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## The Impact of Total Quality Management Components on the Performance of Directorate of General Security in Saudi Arabia

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### Abstract:

*The aim of this research is to investigate the effect of total quality management components on performance at the directorate of general security in Riyadh - Saudi Arabia. The total quality management consists of five components namely are commitment to quality, employee involvement, continuous improvement, fact-based management, and process monitoring and control. The data of this study was gathered from the employees who work at the directorate of general security in Riyadh. A total of 252 useable questionnaires were used in the statistical analysis. The results showed that there is significant effect of commitment to quality, employee involvement, fact-based management and, process monitoring and control on performance. The results indicated that there are positive and significant relationships between TQM components and performance. However, the continuous improvement does not have a significant effect on performance. It can be concluded that the TQM practices are employed in public the directorate of general security in Riyadh in appropriate way.*

### 1. Introduction

Since the 1980's, when the Total Quality Management (TQM) concept was first defined, (Deming, 1986, Crosby, 1979, Juran, 1986), practitioners and researchers tried to give more definitions to defend this business philosophy, the first organic ground based system that emphasizes a systems approach to quality. TQM is a set of techniques, principles, processes, and best practices that over time have been proven effective (RaoCarr, Dambolena, Kopp, Martin, Rafii and Schlesinger, 1996).

TQM utilizes techniques that improve as well as get better product quality and processes and thereby help a firm improve competitive performance (Grant et al., 1994). Proponents of TQM argue that the philosophy can be applied to any organization (Powell 1995).

The effectiveness of TQM as a system for organizational improvement has been widely reviewed in the literature. TQM is an important management tool, which can offer business with stability, growth, and prosperity (Issac et al., 2004). In order to achieve the requirement of quality, firms have to put the effort on the implementation of TQM. Therefore, firms will introduce quality management practice to integrate internal information communications with TQM philosophy effectively. In addition, the application of TQM mechanisms is also important to develop the relationship between organizations and their suppliers. Moreover, the application of TQM can also increase the satisfaction of the customer by providing preminent products or services.

Total quality management is important for both private and public sectors, according to EsinSadikoglu, CemalZehir (2010) who declared that TQM is mostly concerned with continuous improvement as well as enhancement in all work. There are many studies have investigated the link between TQM and organization performance. However, this study concentrates on the impact of TQM on the performance of directorate of general security in Saudi Arabia. More specifically, this study focuses on the impact of TQM components on the performance of directorate of general security in Riyadh - Saudi Arabia.

### 2. Literature Review

Christos, Fotopoulos & EvangelosL. Psomas (2009) and Kumar, Dixit Garg and Grag (2009) studied the impact of TQM practices on quality management consequences and explained the relationship between TQM components including leadership, strategic quality planning, employee management and involvement, supplier management, customer focus, process management, and other continuous improvements, and their effect on quality management in the form profits, sales, and position.

Some research has found a positive effect of TQM (Easton and Jarrell, 1998; Hendricks and Singhal, 2001a, b); whereas another research reports a negative incidence of TQM on all of the measures (Chapman et al. 1997). Other research has found a neutral result (Adam, 1994; Powell, 1995; York and Miree, 2004). Hence, that indicates the inconsistent results of those studies, However, that could lead to a methodological problem and conceptual approaches used by researchers which may have led to conflicting results.

Moreno Luzon (1993) examined the effectiveness of TQM in a survey of 44 small manufacturing companies in Valencia, Spain. Effectiveness was measured on the basis of managers' satisfaction with the achievement of specific objectives and their estimation of the change in several performance variables over a one year period believed to be a consequence of the quality program. Overall, the managers indicated a high level of achievement of their TQM objectives, and some managers perceived that their TQM programs had resulted in highly positive effects. In particular, the most frequently cited effects were the development of a quality culture (with 77% of firms experiencing this effect) and improved training (72.7%). Increased profits and increased sales were less frequently cited, with 63.6% and 50% of firms experiencing these effects, respectively.

Walley (2000) provided insights to the effect of TQM in SMEs in the UK farming sector. Respondents were asked to rate the impact of TQM on a range of criteria. Based on the responses of 25 farmers who had implemented TQM (15.2% of the sample), Walley (2000) concluded that although some farmers had indicated that TQM had resulted in slight decreases in criteria such as 'cost efficiency' and "profitability", on average TQM appeared to have a small positive effect on overall performance. Criteria where TQM had a major impact were "quality awareness" and "employee morale".

Rahman (2001) studied the relationship between TQM practices and three business outcomes in SMEs in Western Australia. He developed a questionnaire which asked respondents to rate themselves on the degree to which they practiced 36 TQM mechanisms. The questions pertained to the similar six quality criteria that have been examined in Anderson and Sohal's (1999) study. Business outcomes were defined in terms of revenue, profit, and the number of customers. A self rating scale was used to measure business outcomes. The questionnaire was sent to 250 SMEs, and 49 usable responses were received. Rahman (2001) documented that "leadership", "processes, products and services", "people", and "customer focus" were significantly correlated with revenue, profit, and the number of customers.

EsinSadikoglu, CemalZehir (2010) and Alessandro Brun (2010) investigated the relationship between TQM practices with innovation and employee performance. The theoretical model developed for the study explains how different TQM practices i.e. leadership, training, employee management, information and analysis, supplier management, process management, customer focus, and continuous improvements effects on employee performance which leads to innovation performance and this in later stages effects the firm overall performance.

Oduor (2015) studied the effect of total quality management on the employee's performance in public universities in Kenya. He developed a theoretical model according to the previous studies by answering how different TQM factors can significantly affect the employee performance. The results indicated that most of TQM components can significantly affect performance. Further analysis, he showed that there are significant and positive relationship between total quality management factors and performance.

Kenneth (2012) explored the impact of total quality management on performance in public organizations. The research was aimed at assessing the TQM practices and its effect on organizational performance at Intravenous Infusions Limited Koforidua (IIL). A questionnaire was employed to achieve the research objective. The results declared that the public organization is practicing TQM but it is yet to implement it to the highest level of subscribing to a quality award system.

Some researchers have found a positive effect of TQM (Easton and Jarrell, 1998; Hendricks and Singhal, 2001a, b); whereas other researchers found a negative incidence of TQM on all of the measures (Chapman et al. 1997). Other researchers also have found a neutral result (Adam, 1994; Powell, 1995; York and Miree, 2004). Hence, that indicates the inconsistent results of those studies, However, that could lead to a methodological problem and conceptual approaches used by researchers which may have led to conflicting results but, in response.

The aim of this study is to investigate the impact of TQM components on the performance of directorate of general security in Reyad - Saudi Arabia. The components are commitment to quality, employee involvement, continuous improvement, fact-based management, and process monitoring and control. Based on the previous studies, the conceptual framework of this study is illustrated as follow:

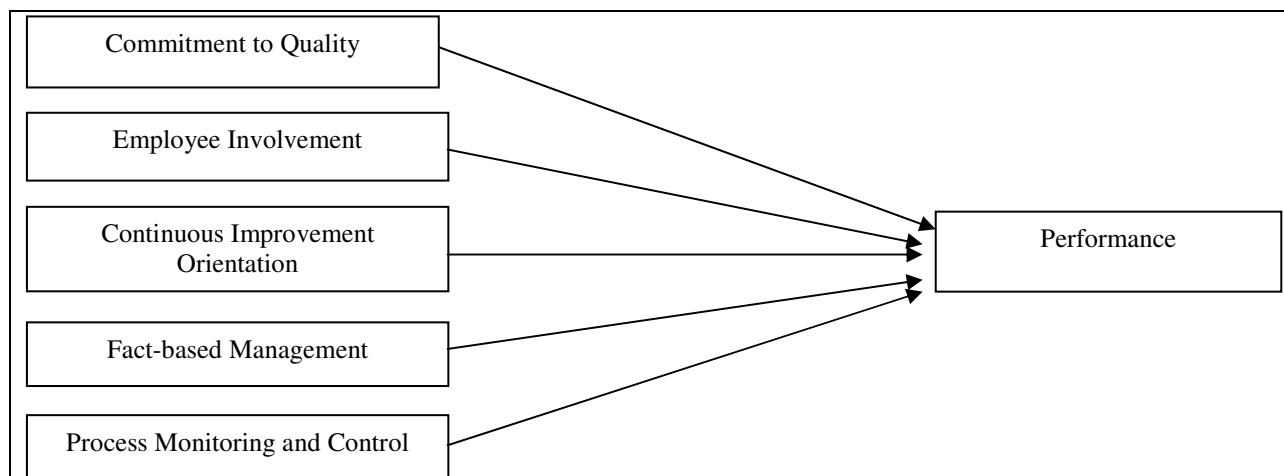


Figure 1: Conceptual Framework

### 2.1. Research Objectives

1. To investigate the impact of commitment to quality on the performance of directorate of general security in Reyad.
2. To explore the impact of employee involvement on the performance of directorate of general security in Reyad.
3. To examine the impact of continuous improvement orientation on the performance of directorate of general security in Reyad.
4. To investigate the impact of fact-based management on the performance of directorate of general security in Reyad.
5. To explore the impact of process monitoring and control on the performance of directorate of general security in Reyad.

### 2.2. Research Hypothesis

1. There is a significant effect from commitment to quality on the performance of directorate of general security in Reyad.
2. There is a significant effect of employee involvement on the performance of directorate of general security in Reyad.
3. There is a significant effect continuous improvement orientation on the performance of directorate of general security in Reyad.
4. There is a significant effect from fact-based management on the performance of directorate of general security in Reyad.
5. There is a significant effect of process monitoring and control on the performance of directorate of general security in Reyad.

### 3. Research Methodology

The aim of this study is to investigate the impact of TQM components on the performance of directorate of general security in Reyad. A questionnaire is constructed according to the previous studies (Kimani, 2014; Choi and Liker, 1995; Rice, Hwang, Gyan, Powell, 2010). The questionnaires were distributed to the sample of this study. The population of this study is all employees who work at directorate of general security in Saudi Arabia. However, the sample of this study is the employees who work at the directorate of general security in Reyad. Simple random sampling method was employed in selecting the respondents. The respondents have been given a month to answer the questionnaire. Furthermore, 300 questionnaires were distributed to the employees, in all, a total of 252 useable questionnaires were used in the statistical analysis.

#### 3.1. Measurement of the Variables

The independent variable of this study is the TQM components that affect the directorate of general security in Saudi Arabia performance, the independent variables are commitment to quality, employee involvement, continuous improvement, fact-based management, and process monitoring and control. These TQM components have been employed on a developed instrument by several researchers (Choi and Liker, 1995; Rice, Hwang, Gyan, Powell, 2010; Kimani, 2014; Almansour, 2016). Furthermore, these factors contain 30 close-ended questions. The dependent variable of this study is the performance. This variable contains 10 close-ended questions which have been developed by Almansour (2016). Table 1 shows each variable and its items.

Variables	Items
<b>Commitment to quality</b>	<ol style="list-style-type: none"> <li>1. The Directorate offers excellent service to its customers.</li> <li>2. Customer satisfaction is an everyday priority in my organization</li> <li>3. The Directorate does a good job responding to customers when their needs change</li> <li>4. The Directorate's customers feel that we strive to satisfy.</li> <li>5. The Directorate has one of the best reputations in the industry</li> <li>6. The Directorate tries to make its products/services easy to use.</li> </ol>
<b>Employee involvement</b>	<ol style="list-style-type: none"> <li>1. Employees participation is involved in decision making</li> <li>2. Communication of information about the organization.</li> <li>3. Involvement through self-managed teams</li> <li>4. Participation and input into assessment tools</li> <li>5. Involvement in product development</li> <li>6. Having feedback on actions taken</li> </ol>
<b>Continuous improvement</b>	<ol style="list-style-type: none"> <li>1. There is improvement the directorate compared with previous year</li> <li>2. Level of continuous improvement accomplishment.</li> <li>3. Level of continuous improvement philosophy taking hold.</li> <li>4. Level of waste elimination.</li> <li>5. Level of sustainability of continuous improvement.</li> <li>6. Overall impact of continuous improvement.</li> </ol>
<b>Fact-based management</b>	<ol style="list-style-type: none"> <li>1. Decisions are based on actual information</li> <li>2. The directorate saved its information which help job performance</li> <li>3. The directorate has database which help managers to make decisions</li> <li>4. My workload is too great for me to keep up to date with all the new evidence</li> <li>5. Evidence-based practice is a waste of time</li> <li>6. I stick to tried and trusted methods rather than changing to anything new</li> </ol>
<b>Process monitoring and control</b>	<ol style="list-style-type: none"> <li>1. Managers conduct meetings regularly to review performance</li> <li>2. The directorate has clear policies that monitors all activities</li> <li>3. Control activities is done by heads of the departmental</li> <li>4. The directorate's performance evaluation reports are prepared frequently</li> <li>5. Managers always take timely corrective actions when adverse variances are reported</li> <li>6. There is a regular follow up on plans by the teams and departmental heads</li> </ol>
<b>Performance</b>	<ol style="list-style-type: none"> <li>1. Quality of our services is high</li> <li>2. Reliability of our services is high</li> <li>3. We deliver our services on time to customers</li> <li>4. The employees' job performance is high</li> </ol>

	<ol style="list-style-type: none"> <li>5. The employees' absenteeism is low</li> <li>6. The employees' turnover rate is low</li> <li>7. The number of successful new service introductions of our directorate is high</li> <li>8. The use of latest technological innovations in our new service is high</li> <li>9. The technological competitiveness of our directorate is high</li> <li>10. The speed of new service development of our directorate is high</li> </ol>
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Table 1: Variables Used in this Study and its Measurement

3.2. Statistical Tools and Research Model

3.2.1. Reliability and Validity

The reliability and validity analysis were conducted to assess the measurement of each item and constructs. The reliability is defined as an estimation of the consistency measurement. In this research, the coefficient of Cronbach's alpha is considered for each scale to estimate the reliability. Table 2 demonstrates the coefficient of Cronbach's alpha value for all factors employed in this study.

Variable	Cronbach's alpha	Number of Items
Commitment to Quality	0.721	6
Employee involvement	0.826	6
Continuous improvement	0.778	6
Fact-based management	0.708	6
Process monitoring and control	0.881	6
Performance	0.859	10

Table 2: Results of Measurement Testing

The results showed that the Cronbach's alpha values for all scales are more than the minimum acceptable alpha value of 0.60. This means that the scales used in this study are internally consistent.

Next, the validity of measurement scales is tested, the questionnaire was sent to five scholars as well as experts in total quality management to evaluate the questionnaire. However, the questionnaire was amended according to their valuable comments. In order to investigate the impact of TQM components on the performance of directorate of general security in Reyad, several statistical tools were employed to testing the research hypothesis namely are: descriptive statistic, reliability and validity test, multiple regression analysis as well as correlation analysis. The model used in this study is as follows:

$$Perf_i = \beta_0 + \beta_1 CQ_{1i} + \beta_2 EI_{2i} + \beta_3 CI_{3i} + \beta_4 FBM_{4i} + \beta_5 PMC_{5i} + \varepsilon_i$$

Where,

- Pefr: Performance
- CQ: Commitment to Quality
- EI: Employee involvement
- CI: Continuous improvement
- FBM: Fact-based management
- PMC: Process monitoring and control
- e: Error
- B<sub>0</sub> Constant

3.3. Empirical Results and Hypothesis Testing

3.3.1. Respondent Profile

Table 3 illustrates the personal information of the respondents; the table summarizes the personal information of the respondents according to age, education level, lieutenant rank, experience and number of training given to the respondents.

		<b>n</b>	<b>%</b>
<b>Age</b>	less than 30 years	70	28%
	From 30 - 40	102	40%
	From 40 - 50	60	24%
	More than 50 years	20	8%
<b>Total</b>		<b>252</b>	<b>100%</b>
<b>Education Level</b>	Bachelor Degree	230	91%
	Master Degree	20	8%
	PhD Degree	2	1%
<b>Total</b>		<b>252</b>	<b>100%</b>
<b>Lieutenant Rank</b>	Second Lieutenant	22	9%
	First Lieutenant	45	18%
	Captain	40	16%
	Major	61	24%
	Lieutenant - Colonel	39	15%
	Colonel	28	11%
	Brigadier - General	13	5%
	Major General	4	2%
<b>Total</b>		<b>252</b>	<b>100%</b>
<b>Experience</b>	less than 5 years	27	11%
	From 5 - less than 15 years	145	58%
	From 15 - less than 25 years	62	25%
	More than 25 years	18	7%
<b>Total</b>		<b>252</b>	<b>100%</b>
<b>Number of Training taken</b>	One training	11	4%
	Two trainings	30	12%
	More than 2 trainings	211	84%
<b>Total</b>		<b>252</b>	<b>100%</b>

Table 3: Summary of Profile Respondents

It can be seen in the table above that most of the respondents' ages are ranged between 30 to 40 years which recorded a value of 40%. Those who are less than 30 years are 70 respondents which recorded a value of 28%, following by the respondents who are ranged between 40 to 50 years recorded a value of 60 respondents which recorded a value of 24%. Finally, the ages of respondents who are more than 50 years are 20 respondents which recorded a value of 8%.

In term of education level, it can be observed that all the respondents are educated and most of them have bachelor degree which recorded a value of 91%. There are 20 persons who have master degree and this contains a value of 8%. Furthermore, there are 2 persons who have PhD degree and this contains a value of 1%.

The lieutenant rank has been divided into 8 factors namely, second lieutenant, first lieutenant, captain, major, lieutenant – colonel, colonel, brigadier – general and major general. It can be observed that the highest percentage is referred to majors who recorded a value of 24%, following by first lieutenant and captain 18% and 16% respectively. Moreover, the lieutenant – colonel and colonel recorded values of 15% and 11% respectively. As results shown in the table, the second lieutenant and brigadier – general recorded values of 9% and 5% respectively, and finally, the lowest percentage has been referred to major general who recorded a value of 2%.

In term of experience, it can be seen that most of the respondents have experience years which are ranged between 5 to less than 15 years which recorded a value of 58%. Following by those respondents who have experience years between 15 years to less than 25 years. However, the respondents who have experience more than 25 years are 18 persons (7%). In the end, those respondents who still do not have more than 5 years' experience are 27 persons which recorded a value of 11%.

To end with number of training given to the respondents, it can be observed that most of the respondents have taken more than two training courses which recorded a value of 84%. This is an indication to how important is training courses to the respondents. However, those who have taken two training course and one training course are recorded values of 12% and 4% respectively.

### 3.4. Descriptive Statistics

Descriptive statistic is employed to review the measures of the variables as well as the sample used in this study. Moreover, the level of mean satisfaction for each item used in this study is significantly important to be recognized before analyzing descriptive statistics. In order to consider the level of satisfaction, it is important to employ the score of the answers which is divided into five levels to the Likert scale<sup>1</sup>. Therefore, Table 4 explains the criteria for consideration the mean of satisfaction level.

<sup>1</sup>(High score – Low score) / Number of levels  
 $(5 - 1) / 5$   
 $= 0.80$

n	Mean Score	Satisfaction Level
1	1.00 – 1.80	Strongly Disagree
2	1.81 – 2.60	Disagree
3	2.61 – 3.40	Neutral
4	3.41 – 4.20	Agree
5	4.21 – 5.00	Strongly Agree

Table 4: The Criteria for Consideration Mean of Satisfaction Level.

Further analysis on descriptive statistics for each item as well as each factor used in this study is employed and illustrated on table 5.

n	Item	Mean	Std.	Meaning
1	The Directorate offers excellent service to its customers.	4.1468	.63612	Agree
2	Customer satisfaction is an everyday priority in my organization	4.0952	.59115	Agree
3	The Directorate does a good job responding to customers when their needs change	4.1151	.59098	Agree
4	The Directorate's customers feel that we strive to satisfy.	4.1429	.65248	Agree
5	The Directorate has one of the best reputations in the industry	4.0595	.67425	Agree
6	The Directorate tries to make its products/services easy to use.	4.0635	.67092	Agree
	<b>Commitment to quality</b>	<b>4.1038</b>	<b>0.6360</b>	<b>Agree</b>
7	Employees participation is involved in decision making	4.1230	.62862	Agree
8	Communication of information about the organization.	4.1429	.62758	Agree
9	Involvement through self-managed teams	4.1349	.66023	Agree
10	Participation and input into assessment tools	4.1071	.58571	Agree
11	Involvement in product development	4.0794	.63250	Agree
12	Having feedback on actions taken	4.1151	.70191	Agree
	<b>Employee involvement</b>	<b>4.1171</b>	<b>0.6394</b>	<b>Agree</b>
13	There is improvement the directorate compared with previous year	4.1071	.60577	Agree
14	Level of continuous improvement accomplishment.	4.1706	.59098	Agree
15	Level of continuous improvement philosophy taking hold.	4.1270	.67963	Agree
16	Level of waste elimination.	4.1468	.59736	Agree
17	Level of sustainability of continuous improvement.	4.1270	.59190	Agree
18	Overall impact of continuous improvement.	4.1468	.61056	Agree
	<b>Continuous improvement</b>	<b>4.1376</b>	<b>0.6127</b>	<b>Agree</b>
19	Decisions are based on actual information	4.1548	.57492	Agree
20	The directorate saved its information which help job performance	4.1111	.68242	Agree
21	The directorate has database which help managers to make decisions	4.0873	.64394	Agree
22	My workload is too great for me to keep up to date with all the new evidence	4.1190	.66927	Agree
23	Evidence-based practice is a waste of time	4.2103	.61797	Strongly Agree
24	I stick to tried and trusted methods rather than changing to anything new	4.2063	.61609	Agree
	<b>Fact-based management</b>	<b>4.1481</b>	<b>0.6341</b>	<b>Agree</b>
25	Managers conduct meetings regularly to review performance	4.1746	.53677	Agree
26	The directorate has clear policies that monitors all activities	4.1349	.56248	Agree
27	Control activities is done by heads of the departmental	4.1905	.56757	Agree
28	The directorate's performance evaluation reports are prepared frequently	4.1984	.55774	Agree
29	Managers always take timely corrective actions when adverse variances are reported	4.1349	.67809	Agree
30	There is a regular follow up on plans by the teams and departmental heads	4.1548	.62154	Agree
	<b>Process monitoring and control</b>	<b>4.1647</b>	<b>0.5874</b>	<b>Agree</b>
31	Quality of our services is high	4.1706	.65493	Agree
32	Reliability of our services is high	4.1706	.57734	Agree
33	We deliver our services on time to customers	4.1984	.56484	Agree
34	The employees' job performance is high	4.1825	.58399	Agree
35	The employees' absenteeism is low	4.1706	.58420	Agree
36	The employees' turnover rate is low	4.0952	.70771	Agree
37	The number of successful new service introductions of our directorate is high	4.0913	.57470	Agree
38	The use of latest technological innovations in our new service is high	4.1548	.55374	Agree
39	The technological competitiveness of our directorate is high	4.0437	.66356	Agree
40	The speed of new service development of our directorate is high	4.1349	.59013	Agree
	<b>Performance</b>	<b>4.1413</b>	<b>0.6055</b>	<b>Agree</b>

Table 5: Descriptive Statistics for All Items Used in the Study

Table 5 shows the descriptive statistics for all items used in this study. The results show that the mean for all items is ranged between a minimum value of 4.04 (The technological competitiveness of our directorate is high) to a maximum value of 4.21 (Evidence-based practice is a waste of time). The standard deviation is ranged between a minimum value of 0.5367 (Managers conduct meetings regularly to review performance) to a maximum value of 0.7077 (The employees' turnover rate is low). For total quality management factors, the maximum value recorded in commitment to quality's items is 4.1468 with a standard deviation of 0.63612 which refers to (The Directorate offers excellent service to its customers). The minimum value recorded in commitment to quality's items is 4.0595 with a standard deviation of 0.67425 which refers to (The Directorate has one of the best reputations in the industry). As a conclusion, commitment to quality has shown an interesting result, it is shown that the commitment to quality has recorded an average value of 4.1038 with a standard deviation of 0.6360 this means that the respondents were agreed towards the commitment to quality in the directorate of general security.

The maximum value recorded in employee involvement's items is 4.1428 with a standard deviation of 0.63250 which refers to (Communication of information about the organization). The minimum value recorded in employee involvement's items is 4.0794 with a standard deviation of 0.63250 which refers to (Involvement in product development). As a conclusion, employee involvement has shown an attractive result, it is shown that the employee involvement has recorded an average value of 4.1005 with a standard deviation of 0.6400 this means that the respondents were agreed towards the employee involvement in the directorate of general security.

According to continuous improvement, the maximum value recorded in continuous improvement's items is 4.170 with a standard deviation of 0.590 which refers to (Level of continuous improvement accomplishment). The minimum value recorded in continuous improvement's items is 4.107 with a standard deviation of 0.60577 which refers to (There is improvement the directorate compared with previous year). As a conclusion, continuous improvement has shown good results; it is shown that the continuous improvement has recorded an average value of 4.1204 with a standard deviation of 0.6258 this means that the respondents were agreed towards the continuous improvement in the directorate of general security.

According to fact-based management, the maximum value recorded in fact-based management's items is 4.2103 with a standard deviation of 0.61797 which refers to (Evidence-based practice is a waste of time). The minimum value recorded in fact-based management's items is 4.0873 with a standard deviation of 0.6439 which refers to (The directorate has database which help managers to make decisions). As a conclusion, fact-based management has shown good results; it is shown that the fact-based management has recorded an average value of 4.1058 with a standard deviation of 0.6652 this means that the respondents were agreed towards the fact-based management in the directorate of general security.

According to process monitoring and control, the maximum value recorded in process monitoring and control's items is 4.1984 with a standard deviation of 0.5574 which refers to (The directorate's performance evaluation reports are prepared frequently). The minimum value recorded in process monitoring and control's items is 4.1349 with a standard deviation of 0.6780 which refers to (Managers always take timely corrective actions when adverse variances are reported). As a conclusion, process monitoring and control has shown good results; it is shown that the process monitoring and control has recorded an average value of 4.1415 with a standard deviation of 0.6207 this means that the respondents were agreed towards the process monitoring and control in the directorate of general security.

According to performance, the maximum value recorded in performance's items is 4.1984 with a standard deviation of 0.56484 which refers to (We deliver our services on time to customers). The minimum value recorded in performance's items is 4.0437 with a standard deviation of 0.66356 which refers to (The technological competitiveness of our directorate is high). As a conclusion, performance has shown good results; it is shown that the performance has recorded an average value of 4.0913 with a standard deviation of 0.6340 this means that the respondents were agreed towards the performance in the directorate of general security.

### *3.5. The Relationship between Total Quality Management Components and Performance*

Correlation analysis is employed to investigate the relationship between total quality management components and performance at directorate of general security in Reyad. Table 6 shows the relationship between total quality management components and performance.

		CQ	EI	CI	FBM	PMC	PERF
CQ	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	252					
EI	Pearson Correlation	.245**	1				
	Sig. (2-tailed)	.000					
	N	252	252				
CI	Pearson Correlation	.240**	.197**	1			
	Sig. (2-tailed)	.000	.002				
	N	252	252	252			
FBM	Pearson Correlation	.195**	.093	.299**	1		
	Sig. (2-tailed)	.002	.141	.000			
	N	252	252	252	252		
PMC	Pearson Correlation	.411**	.049	.353**	.408**	1	
	Sig. (2-tailed)	.000	.442	.000	.000		
	N	252	252	252	252	252	
PERF	Pearson Correlation	.219**	.309**	.318**	.515**	.592**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	252	252	252	252	252	252

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 6: The Relationship between Total Quality Management Components and Performance

The results showed that there are positive and significant relationships between commitment to quality, employee involvement, continuous improvement, fact-based management and, process monitoring and control and the directorate performance. This indicates the importance of employing total quality management in the public sector, this results are consistent with several previous studies (Rahman, 2001; EsinSadikoglu, CemalZehir, 2010; Alessandro Brun, 2010)

### 3.6. The Impact of Total Quality Management Components on the Performance

Regression analysis is employed to investigate the effect of total quality management components on the performance at directorate of general security in Reyad. Table 7 shows the effect of total quality management components on the performance.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.834	.224		3.726	.000
Commitment to quality	-.078	.033	-.119	-2.357	<b>.019</b>
Employee involvement	.214	.035	.281	6.031	<b>.000</b>
Continuous improvement	.019	.037	.026	.524	.601
Fact-based management	.220	.036	.302	6.117	<b>.000</b>
Process monitoring and control	.422	.046	.494	9.183	<b>.000</b>
R <sup>2</sup>	0.517				
VIF Problems	No				
Heteroscedasticity	No				

Table 7: The Effect of Total Quality Management Components on Performance.

The effect of commitment to quality, employee involvement, continuous improvement, fact-based management and, process monitoring and control on performance is analyzed in table 7. The results indicated that the coefficient of determinations R<sup>2</sup> value is 0.517 (51.7%). This implied that on average the variability in the influenced construct for this study can explain 51.7% of the variability in the directorate of general security performance. In other words, 48.3% are external factors have not employed in this study.

The results showed that the influence of commitment to quality, employee involvement, fact-based management and, process monitoring and control on performance are valid which all recorded a probability value of less than 0.05. This indicated that there is significant effect of commitment to quality, employee involvement, fact-based management and, process monitoring and control on performance. However, the continuous improvement does not have a significant effect on performance which recorded a probability value of more than 0.05 which is 0.601. In general, there are significant impact of total quality management components on performance, this results are consistent with several previous studies (Easton and Jarrell, 1998; Hendricks and Singhal, 2001a, b). Table 8 shows the research hypothesis according to the results.



Research Hypothesis	Results	Meaning
There is a significant effect from commitment to quality on the performance of directorate of general security in Reyad.	.019	Accepted
There is a significant effect of employee involvement on the performance of directorate of general security in Reyad.	.000	Accepted
There is a significant effect continuous improvement orientation on the performance of directorate of general security in Reyad.	.601	Rejected
There is a significant effect from fact-based management on the performance of directorate of general security in Reyad.	.000	Accepted
There is a significant effect of process monitoring and control on the performance of directorate of general security in Reyad.	.000	Accepted

Table 8: Research Hypothesis According to the Results

#### 4. Conclusion and Recommendations

This study investigated the impact of TQM components and the performance of directorate of general security in Reyad - Saudi Arabia. The components are commitment to quality, employee involvement, continuous improvement, fact-based management, and process monitoring and control. The results showed that there is significant effect of commitment to quality, employee involvement, fact-based management and, process monitoring and control on performance. But, the continuous improvement does not have a significant effect on performance. Furthermore, the importance of TQM is investigated by investigating the relationship between total quality management components and performance by conducting correlation analysis. It is shown that there are positive and significant relationships between TQM components and the performance.

Interested parties in the future can further improve model with the same variables in different sectors such as health care center, services organizations, and financial sectors rather than focusing on the directorate of general security in Reyad - Saudi Arabia. In addition, future studies could also include some other TQM factors which that could influence the performance.

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