The role played by service quality as a moderator in the relationship between E-management and excellence of government performance

Prepared by
Dr. Emad Abdul Khalik Saher Al-Tahan,
emad_tahan@hotmail.com

Abstract: the present research problem can be summarized in the following question "To what extent can service quality contribute to operationalization of E-management and excellence of government performance within Al-Gouf traffic authority, K.S.A."

Moreover, the study seeks to determine the relationship nature between service quality on one hand, and both E-management and excellence of government performance on the other, through testing the proposed model to reach a number of results, and recommendations that may benefit officials within Al-Gouf traffic Authority, K.S.A.

To this end, the researcher used the descriptive methodology, interpreting the existing condition of the examined issue, dimensions, along with conducting analysis and interpretation of such issue. In addition, the researcher used the questionnaire methodology in the field study with a sample comprised of 137 items.

Results of the study indicate that there is a significant effect of E-management on service quality within AL-Gouf Traffic Authority. The former has a significant effect on excellence of government performance within Al-Gouf Traffic Authority.

Some recommendations made by the present research include: the establishment of an entity concerned mainly with up to date technology enacted in E-management, benefit from similar endeavors undertaken by other countries, notwithstanding cultural differences, develop knowledge skills and potential of staff by way of skills and potential of staff by way of training to ensure the presence of high caliber employees within job activities for greater levels of performance under the umbrella of E-management.

Keywords: Service quality, E-management, excellence of government performance, traffic authority, Al-Gouf.
مستخلص: تتمثل مشكلة البحث في التساؤل التالي: "إلى أي مدى تسهم جودة الخدمة في تفعيل الإدارة الإلكترونية والتميز في الأداء الحكومي داخل مرور الجوف في المملكة العربية السعودية.

كما هدد هذا البحث إلى تحديد طبيعة العلاقة بين جودة الخدمة وكل من الإدارة الإلكترونية والتميز في الأداء الحكومي داخل مرور الجوف، واختبار النموذج المقترح للتوصل إلى عدد من النتائج وتقديم مجموعة من التوصيات التي قد تخدم المسئولين داخل إدارة مرور الجوف في المملكة العربية السعودية.

وأعتمد الباحث على المنهج الوصفي، الذي يقوم على تفسير الوضع الراهن للظاهرة محل البحث والبحث وتحديد الأبعاد وظروف الظاهرة، هذا بجانب إجراء تحليل وتفسير البيانات الخاصة بالظاهرة، كما استخدم الباحث في الدراسة الميدانية أسلوب الاستبيان على عينة قوامها 137 مفردة.

كما توصل الباحث لعدة نتائج أهمها يوجد تأثير ذو دلالة معنوية للإدارة الإلكترونية على جودة الخدمة داخل إدارة مرور الجوف، كما يوجد تأثير ذو دلالة معنوية للإدارة الإلكترونية على التميز في الأداء الحكومي داخل إدارة مرور الجوف، وكذلك يوجد تأثير ذو دلالة معنوية لجودة الخدمة على التميز في الأداء الحكومي داخل إدارة مرور الجوف.

وكذلك قدم الباحث العديد من التوصيات أهمها السعي نحو إنشاء وحدة تبعته بأخير الأساليب التكنولوجية المتاحة في الإدارة الإلكترونية والاستفادة من التجارب المماثلة في دول العالم مع الأخذ في الاعتبار الاختلافات في البيئة الثقافية، العمل على تطوير معلومات ومهارات وقادات ومعرف الموظفين ونطم تفكيرهم لإكسبابهم القدرة على التعامل مع مطلبات تطبيق الإدارة الإلكترونية للموارد البشرية، من خلال التدريب لتطوير مهارات وإمكانيات جميع الموظفين في مجال أنشطة العمل لزيادة كفاءة الموظفين في أدائهم لتوظيفهم في ظل الإدارة الإلكترونية.

الكلمات المفتاحية: جودة الخدمة - الإدارة الإلكترونية - التميز في الأداء الحكومي - إدارة المرور - الجوف.
Introduction:

Emergence of globalization has made the world more complicated due to the rapidly changing IT & Telecommunication. Organizations might plunge into endless competitions for the acquisition of superb quality and performance that meet high expectations (Nivlouei, 2014).

Amid such market demands, and intense competition, organizations seek to forge new strategies to handle these demands and achieve the competitive edge. Therefore, E-management has become a decisive factor enabling organization to meet their goals and attain competitiveness (Findikli, Ebru, 2015).

Concept of E-management generally depends on the utilization of the massive capabilities of IT and Telecom to streamline daily activities within business organizations providing managers with opportunities to engage with one another in pursuit of common objectives (Sven, et.al, 2015).

However the concept of E-management does not confine itself to automating work units within organizations, but rather extend to the integration of data bases and knowledge among multiple administrations, using the available data to direct firm policies and flexibility required to respond to consequent changes internally or externally (Sharma, Megha, 2016).

Service quality can be defined as the perception of client resulting from comparing the perceived performance level after usage to the expected performance level prior to usage (Al-Menawy, 2001).

It is therefore a measure of the service type provided to customers, how it has been delivered and to what extent it meets their needs, wants and expectations (Al-Sabaei, 2017).

Service Quality is thus associated with customer needs and expectations, when the latter are satisfied, the service is said to be high quality (Gad Al-Rab, 2007).

Another widely circulated term is excellence with definitions varying considerably by studies, lectures, scientific conferences, journals …etc. This reflects the significance of the term and content as well. As a result, different management approaches over the years sought diligently to define the management excellence. For instance, scientific management approach cited efficiency as the basis for management excellence, while the humanitarian relations approach introduced the human dimension to the process stressing the importance of staff social needs (Greasley, 2005).
Modern approaches, however, focuses more on the business environment for its direct impact on the organizational performance. "Effectiveness" then emerged showing the importance of achieving corporate objectives given the environmental variables that might affect the firm’s activity (Ghonemi, 2014).

Harrison, 2001, Sachs, 2000, and Bennett, 2000, argue that performance is behavior resulting from reaction toward a certain task, imposed either by others, or self-enacted. It can be said that performance is actions or reactions with principles embraced by a certain member in an organized group representing the entire organizational entity. Further, performance is the individual's ability to accomplish job expectations in different aspects i.e. quantity and quality of production, planning, cooperation, reliability, effort, care at work, innovation and creativity.

The present study proposes seeks to identify the role played by service quality as a moderator in the relationship between E-management, and excellence in government performance with an application on Al-Gouf traffic authority, K.S.A.

First: Research problem:

Research problem can be summarized in the following major question: "To what extent can E-management contribute to the attainment of service quality and excellence of government performance within AL-Gouf traffic authority, K.S.A.?

Second: Research objectives:
The following are the research objectives:
1- Define the nature of relationship between E-management and service quality within Al-Gouf traffic authority
2- Identify the nature of relationship between E-management and excellence of government performance within Al-Gouf traffic authority
3- Examine the relationship between service quality and excellence of government performance within Al-Gouf traffic authority
4- Identify the level of interest by officials in service quality and excellence of performance within Al-Gouf traffic authority

Third: Research importance:

The following factors constitute research importance:

1- Research academic importance: due to the fact that service quality, E-management, and excellence of government performance are still not extensively examined in K.S.A., the issue needs further contributions by Arabic studies and research that would enrich the discussion with more up-to-date writings.
2- Research practical importance: practical importance of the present research is the determination of the role played by E-management in improving service quality, and excellence of government within AL-Gouf traffic authority. Al-Gouf traffic authority has been chosen because of the major role it plays in keeping roads hazard-free and insuring the safety of citizens ads well as regulating traffic flow and minimize road accidents.
3- Importance to the researcher: the present research is expected to enhance the researcher's knowledge, enrich thoughts on the issue being examined.

Fourth: Research Hypotheses:

The following hypotheses have been developed:

H-(1): There is a significant effect of E-management on the service quality within Al Gouf Traffic Authority.

H-(2): There is a significant effect of E-management on excellence of performance within Al Gouf Traffic Authority.

H-(3): There is a significant effect of service quality on excellence of performance within Al Gouf Traffic Authority.

Fifth: Research variables:

The following figure illustrates the search variables (e.g. Figure (1/1)
Sixth: Population and study sample:

(1) **Population:** Subjects of the present study are the entire staff hires by Al Gouf Traffic Authority (N. 328) (as reported by Manpower department, Apr. 2018, Al Gouf Traffic Authority). The schedule below indicates number of employees according to job descriptions

<table>
<thead>
<tr>
<th>No.</th>
<th>Job Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Officers</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Soldiers</td>
<td>300</td>
</tr>
<tr>
<td>3</td>
<td>Administrators</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>328</td>
</tr>
</tbody>
</table>

**Source:** Manpower Department: Al Gouf Traffic Authority, Apr. 2018

(2) **Research sample:** a random sample participated in the present study comprised of all job levels (i.e.): officers, soldiers, and administrators relying on the following statical tables and equations (Idrees, 2007)

\[
n = \frac{Z^2 \pi (1 - \pi)}{e^2}
\]

With Z= Standard deviation limits at certain trust level for instance 95%, The corresponding standard deviation for statistical tables is 1.96,
And \( \pi \) = ratio of subjects with characteristics pertinent to the study issue (i.e.) 50%,

\( (1-\pi) \) = ratio of those not having the characteristics pertinent to the study issue (i.e.) 50%,

\( e^2 \) = admissible error estimated = 0.5,

\( n \) = sample size

Based on the above equation, the sample size is 190 items for the employees participating in the study.

The sample size has been distributed in accordance with job levels (e.g. officers, soldiers, and administrators), later a random sample was taken from the three job levels as follows:

Table (1/2): Distribution of study sample based on job levels

<table>
<thead>
<tr>
<th>No.</th>
<th>Job Description</th>
<th>No. of employees</th>
<th>Ratio</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Officers</td>
<td>8</td>
<td>2%</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Soldiers</td>
<td>300</td>
<td>92%</td>
<td>173</td>
</tr>
<tr>
<td>3</td>
<td>Administrators</td>
<td>200</td>
<td>7%</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>328</td>
<td>100%</td>
<td>190</td>
</tr>
</tbody>
</table>

Source: Prepared by the researcher

200 questionnaire forms have been distributed to study subjects with a response rate of 150 minus 13 excluded (i.e.) 72%

Seventh: Research methodology:

the researcher used the analytical descriptive methodology that interprets the existing condition of the issue examined, defines dimensions as well as conducting analysis and description of the relevant data. Moreover, the study used the questionnaire method during the field study; here is how the questionnaire form has been designed:

The layout contains five main parts:

Section one: outer cover, the introduction, stressing the issue importance and confidentiality of provided information.

Section two: a question comprised of five items to identify demographics of employees hired by Al-Gouf Traffic Authority.

Section three: a question comprised of (15) items to identify service quality within Al-Gouf Traffic Authority.

Section four: a question comprised of (20) items to identify E-management within Al-Gouf Traffic Authority.

Section five: a question comprised of (20) items to identify performance excellence within Al-Gouf Traffic Authority.
Eighth: Statical analysis methods:

SPSS Ver: 22 computer program of statistics in social science, was used as follows:

A- Alpha Cronbach coefficient for the measure consistency of research variables was used, except for the demographics.

B- Sample items have been distributed based on demographic variables (e.g. age, experience, qualifications, and job hierarchy) along with numbers and percentage.

C- Average standard deviation, and discrepancy coefficient for the research variables except the demographics, to identify the existing rate of every variable in the study sample as well as the dispersion medium.

D- Pearson correlation among research variables (dual variables) except for the demographics, so as to determine the strength, direction, and significance of correlation in its basic form.

E- Simple linear regression used to examine the impact of E-management, its dimensions on the moderator and dependent variables (e.g. service quality, and excellence of government performance), thus testing the validity of hypotheses 1,2,and 3.

Ninth: Research theoretical framework:

(a) **E-management:**

it is defined as the process related to the four functions of management (e.g. planning, organization, direction, and control) electronically in service of human resources within organizations. In other words, functions and activities of HR are carried out electronically i.e. via computers, internet and intranet (Steve Foster, 2009). Mirzaei and Sanayei 2008, argue that E-management of HR provides numerous tools and services for the HR such as:

(1) Electronic business administration of human resources.
(2) E-training
(3) E-recruitment

1- **Electronic business administration of HR:**

The process of e-business administration of HR can be defined as planning, organization, direction and control of HR e.g. organize work plans, performance evaluation, running assignments, check-in and check-out follow up, conferences, e-pay of salaries and wages via computers and internet (Steve Foster, 2009).

2- **E-training:**
A set of training techniques to attain fast progress with low costs thus meeting business needs immediately. E-training is easy to implement as it uses common tools such as display and teleconferencing programs (Carmen, 2006)

3- E-recruitment:

this can be defined as the process of selecting and attracting the human resources needed by the corporation using the Internet and the website or other recruitment sites (Roseanne, 2007).

(b) Service quality and its dimensions (the moderator):

A service is defined as an act or performance provided by some party to another, usually such service is intangible with no transfer of possession. The service might be related to a physical product or not (Al-Bakry, 2005). A service is invisible, and can't be tasted or perceived prior to purchase (usage). Usually services can't be separated from their providers thus requiring interaction on the providers' part to deliver a value. In the area of a service component a number of researchers reached the conclusion that customers seem to have criteria to enable them judge the quality of a service provided.

The criteria consist of 10 major dimensions devised by Kottler, (2007) as follows:

1- Performance assurance or reliability.
2- Responsiveness
3- Competence
4- Accessibility
5- Credibility
6- Communication
7- Safety
8- Understanding
9- Courtesy
10- Tangibles

Later studies indicated that the above dimensions may be reduced to just five major ones that constitute the triangle of certified service quality as adopted by the present research (Ananth et.al. 2011)

1- **Tangibles**: this refers to physical facilities, equipment, and appearance of employees.
2- **Reliability**: it refers to providing the service precisely and independently.
3- **Responsiveness**: it means the presence of a genuine desire to help customers and improve the service provided.
4- **Assurance:** it signifies staff knowledge, empathy, and instil trust among customers.

5- **Empathy:** it shows the level of interest and attention paid to customers.

Further, the present study has indicated that despite the importance of aforementioned dimensions in creating service quality, the relative weight of each varies considerably (Koyngo, 2005).

(c) **Dimensions of performance excellence:**

1- **Performance excellence conception:** It's a state of managerial creativity, organizational superiority leading to unprecedented levels of performance, execution of productive, marketing, and financial process. These together contribute to attaining remarkable results that surpass those attained by competitors besides satisfying customers and various stakeholders throughout the organization (Al-Selmy, 2001).

2- **Excellence culture in corporate performance:** This refers to a set of common values adopted by the organization for the customer satisfaction along with other effective operations (e.g. measure of output, continuous improvement, inspirational leadership, transparency, trust, empowerment, accountability for business) (Al-Mazroua, 2010).

3- **Role of leadership in excellence:** Leadership traits vary from one person to another as some seem to enjoy certain leadership characteristics and behavior whether born or acquired through practice, observation, action and reaction. However, others don't have such qualities or they may be latent awaiting the right motivation by successful managerial leadership. In other words, leadership plays a pivotal role in refurbishing performance excellence.

4- **Staff satisfaction:** Job satisfaction is a key ingredient of the elements contributing to the retention of workers despite work pressures. In other words, job satisfaction varies directly with continuation commitment among workers thus leading to greater job effectiveness. (Wei, Cheng, 2008).

5- **Education and Institutional growth:** It's a process of reaching conclusions and correcting errors of the state of enhancing corporate knowledge by way of continued knowledge of individuals due to becoming aware of environmental factors influencing relations (Al-Zottma, 2011).

**Tenth: Results of field study:**
(a) Consistency and validity of measurement: the table below shows consistency and validity coefficients using Alpha Cronbach

Table (1/3): consistency and validity coefficients using Alpha Cronbach

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>No. of items</th>
<th>A</th>
<th>Self-validity</th>
<th>order</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>E-management</td>
<td>20</td>
<td>0.953</td>
<td>0.976</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Service quality</td>
<td>15</td>
<td>0.902</td>
<td>0.949</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Excellence of governmental performance</td>
<td>20</td>
<td>0.961</td>
<td>0.980</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>0.974</strong></td>
<td><strong>0.986</strong></td>
<td><strong>-</strong></td>
</tr>
</tbody>
</table>

1. Governmental performance excellence coefficient was ranked first in terms of consistency and validity i.e. 96% and 98% respectively.
2. E-management coefficient was ranked second i.e. 95% and 98% respectively.
3. Service quality variable came in third i.e. 90% and 95% respectively.

The above results show that total values of consistency and validity coefficients were 97% and 98% thus reflecting higher consistency of the measure used. As for items maintained in the tests, they indicated unwavering beliefs and opinions on the participants' part toward research variables.

(b) Demographics of research sample:

Table (1/4) below shows the repeat and percentages of demographic data for the research sample and analysis.

Table (1/4) Distribution of Study sample According to demographic data

<table>
<thead>
<tr>
<th>Statement</th>
<th>Distribution</th>
<th>Repeat</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-30 yr.s</td>
<td>51</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>30-45 yr.s</td>
<td>48</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>45-50 yr.s</td>
<td>27</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>50 yr.s and above</td>
<td>11</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>137</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary, diploma</td>
<td>102</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>33</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Higher studies</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>137</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5 yr.s</td>
<td>63</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>5-10 yr.s</td>
<td>56</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>10-15 yr.s</td>
<td>13</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>15 and more yr.s</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>137</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td><strong>Job hierarchy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Officers</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Soldiers</td>
<td>125</td>
<td>91</td>
<td></td>
</tr>
</tbody>
</table>
The above table shows the following:

- 25 yr.s to less than 30 yr.s of age category accounted for 37%, while 30 yr.s to less than 45 yr.s accounted for 35%, with 45 yr.s to less than 50 yr.s of age category accounted for 20%, 50 yr.s and more represented 8%. This indicates a high level of trust in results due to variety of age categories.
- University education rate accounted for 24%, secondary and diploma education amounted to 74%, while higher studies accounted for 2% reflecting a high level or trust in the results as sophisticated education enables respondents to fully comprehend the study issue.
- Experience category with less than 5 yr.s accounted for 46%, 5 yr.s to less than 10 yr.s accounted for 41% from 10 years to 15 years stood at 9% ratio, and finally 15 years of experience and more accounted for 4%. In all, such values reflect a high level of trust in results due to the high level of experience acquired by study participants.
- Officers accounted for 2% while soldiers were 91%, and administrators 7%, thus showing trust in results due to the presence multiple job hierarchies.

C) Descriptive statistics of study variables:

1- Statistical description of E-management variable:

The table below (1/5) shows the results of statistical description of E-management variable

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Item</th>
<th>Average</th>
<th>S.D</th>
<th>D.C</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1-1</td>
<td>E-business administration of H.R: Employees have an insight to E-management &amp; its requirements.</td>
<td>4.36</td>
<td>0.596</td>
<td>13.67</td>
</tr>
<tr>
<td>X1-2</td>
<td>Current E-management boosts the morale of employees, their performance</td>
<td>4.27</td>
<td>0.654</td>
<td>15.32</td>
</tr>
<tr>
<td>X1-3</td>
<td>Employees within administrative units submit suggestions for better performance of E-management.</td>
<td>4.46</td>
<td>0.654</td>
<td>15.32</td>
</tr>
<tr>
<td>X1-4</td>
<td>Empowering E-management to introduce new and variable services for employees</td>
<td>4.33</td>
<td>0.637</td>
<td>14.71</td>
</tr>
<tr>
<td>X1-5</td>
<td>E-management is capable of achieving maximum levels of organizational commitment among employees</td>
<td>4.03</td>
<td>0.633</td>
<td>14.72</td>
</tr>
<tr>
<td>X1-6</td>
<td>E-management reduces administrative complications</td>
<td>4.16</td>
<td>0.610</td>
<td>14.66</td>
</tr>
<tr>
<td>X1-7</td>
<td>E-management allows the reception of staff</td>
<td>4.08</td>
<td>0.29</td>
<td>17.87</td>
</tr>
</tbody>
</table>
grievances, examining them and findings solutions

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Item</th>
<th>Average</th>
<th>S.D</th>
<th>D.C</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1-8</td>
<td>E-management makes the provision of services to employees immediate and timely</td>
<td>4.14</td>
<td>6.660</td>
<td>15.94</td>
</tr>
<tr>
<td>X1-9</td>
<td>E-management facilitates the speedy storage of information and keeps the corporate memory intact</td>
<td>4.17</td>
<td>0.620</td>
<td>14.87</td>
</tr>
<tr>
<td>X1-10</td>
<td>E-management improves the level of services needed for H.R management. H.R.M</td>
<td>4.15</td>
<td>0.556</td>
<td>13.40</td>
</tr>
<tr>
<td>X1-11</td>
<td>2- E.Training: e. Training lessens the time required for regular training</td>
<td>4.15</td>
<td>0.581</td>
<td>14.00</td>
</tr>
<tr>
<td>X1-12</td>
<td>e.Training preserves the time and effort exerted by trainees</td>
<td>4.04</td>
<td>0.643</td>
<td>15.92</td>
</tr>
<tr>
<td>X-1-13</td>
<td>e.Training facilitates procedures of the training process</td>
<td>2.18</td>
<td>1.086</td>
<td>49.82</td>
</tr>
<tr>
<td>X-1-14</td>
<td>e.Training enhances the continuation of the training process within the Traffic Authority.</td>
<td>3.46</td>
<td>0.944</td>
<td>27.28</td>
</tr>
<tr>
<td>X1-15</td>
<td>e.Training lessens the costs of training</td>
<td>3.85</td>
<td>0.817</td>
<td>21.22</td>
</tr>
<tr>
<td>X1-16</td>
<td>3- E-Recruitment: e. Recruitment eliminates employment mediation within Al Gouf Traffic Authority Websites.</td>
<td>3.79</td>
<td>0.751</td>
<td>19.82</td>
</tr>
<tr>
<td>X-1-17</td>
<td>e. Recruitment reduces the time needed for hiring new applicants</td>
<td>3.98</td>
<td>0.877</td>
<td>22.04</td>
</tr>
<tr>
<td>X1-18</td>
<td>e.Recruitment reduces costs of hiring new applicants</td>
<td>3.78</td>
<td>0.739</td>
<td>19.55</td>
</tr>
<tr>
<td>X-1-19</td>
<td>e.Recruitment facilitates procedures, interviews and tests of job applicants</td>
<td>3.22</td>
<td>1.010</td>
<td>31.37</td>
</tr>
<tr>
<td>X-1-20</td>
<td>e.Recruitment attracts and retains high calibers employees</td>
<td>3.62</td>
<td>1.107</td>
<td>30.58</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3.92</td>
<td>0.742</td>
<td>19.99</td>
</tr>
</tbody>
</table>

The above table indicates that the study sample tends to support the item on excellence of g. performance variable with the total average of (4.03), S.D (0.855) and D.C (21.2)

2- Statistical description of service quality variable:

The table below (1/6) shows the results of statistical description of service quality variable

Table (1/6): Statistical description of service quality variable

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Item</th>
<th>Average</th>
<th>S.D</th>
<th>D.C</th>
</tr>
</thead>
<tbody>
<tr>
<td>X2-1</td>
<td>1-Tangibility: Provision of tangible facilities and sufficient flexibility when delivering traffic</td>
<td>4.355</td>
<td>0.510</td>
<td>11.26</td>
</tr>
</tbody>
</table>
The presence of guide signs pointing toward the required service venue | 4.23 | 0.686 | 16.22
Use of modern methods in promoting traffic services on the website | 4.17 | 0.612 | 14.68
**2-Reliability:**
Traffic employees are capable of providing the required services in a timely manner | 4.34 | 0.591 | 13.62
Response of traffic employees to demands by clients at the suitable timing despite pressures | 3.99 | 0.761 | 19.07
Absolute confidentiality regarding clients’ data | 4.08 | 0.562 | 13.77
**3-Assurance:**
Clients are assured of trust when dealing with service providers | 3.30 | 1.170 | 35.45
Clients are assured that their demands are fulfilled | 3.26 | 1.174 | 36.01
Risk avoidance when clients seek to get the required services | 3.32 | 1.253 | 37.74
**4-Responsiveness:**
To what extent are clients' demands met and problems solved | 3.26 | 1.152 | 35.34
Quick response to enquiries by clients on the internet | 3.50 | 1.044 | 29.83
 Clients perceptions of the speed and treatment provided | 3.31 | 1.044 | 31.54
**5-Empathy:**
Work hours are convenient | 3.44 | 1.107 | 32.18
Care is taken to provide extra services for staff when having problems | 3.44 | 1.088 | 31.63
Quick response to staff suggestions and grievances | 4.44 | 0.647 | 14.57
**Total** | **3.90** | **0.82** | **22.16**

The above table shows that the study sample tends to favor service quality items with a total average 3.90, SD (0.82), and DC (22.16).

**3-Statistical description of g-performance excellence variable:**

The table below (1/7) shows results of statistical description of g-performance excellence

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Item</th>
<th>Average</th>
<th>S.D</th>
<th>D.C</th>
</tr>
</thead>
</table>
| X3-1   | **1-Corporate culture of excellence:**
The culture prevailing in Al-Gouf traffic authority enhances job performance excellence | 4.24 | 0.647 | 15.26 |
| X3-2   | Regulations and procedures within Al-Gouf | 4.06 | 0.745 | 18.35 |
| X3-3 | Existing values and benefits within Al-Gouf traffic authority are upheld while performing job duties | 3.85 | 0.846 | 21.97 |
| X3-4 | Education and staff culture at A-Gouf traffic authority is compatible with specialties | 4.29 | 0.594 | 13.85 |
| X3-5 | Values and beliefs governing Al-Gouf traffic authority are specific and well defined | 4.19 | 0.651 | 15.54 |
| **X3-6** | **2- Role by leaders in excellence:**
Superiors encourage employees to submit fresh ideas | 3.82 | 0.957 | 25.05 |
| X3-7 | Superiors present employees with ideas and alternatives that would help growth within Al-Gouf traffic authority in the long run | 3.80 | 0.863 | 22.71 |
| X3-8 | Leaders support employees for making strategic decisions within Al-Gouf traffic authority | 3.73 | 0.913 | 24.48 |
| X3-9 | Employees are allowed to submit suggestions to leaders that would handle unexpected changes | 3.91 | 0.975 | 24.94 |
| X3-10 | Superiors lay out their visions for how to carry out assignments and improve performance | 4.03 | 0.955 | 23.70 |
| **X3-11** | **3- Staff satisfaction:**
Benefits and social services are in place within Al-Gouf traffic authority | 3.88 | 0.912 | 23.51 |
| X3-12 | Physical circumstances in the work place contribute to job satisfaction | 3.81 | 0.858 | 22.52 |
| X3-13 | Sometimes job assignments are conflicting as they come from several leaders | 3.86 | 0.829 | 21.48 |
| X3-14 | Promotion system increases job satisfaction among Al-Gouf traffic authority employees | 4.05 | 0.800 | 19.75 |
| X3-15 | Pay and incentives applied within Al-Gouf traffic authority are satisfactory | 4.15 | 0.808 | 19.47 |
| **X3-16** | **4- Education and institutional growth:**
There is a training system enabling Al-Gouf traffic authority employees to develop and enhance organizational education | 4.08 | 0.562 | 13.77 |
| X3-17 | I’m provided the opportunity to improve performance | 4.24 | 0.647 | 15.26 |
| X3-18 | Possession of education skill liberates me from classical work style | 4.13 | 0.716 | 17.34 |
| X3-19 | Al-Gouf traffic authority encourages employees to acquire more education through available information sources | 4.43 | 0.512 | 11.56 |
| X3-20 | Employees are aware of all variables | 4.10 | 2.200 | 53.66 |
The above table indicates that the study sample tends to support the item on excellence of g. performance variable with the total average of (4.03), S.D (0.855) and D.C (21.2)

**D-Testing research hypothesis:**

1- Testing H1 :

This hypothesis states that "There is a significant effect for E-management on service quality within Al-Gouf Traffic Authority".

To this end, the following tests have been used :

**A- Correlation Coefficient:**

The following table (1/8) shows correlation between E-management (independent variable) and service quality (dependent variable), using Pearson coefficient.

**Table (1/8) Pearson’s correlation for Hypothesis one**

<table>
<thead>
<tr>
<th>Independent variable X1</th>
<th>Pearson correlation Value</th>
<th>P</th>
<th>Dependent variable (X2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-management</td>
<td>0.540</td>
<td>**0.001</td>
<td>service quality</td>
</tr>
</tbody>
</table>

*** P=0.001.

The above table shows a significant relationship at P=0.001 between E-management and service quality.

**B- Simple linear regression results:**

The following table (1/9) shows results of Simple linear regression analysis between E-management and service quality.

**Table (1/9): Results of stepwise analysis between E-management and service quality**

<table>
<thead>
<tr>
<th>P</th>
<th>t-value</th>
<th>Beta</th>
<th>Standard deviation</th>
<th>B</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.001</td>
<td>17.748</td>
<td>0.176</td>
<td>3.115</td>
<td>Constant</td>
<td>E-management</td>
</tr>
<tr>
<td>0.001</td>
<td>7.067</td>
<td>0.340</td>
<td>0.142</td>
<td>0.294</td>
<td>X 2</td>
</tr>
</tbody>
</table>

Other indicator \( R^2 = 12\% \)

**The above table indicates that:**

- \( R^2 = 12\% \) meaning that E-management variable interprets service quality at a ratio of 12% while the remaining ratio is accounted for by
other variables excluded from the stepwise relationship, along with random errors resulting from the method of forming the study sample, measurement accuracy as well as other factors.

- The value of the beta coefficient = 0.340 which is a significant value, meaning that the electronic management variable affects the quality of service significantly by 34%.

- The above shows that there is a significant effect of E-management on performance excellence within Al-Gouf traffic authority, thus H-2 providing that “E-management has a significant effect on performance excellence within Al-Gouf traffic authority” has gained support.

3- Testing hypothesis H2:

This hypothesis states that “There is a significant effect of e-management on excellence of performance within Al Gouf Traffic Authority”.

To this end, the researcher used the following tests:

(A) Correlation coefficient:

The table below (1/10) shows correlation between E-management as the independent variable, and g-performance excellence as the dependent variable, using Pearson’s correlation.

<table>
<thead>
<tr>
<th>Independent variable (X1)</th>
<th>Pearson’s Value</th>
<th>P.</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-management</td>
<td>0.517</td>
<td>0.001</td>
<td>g-performance excellence</td>
</tr>
</tbody>
</table>

*** significant at P.=0.001.

The above table (1/10) shows the significant correlation at P.=0.001 between E-management and g-performance excellence.

B- Simple linear regression results:

The following table (1/11) shows results of Simple linear regression results: between E-management and g-performance excellence.

<table>
<thead>
<tr>
<th>P</th>
<th>t-value</th>
<th>Beta</th>
<th>Standard deviation</th>
<th>B</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.001***</td>
<td>8.971</td>
<td>0.0203</td>
<td>0.047</td>
<td>1.0824</td>
<td>Constant</td>
</tr>
<tr>
<td>0.001 ***</td>
<td>11.790</td>
<td>0.517</td>
<td>0.549</td>
<td>X 3</td>
<td>E-management</td>
</tr>
</tbody>
</table>

Other indices: $R^2=27\%$

The above table (1/11) shows the following:

- $R^2=27\%$ meaning that E-management variable can account for g-performance excellence at a ratio of 27%, the remaining ratio can be
accounted for by other variables kept out of the stepwise relation along with other random errors resulting from the method of forming the sample, measuring accuracy… etc.

- The value of the beta coefficient = 0.517 which is significant value, meaning that the electronic management variable affects the excellence in government performance with a significant effect of 51.7%.

Thus the second hypothesis (H2) has won support providing that “There is a significant effect of e-management on excellence of performance within Al Gouf Traffic Authority.

3- Testing H3:

H (3) provides that “There is a significant effect of service quality on performance excellence within Al. Gouf Traffic Authority.

To this end, the research used the following tests:

(A) Correlation coefficient:

The table below (1/12) indicates correlation coefficient between service quality as the independent variable, and g-performance as a dependent variable using Pearson correlation coefficient.

<table>
<thead>
<tr>
<th>Independent variable (X2)</th>
<th>Pearson’s correlation Value</th>
<th>P.</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service quality</td>
<td>0.641</td>
<td>***0.001</td>
<td>Excellence of g-performance</td>
</tr>
</tbody>
</table>

*** significant at P.=0.001

The above table reveals the presence of a significant relationship at P.=0.001, between service quality and excellence of g-performance.

B- Simple linear regression results:
The table below (1/13) shows results of Simple linear regression results: analysis between service quality and excellence of g-performance

Table (1/13): Stepwise analysis results between service quality and g-performance

<table>
<thead>
<tr>
<th>P</th>
<th>t-value</th>
<th>Beta</th>
<th>Standard deviation</th>
<th>B</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.001 ***</td>
<td>7.026</td>
<td>-</td>
<td>0.0181</td>
<td>1.272</td>
<td>Constant</td>
</tr>
<tr>
<td>0.001***</td>
<td>16.310</td>
<td>0.641</td>
<td>0.042</td>
<td>0.690</td>
<td>X 3</td>
</tr>
</tbody>
</table>

Other indices: $R^2=41\%$

The above table (1/13) shows that:
- $R^2=41\%$ indicating that service quality variable can interpret excellence of g-performance by a ratio of 41\%, the remaining ratio is interpreted by other variables not accounted for in the stepwise analysis along with random errors resulting from the method used to form the study sample and measurement accuracy…etc.
- The value of the beta coefficient = 0.641, a value of significant significance, meaning that the quality of service variable affects the performance excellence significantly by 64.1\%.

The researcher reached the conclusion that there is a significant effect of service quality on excellence of performance within AL-Gouf Traffic Authority.

In other words: H.(3) providing that “There is a significant effect for the service quality, on performance excellence within Al Gouf Traffic Authority”, has gained support.

Eleventh: Results & Recommendations:

(A) Prominent results:
1- Total consistency and validity coefficients are high reflecting consistency of the measure used and consequently validity of views surfaces by the study sample on research variables.
2- Study population approved of the E-management variable items.
3- Study sample tended to approve of the service quality variable items.
4- Study sample was inclined to approve of g-performance excellence items
5-There is a significant effect of the e.management on the service quality within Al Gouf Traffic Authority.
6-There is a significant effect of e.management on g.performance excellence within Al-Fouf Traffic Authority.

7-There is a significant effect of service quality on g.performance excellence within Al Gouf Traffic Authority.

B-Recommendations:

1. Greater focus and attention when recruiting new employees by e.recruitment without confining to CVs or resumes. This can be achieved by selecting candidates with required qualifications, versions, readiness for development, and applying basics and concepts of e.management. However, interviews should be the final mechanism for hiring efficient cadres. Further, job descriptions should be updated to align encumben employees with such requirements.

2. Encourage communication among different managerial levels to determine orientations explain objectives within e.forums established technology to enable employees to perfect their duties without having to exist at the Traffic Authority.

3. Develop employees skills to promote vision and future orientations amid the policies of e.management in H.R centering on self-training and education, stressing the fact that every employee is responsible for the development of their skills, knowledge, and experience gained from e.activities.

4. Establish a unit tasked with follow up on latest technological methods in e.management, benefit from similar experience around the world, without disregard of cultural differences.

5. Improve potential, and knowledge of employees to handle requirements of e.management in H.R. This can be attained through training in the job performance and evaluation using e.management.

6. Increase service quality by encouraging clients to use information technology (e.g. internet, e.cards) for receiving traffic services with credit privileges for users of such services.

7. Retain competent employees as they represent intellectual capital, rewarding them thus promoting organizational commitment. Further, an appropriate wage and incentive system should be in place, dismantle obstacles to the effective communication within top management, empower employees so that they become decision makers, and create an atmosphere inducing creativity and innovation.

8. Provide employees with the opportunity to forward suggestions on how to enhance service quality and other work-related areas within Al-Gouf Traffic Authority. Brilliant ideas should be rewarded areas within applications of suitable ones to reassure employees that their ideas are welcomed.
9. survey employees every once in a while on how work activities are performed to listen to their wants, needs, and traffic services they are willing to find available thus enhancing traffic performance excellence within Al-Gouf.

10. Conduct comprehensive review of politics and systems pertinent to service quality while considering the systems adopted in other traffic authorities to the benchmark for the regular evaluation and selection of the most appropriate ones.

C) Future Research:

The following areas would be perfect extension of the present research endeavor:

1. Study of leadership styles (e.g. democratic and chaotic), their impact on service quality and performance.
2. The effect of e-management on other variables (e.g. build and support of self-managing teams, job satisfaction).
3. The impact of e-management on issues of relevance such as organizational commitment, and organizational loyalty.
4. Application of the present study results on other sectors (e.g. public and private sector companies or banks).

Twelfth: References:

A- Arabic References:

Idrees, Thabit Abdulrahman; (2007) "Marketing Research: Methods of measuring and testing hypotheses" 'Alex., Gamiaya Dar.  


Gad Al.Rab, Hisham Fathi, Ebeed Fathi (2007) “Structural Models as an approach to evaluating faculty members development programs, and leaders, applied study on assistants to faculty members in Mansoura, University of Mansoura.


A- Foreign References:


Ananth et al, (2011), Service quality GAP analysis in private sector Banks a customer’s perspective, Indian Journal of Commerce & Management Studies, Vol–II , Issue 1,


Harrison, Nigel ( 2001) Improving Employee Performance, N.J: KoganPage, ,p.211.


