Civil Affairs in Saudi Arabia

SELP 695

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BACKGROUND

- A huge and basic resource for Saudi government

- Important data base on both citizens and non-citizens

- The first branch for Civil Affairs first was in 1926

- 13 branches in the country up to the reign of King Abdullah

- (2005-2014) the number of Civil Affairs branches became 129
## BACKGROUND

- **Civil Affairs Branches:**

<table>
<thead>
<tr>
<th></th>
<th>Civil Affair's Branches</th>
<th>Number of Civil Affair's Branches</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Riyadh Branches</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>Makkah Branches</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Madinah Branches</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Qaseem Branches</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Asceer Branches</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>Jazan Branches</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Baha Branches</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Jouf Branches</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Northern Border Branches</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Hael Branches</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Eastern Province Branches</td>
<td>15</td>
</tr>
<tr>
<td>12</td>
<td>Najran Branches</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>Tabouk Branches</td>
<td>9</td>
</tr>
</tbody>
</table>
PROBLEM STATEMENT

- Waiting in Civil Affairs
- A rapidly growing population
- Few branches and many people

(Only increasing in the number of branches not solving the problem)
PROJECT OBJECTIVE

- Reduce the time that visitors spend in Civil Affairs
- Design a system that upgrades Civil Affairs processes that effect visitors
- Assist the Saudi government in handling crowds at Civil Affairs branches
PROJECT OBJECTIVE

- Reduce costs through paperless (electronic) transactions
- Reduce costs by lowering the number of employees at Civil Affairs
- Improve Saudi security by reducing crowds that could potentially cause issues at Civil Affairs
SYSTEM REQUIREMENTS

- The system’s primary requirement is to significantly reduce the wait time for customers at the Civil Affairs Department

- The system shall facilitate the process involved in dealing with the Civil Affairs Department

- The system shall consist of five parts (individual, website of Civil Affairs, Civil Affairs Headquarters, All Ministries, and All City Civil Affairs Branches)

- The system shall provide guidance to the user

- The system shall be easily accessed via a Civil Affairs website

- The system shall be easily upgraded at any time

- The system shall integrate easily within the Civil Affairs Department

- The system shall train all employees to speed up necessary processes
STAKEHOLDER DESCRIPTION

- Civil Affairs

- Ministry of Interior

- Civil Affairs Employees
STAKEHOLDER DESCRIPTION

- Technical Assistance
- Citizens
- Non-citizens
PROPOSED ALTERNATIVE APPROACHES:

- Current System
- Modern System
- Easy-life System
CURRENT SYSTEM

- Set up appointments online

- Complete the necessary documents at any branch of Civil Affairs

- Issue i.d. within (10-14) days

- Does not include the issuance of drivers’ licenses
MODERN SYSTEM

- Takes an appointment online
- Fills out all the necessary paperwork online
- Photograph is taken directly online
- Fingerprint are taken if it is a first-time at nearest branch
- Receives the identification proof within a few hours
- Pick up the identification from the nearest branch immediately
- Wait until Civil Affairs delivers it the person’s home
EASY-LIFE SYSTEM

- Combining the identification of Civil Affairs with the driver's license
## TRADE STUDY

<table>
<thead>
<tr>
<th>System Requirements</th>
<th>Current System</th>
<th>Modern System</th>
<th>Easy-life System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Requirement</td>
<td>10-14 Days</td>
<td>Few Hours</td>
<td>Few Hours</td>
</tr>
<tr>
<td>Facilitate Process with Departments</td>
<td>Manual</td>
<td>Paperless</td>
<td>Paperless</td>
</tr>
<tr>
<td>Including Parts</td>
<td>Three Parts</td>
<td>Four Parts</td>
<td>Five Parts</td>
</tr>
<tr>
<td>Guidance</td>
<td>Not Applicable</td>
<td>Some Guidance</td>
<td>More Guidance</td>
</tr>
<tr>
<td>Access Via Website</td>
<td>Not Applicable</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Upgradable</td>
<td>Not Applicable</td>
<td>Easy to Upgrade</td>
<td>Easy to Upgrade</td>
</tr>
<tr>
<td>Integration</td>
<td>Not Applicable</td>
<td>Civil Affairs</td>
<td>Civil Affairs + Police Department</td>
</tr>
<tr>
<td>Training</td>
<td>Not Applicable</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
ANALYSIS OF THE PROPOSED ALTERNATIVE APPROACHES

+ Measures of Effectiveness (MoEs)

• System Performance: the ability to respond in a timely way

• System Recovery: the ability to recover in the event of system failure

• System Scalability: the ability to upgrade hardware and software in the physical system as demand increases

• System Dependability: the likelihood that the system will operate properly

• System Repairability: the ease with which the system to be fixed, in the event of a failure

• System Connection: dialog between or among systems
ANALYSIS OF THE PROPOSED ALTERNATIVE APPROACHES

**Measures of Effectiveness (MoEs)**

- **System Performance**: The Easy-life system demonstrates good performance
- **System Recovery**: There has been a steady progression as the system improves over time to the high point of Easy-life
- **System Scalability**: Improvements are being made as the systems modernize and Easy-life integrates with them to meet increased demand
- **System Dependability**: Both the modern and Easy-life systems exhibit high levels of dependability
- **System Reparability**: Since Easy-life is the newest, it is still the hardest to repair. We need to train more people because it is electronic system
- **System Connection**: Easy-life is the best because of its connection to different ministries
SYSTEM ARCHITECTING APPROACH/PROCESS:

- Operational Viewpoint
- Operational Environment
- Operational Needs
- System Overview
- The Heuristic Approach
OPERATIONAL VIEWPOINT (OV-1)

- Operational Viewpoint (OV-1)
OPERATIONAL ENVIRONMENT

- Organizational Relationship (OV-4)
OPERATIONAL ENVIRONMENT

- Capability for Smart line System (CV-2)

0-N Can be canceled
1-N Cannot be canceled
OPERATIONAL NEEDS

1) World Wide Web (www) address for collection of information as requested by consumers

2) High-speed data lines between customers with Civil Affairs, and Civil Affairs with the Ministry of Interior

3) Top "24-7" website security to protect the data that exists in the system

4) "24-7" Information Technology support for operations and troubleshooting

5) Educational courses in the use of the new system for Civil Affairs employees

6) Customer Service Department to handle all complaints
SYSTEM OVERVIEW

- Activity Diagram (SV-4)
RISK MANAGEMENT

<table>
<thead>
<tr>
<th>Risk</th>
<th>Likelihood</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Civil Affairs will reject the proposed system</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>2- Connections between branch units and the Civil Affairs principal server will be affected by issues related to national disasters</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>3- The developed software will not operate as planned</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>4- There will be public resistance to the changes introduced by the system</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>5- New users of the system will encounter great difficulties</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>6- The system will suffer a complete breakdown</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>7- There will be viruses introduced by computer hackers</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>
# Risk Management

<table>
<thead>
<tr>
<th>Risk</th>
<th>Action</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Civil Affairs will reject the proposed system</td>
<td>Present the system concept to Civil Affairs</td>
<td>Based on the acceptance of the project by Civil Affairs, work on the project will begin</td>
</tr>
<tr>
<td>2- Connections between branch units and the Civil Affairs principal server will be affected by issues related to national disasters</td>
<td>Locate the source of the problems</td>
<td>There will be backup systems put into use</td>
</tr>
<tr>
<td>3- The developed software will not operate as planned</td>
<td>Send in technicians to assess what is wrong</td>
<td>Software will be reprogrammed or outside software company will be retained</td>
</tr>
<tr>
<td>4- There will be public resistance to the changes introduced by the system</td>
<td>Manuals will be provided at every branch for people who resist</td>
<td>Provide public training courses</td>
</tr>
<tr>
<td>5- New users of the system will encounter great difficulties</td>
<td>Provide a help line which can access to the customers server</td>
<td>Educate customers through online courses</td>
</tr>
<tr>
<td>6- The system will suffer a breakdown</td>
<td>System operators will be sent in to locate the sources of the problem and resolve the situation</td>
<td>Weekly system maintenance to ensure proper function</td>
</tr>
<tr>
<td>7- There will be viruses introduced by computer hackers</td>
<td>System operators will be sent in to locate the sources of the problem and resolve the situation</td>
<td>A high anti-virus protection system will be installed</td>
</tr>
</tbody>
</table>
## VERIFICATION METHODS

<table>
<thead>
<tr>
<th>System Requirements</th>
<th>Inspection</th>
<th>Demonstration</th>
<th>Analysis</th>
<th>Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>The system’s primary requirement is to significantly reduce the wait time for customers at the Civil Affairs Department</td>
<td></td>
<td></td>
<td></td>
<td>The system will study 100 customers to test the wait time for customers at the Civil Affairs Department</td>
</tr>
<tr>
<td>The system shall facilitate the process involved in dealing with the Civil Affairs Department</td>
<td></td>
<td></td>
<td></td>
<td>The system hardware and software will provide the network performance to facilitate the process with the Civil Affairs Department</td>
</tr>
<tr>
<td>The system shall consist of five parts (individual, website of Civil Affairs, Civil Affairs Headquarters, All Ministries, and All City Civil Affairs Branches)</td>
<td>Inspect the system to ensure that the system will effectively combine all five parts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The system shall provide guidance to the user</td>
<td></td>
<td></td>
<td>Through the proper training, the system will provide the necessary guidance to user</td>
<td></td>
</tr>
</tbody>
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## VERIFICATION METHODS

<table>
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<tr>
<td>The system shall be easily accessed via a Civil Affairs website</td>
<td></td>
<td>The system will be easily accessed via a Civil Affairs website.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The system shall be easily upgraded at any time</td>
<td></td>
<td>Through easy upgrading the system will function electronically and without paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The system shall integrate easily within the Civil Affairs Department</td>
<td></td>
<td>The system will be demonstrated through easy integration within the Civil Affairs Department.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The system shall train all employees to speed up necessary processes</td>
<td></td>
<td>The system will provide all necessary training to employees to speed up processes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CONCLUSION

- This project proposes a way to reduce wait time when dealing with Saudi Arabia’s Civil Affairs Department

- Easy-life means increased flexibility

- Individual is not required to visit numerous locations to take care of necessities

- The enterprises and the government do not waste time searching for peoples’ basic data

- It is easier for businesses and other organizations to access all essential personal data in an instant

- This two-in-one mixture truly simplifies life with its paperless, electronic method

- Everything will be easier
LESSONS LEARNED

- The greatest challenge is the need to comprehend and assess system components so as to minimize wait time and maximize productivity.

- There is always the challenge of installing subsystems as part of a larger system so that they work harmoniously with one and other.

- Locating the different risks is key. Risk management must be utilized to the fullest to reduce the possibility of a system collapse.

- It is vital that Civil Affairs, as well as the Saudi government, keep pace with today’s technology.

- There exists the necessity of remaining fully current with technology for everyone’s benefit.

- Continued, careful study of the Easy-life system is recommended, as some sub departments may be removed for greater efficiency.

- Easy-life system is not a cure all for Saudi Arabia’s technical challenges, but it is a step in the right direction.

- Flexibility is the key to Easy-life system’s success and is the solution to replacing the present Saudi Civil Affairs system.
FUTURE WORK

Upgrade the card from a two-in-one to an all-in-one function
REFERENCES


