in improved customer satisfaction and feedback in theatre
   i) strongly agree  ii)agree  iii)neutral  iv)disagree  v)strongly disagree
g) Investment in resources for quality improvement initiatives are seen as an investment into staying competitive in market
   i) strongly agree  ii) agree  iii) neutral  iv) disagree  v) strongly disagree

h) High QMS standards have resulted in my health care organization being regarded as being synonymous with high quality service in theatre
   i) strongly agree  ii) agree  iii) neutral  iv) disagree  v) strongly disagree

Part 5: Open Ended Questions on 'Quality'- Participants may answer these objectively, freely and elaborate on their answers

a. How important is quality to your organization?
b. Is demonstration of quality standards important in choosing your contractor or supplier?
c. Quality service is only based on value for money. Do you agree with this statement?
d. Quality service is based on ability to continually meet customer specifications satisfactorily in a cost effective manner.
e. Quality Health Care should be based on international recognised certifications. Why do you feel international benchmarks are relevant or irrelevant?
f. How often are quality management principles assessed in your organization?
g. Are there barriers to proficient QMS in Iraq which has resulted in your organization lowering QMS standards?
h. Is ISO 9001 certification or equivalence with contractor company mandatory in theatre?