



INNOVATION THROUGH COLLABORATION

UN STUDY TOUR 2015
KINGDOM OF BAHRAIN



FOREWORD

In 2013, the Kingdom of Bahrain hosted the first United Nations Public Service Forum (UNPSF) in the Middle East under the patronage of His Majesty King Hamad bin Isa Al-Khalifa.

The forum had attracted more than 600 leading figures, policymakers, high level official delegations, practitioners and innovators in governance, as well as representatives on behalf of international and regional organizations, the academia, non profit organizations and the private sector from more than 80 countries.

The workshops in the forum reinforced the need for strengthening international ties; enabling representatives of member nations especially the Least Developed Countries (LDCs) to engage in eGovernment capacity building opportunities and study visits. Maintaining the recommendations of the forum, the eGovernment Authority (eGA) in association with Bahrain Information Technology Society (BITS) have been supporting knowledge exchange visits organized by United Nations Department of Economic and Social Affairs/ Division for Public Administration and Development Management (UNDESA/DPADM) during the year 2014 and 2015.

The knowledge exchange programs received delegates from 15 nations and 20 nations in 2014 and 2015 respectively. The delegates benefited from an in-depth and hands-on innovative eGovernment and public service practices.

Both study tours, 2014 and 2015, represented an important opportunity for LDC delegates to understand various innovative Information and Communication Technology (ICT) practices in the public sector and the critical success factors required for improving ICT production in the public service delivery.

The study tours highlighted a range of significant initiatives being undertaken by various stakeholders of the Kingdom's eGovernment program to enhance public service delivery to its constituents, namely citizens, residents, business and the government.

Discussions with delegates allowed an essential initial assessment of the requirements for adapting ICT innovative practices in their respective nations and signalled a strong need for a comprehensive engagement of knowledge transfer.

Reinforcing the commitment to share experiences and exchange information on the best practices for accelerating progress towards Millennium Development Goals (MDG), eGA is pleased to submit this report which seeks to provide a glimpse of the innovative ICT practices adopted by the Kingdom to improve its public service delivery.

Mr. Mohammed Al Qaed
CEO, eGovernment Authority



ABBREVIATIONS

ACSI	American Customer Satisfaction Index
BIC	Bahrain Investors Center
BIPA	Bahrain Institute of Public Administration
BITS	Bahrain Information Technology Society
BLIS	Business Licensing Integrated System
BOOT	Build-Own-Operate-Transfer
BPR	Business Process Re-engineering
BSDI	Bahrain Spatial Data Infrastructure
CAD	Computer Aided Design
CFS	Central Financial System
CIO	Central Informatics Organisation
CR	Commercial Registration
CSB	Civil Service Bureau
DPADM	Division for Public Administration and Development Management
eGA	eGovernment Authority
EPMO	Enterprise Program Management Office
FAQ	Frequently Asked Questions
GDN	Government Data Network
GIS	Geographic Information System
ICT	Information and Communications Technology
ICTGC	Information and Communication Technology of eGovernance Committee
I-SEHA	National Health Information System

ITSM	Information Technology Service Management
IVR	Interactive Voice Response
LDCs	Least Developed Countries
MDGs	Millennium Development Goals
MIS	Management Information System
MoF	Ministry of Finance
MoH	Ministry of Housing
MoSD	Ministry of Social Development
MoWMAUP	Ministry of Works, Municipalities Affairs and Urban Planning
NCC	National Contact Centre
NEAF	National Enterprise Architecture Framework
NGO	Non-Governmental Organization
PCI-DSS	Payment Card Industry - Data Security Standard
PSP	Payment Service Provider
RFP	Request for Proposal
RFQ	Request for Quotation
SCICT	Supreme Committee for Information and Communication Technology
SLA	Service Level Agreement
TRA	Telecommunications Regulatory Authority
UN	United Nations
UNDESA	United Nations Department of Economic & Social Affairs
UNPSF	United Nations Public Service Forum

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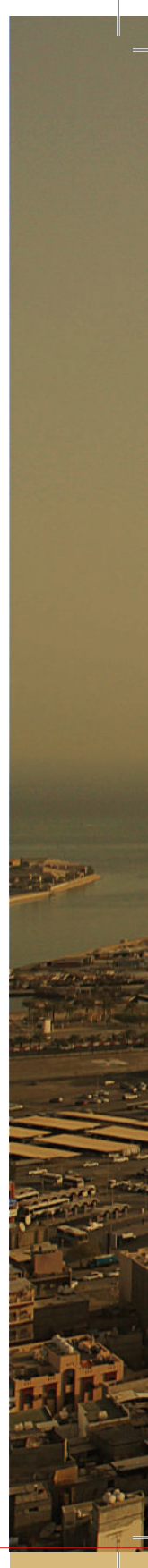
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EXECUTIVE SUMMARY

Hosted by the Kingdom of Bahrain, the United Nations Public Service Forum 2013 paved way to increase interest of delegates from across the globe to understand and learn from the experiences of Bahrain in the field of eGovernment and public service.

This was followed by an announcement of setting-up an information platform that transfers the Kingdom's experience to various countries across the globe as well as enhancing ties with other international organizations like the United Nations Department of Economic & Social Affairs. Based on the recommendations of the UNPSF 2013 final report, UNDESA has organized knowledge exchange visits to Bahrain during January 2014 and 2015 to benefit the involved LDCs.

The knowledge exchange programs; which received delegates from 15 and 20 countries in 2014 and 2015 respectively; were hosted by the eGovernment Authority in association with Bahrain Information Technology Society. These tailor-made programs, aimed to provide a first-hand knowledge and experience to delegates of LDCs in addition to paving the way towards knowledge transfer, included presentations and various field trips to institutions considered as center of excellence in adapting information and communications technology in the delivery of public services.

During their visit, delegates were provided with in-depth insights on experiences of eGA and other governmental entities - had access to various initiatives and led projects within the eGovernment and public sector. They were briefed on various eGovernment channels and projects that resulted from the National eGovernment Strategy 2016 such as eServices, National Payment Aggregator, national eGovernment portal, eGovernment channels, I-SEHA (National Health Information System), Tawasul (National Suggestions and Complaints System), amongst many others.

In addition to gaining access to the National Contact Centre venture along with the authority's platforms deployed throughout the Kingdom, delegates also visited government entities such as Central Informatics Organisation and Bahrain Investors Center. The core focus of these visits was to share and exchange expertise, systems and projects (within the ICT sector) that are designed for individuals, investors and ICT infrastructure. The program also comprised relevant social events which familiarized delegates with Bahrain's potentials in tourism and economic sectors, along with the milestones of the country's modern revivalism and progress realized during the past decade.

This report comprises a brief description of the Kingdom's eGovernment journey and key stakeholders involved in the country's eGovernment program which participated in the knowledge-exchange program. Further, the report highlights the key characteristics of few ICT initiatives that were introduced to the foster quick, efficient and effective delivery of public services and was presented to delegates during their visits. Snapshots of the conducted workshops and seminars, organizational visits carried-out in various government entities, bilateral meetings and social events attended by the delegates are also comprised in this report; thus, encapsulating the study tour arranged in the Kingdom during 2015.

I. INTRODUCTION

The Kingdom of Bahrain is situated near the Western shores of the Arabian Gulf. Known as the Pearl of the Arabian Gulf, Bahrain has a history of more than 5,000 years of civilization, from the mists of time to a vibrant present under a stable and prosperous government. While relatively small in population, land area and resources, Bahrain has achieved a high-level of social and economic development in a short period of time. It is ranked 44th globally on the Human Development Index for 2014, and has retained its position among 'Countries with very high human development index' for the past two decades. The transportation network, international airport, telecommunications, public services, medical and educational facilities are ranked amongst the best in the world. Although great emphasis is naturally being placed on the development of its own citizens, Bahrain has a marvelous multi-national mix of nationalities, living harmoniously together in a completely unique mix of cultures. According to the 2015 Index of Economic Freedom published by the Heritage Foundation and the Wall Street Journal, Bahrain has the most liberal economy in the Middle East and North Africa region as it ranks eighteenth in the world. Impressive long-term improvements in finance, investments, and labor freedoms have helped the Kingdom transform itself into a competitive trade and financial hub that lead the region in various areas.

Bahrain is also considered to be a pioneer in inducting ICT as well as opening the door to innovation in delivering public service - producing countless opportunities for efficient and dynamic work. Since 2007, Bahrain's government embarked on a comprehensive eGovernment program that is aligned with its national Economic Vision 2030 in a phased manner which has resulted in superior service delivery to its citizens, a high degree of intra-ministerial computerization and optimal usage of world-class ICT infrastructure. This is corroborated by the various achievements the country has achieved over the years. Please refer to the Box on the following page for global recognitions received for the Bahrain eGovernment program. Such success was a result of heavy ICT presence in the day-to-day aspects of public administration, along with initiatives and enthusiasm of government entities taking a leadership role in ICT innovations by promoting more dynamic and efficient working methods as well as higher quality service provision.

In a short period of time, the Bahrain eGovernment program has become an icon of leadership and progress on the global eGovernment map as it was honored by a number of global, regional and GCC awards.

Global recognitions received for the Bahrain eGovernment Program:

Bahrain made outstanding progress by being amongst the top 20 in the 'UN Public Service Awards 2010' as a result of the accomplishment in the United Nations eGovernment Survey. Bahrain has progressed 29 positions in the general ranking to place itself up to the 13th worldwide in 2010's report, 3rd in Asia and the 1st in GCC and Middle East - compared to 42nd in 2008.

1. 'UN Public Service Awards 2010' award for 'Improving Transparency, Accountability and Responsiveness in the Public Service' – for Bahrain's national eGovernment Portal.
2. 'UN Public Service Awards 2010' award for 'Advancing Knowledge Management in Government' in recognition of the National Enterprise Architecture project.
3. 'United Nations World Summit Award 2010' – Mobile Content winning within the 'mGovernment & Participation' category; in recognition of the mobile portal.
4. India's award '14d Award' for having best eGovernment projects and initiatives.
5. 'Cisco Innovation Award' in recognition and honoring of eGA's outstanding achievements and efforts in the deployment and successful implementation of innovative ICT initiatives.
6. 'eWorld Forum Award 2011' for 'Best Innovative Initiatives in Governance' in recognition of the National Enterprise Architecture project.
7. 'FutureGov Award 2012' in recognition of the Public Sector Organization of the Year in the Middle East Award.
8. 'UN Public Service Award 2012' in 'Advances Government Knowledge Management' category for the Zajel project.
9. 'UN Public Service Award 2013' within the category 'Advances Government Knowledge Management' recognizing the Integrated Service Delivery Platform.
10. The National Contact Centre, under the management of Silah Gulf, topped the list by winning first place amongst the Western Asia region within the category 'Promoting Whole-of-Government Approaches in the Information Age' of the 'United Nations Public Service Forum, Day and Awards Ceremony 2014'.
11. The National Health Information System won second place amongst the Western Asia region within the category 'Improving the Delivery of Public Services' of the 'United Nations Public Service Forum, Day and Awards Ceremony 2014'.
12. Bahrain was honored by the United Nations at the Global eGovernment Forum 2014 for obtaining advanced ranks in the United Nations eGovernment Survey 2014.

The eGovernment Authority has been leading the ICT innovation in Bahrain's public service delivery and coordinating the efforts of various government entities towards advancing the eGovernment program to greater heights. Since 2013, the authority in association with UNDESA/DPADM supports information-exchange programs that aim to lessen the knowledge divide in the field of ICT and foster a culture of sharing experiences in the field of eGovernment and ICT. This document is intended to strengthen the commitment of eGA in promoting the practice of sharing knowledge and experiences in the field of ICT innovation in the country's public service delivery. It is structured in the following manner:

SECTION I

Provides an introduction of Bahrain and its key achievements in various fields including ICT and eGovernment.

SECTION II

Summarizes the eGovernment transformation journey of Bahrain; along with a summary presented to the delegates during the knowledge exchange programs of the ICT public service delivery initiatives practiced in the Kingdom.

SECTION III

Introduces the key stakeholders who interacted with the delegates during the study tour.

SECTION IV

Highlights the ICT initiatives that enhance and promote eGovernment services and channels.

SECTION V

Consists of visual glimpses of the study tour.

SECTION VI

Encompasses the feedback of the delegates participated in the knowledge exchange program.



II. eGOVERNMENT TRANSFORMATION JOURNEY IN THE KINGDOM OF BAHRAIN

Bahrain's eGovernment journey can be summarized in three phases as depicted below:



Stage 1: Prior to the eGovernment Program

At this stage, Bahrain had no electronic services or electronic payment offerings to its stakeholders; which resulted in the following:

- a) Limited transparency in government transactions
- b) Limited customer satisfaction of government services
- c) Limited citizen participation and
- d) Limited spread of IT literacy amongst the public

This stage was also characterized by high costs incurred by government entities in Human Resources, establishing and maintaining facilities for providing services and archival of documents. Towards the end of this stage, the Kingdom witnessed fast-paced advancements in the field of ICT.

The government was prompt in recognizing the benefits of technology in order to enhance access and delivery of information as well as services to the public. This led to the launch of establishing a fully equipped National Data Centre, followed by creating a secured National Data Network and the introduction of Smart Card to citizens and residents of Bahrain.

There was a growing realization on the importance of a coordinated, well-governed eGovernment program across the Kingdom; and thus, the Supreme Committee for Information and Communication Technology (SCICT) was established and chaired by H.H. Shaikh Mohammed bin Mubarak Al Khalifa, Deputy Prime Minister, as constituted from the Cabinet Affairs decision made in 2005. The SCICT aims to implement the directives of the Cabinet Affairs in line with eGovernment initiatives - devising comprehensive strategies and plans to develop the field of ICT across the Kingdom.

Consequently, the eGovernment Authority was formulated in 2007 with a desire to cater the needs of citizens and make their everyday life easier while having different methods to assist in managing their day-to-day business activities.

Stage 2: First National eGovernment Strategy 2007-2010

Stage 2 was characterized by the conceptualization and implementation of a well-defined eGovernment strategy outlining the broad objectives and goals with the support of collective efforts of skillful SCICT members and the eGA. Bahrain's National eGovernment Strategy 2007-2010 focused on ensuring the delivery of eServices to all customers - citizens, residents and businesses effectively and efficiently under the motto "Delivering customer value through a collaborative government".

Numerous strategic projects and initiatives were conceptualized and implemented to achieve the broad objectives which include, but not limited to, the National eGovernment Interconnectivity projects such as the National Enterprise Architecture Framework, Integrated Workflow Management System 'Zajel', National Gateway Infrastructure, National Authentication Framework, and the Investor. Great attention was also given to Awareness and Marketing programs during the implementation of the strategy.

As a result, awareness of the eGovernment activities and services increased from 25% to over 77% amongst individuals, 96% amongst businesses and 100% across government sectors. Meanwhile, usage of eServices grew from 7% to 47% amongst individuals, 85% across businesses and 92% amid government sectors. Such growth was also attributed to the aggressive awareness campaigns employing a mix of traditional and non-conventional media, aligned to involve the end-user feedback. The success of the National eGovernment Strategy 2007-2010 was the result of a well thought-out strategy, a clear vision mandated by the political and administrative leadership as well as support by a highly qualified team of professionals.

Stage 3: Second National eGovernment Strategy 2011-2016

To maintain the momentum, carry forward the achievements and attain new heights in the field of eGovernment; the Kingdom conceptualized the National eGovernment Strategy for 2016 with a motto to 'ADVANCE' eGovernment program through focusing on the service delivery to the citizens and residents of Bahrain; optimally, utilizing the infrastructure that was created and graduated to the next level within the eGovernment arena.

Building on a strong foundation from the previous period, the 2016 strategy embarked the journey towards an ambitious eGovernment vision - ADVANCE which stands for Achieving next generation government excellence by delivering high-quality services effectively; Valuing efficiency; Advocating proactive customer engagement; Nurturing entrepreneurship; Collaborating with all stakeholders and Encouraging innovation. The eGovernment mission encapsulates the new vision "To realize the Kingdom of Bahrain's eGovernment vision by defining and managing the implementation of relevant strategies, setting and monitoring compliance to policies and standards, facilitating transformation of services and advocating incubation of next generation concepts, all in close collaboration with government entities and effective partnership with the private sector".

At the core of the ADVANCE vision is a pledge to positively impact three key identified stakeholder groups within the country - Individuals, Businesses and the Government. Individuals refer to citizens, residents and visitors; Businesses refer to small, medium and large enterprises along with their employees; and the Government refers to government entities and their employees. The 2016 strategy comprises several eGovernment initiatives which include, but not limited to; setting necessary legislations and regulations to maintain a secure electronic environment, developing advanced infrastructure and technology capabilities in all government entities, strengthening the procedures of service provision through one-stop-shops, launching new communication channels such as social media networks to communicate with citizens, creating open data platforms to promote innovation and entrepreneurship, as well as developing a number of new applications and services.

III. KEY STAKEHOLDERS PARTICIPATION OF THE eGOVERNMENT PROGRAM IN THE UN STUDY TOUR

The following are the key stakeholders, involved in the planning and execution of the eGovernment program in Bahrain, who have presented their ICT innovative practices to the delegates during the UN study tour 2015.

Note: refer to abbreviation in page 4



- **Supreme Committee for Information and Communication Technology:**

Given that Bahrain values the importance of the eGovernment program, the Supreme Committee for Information and Communication Technology (SCICT) was established and chaired by H.H. Shaikh Mohammed bin Mubarak Al Khalifa, Deputy Prime Minister; as constituted from the Cabinet Affairs decision made in 2005. SCICT aims to implement the directives of the Cabinet Affairs in line with eGovernment initiatives and devises comprehensive strategies as well as plans to develop the field of Information Technology across the Kingdom. The committee also seeks to place legislations to implement the eGovernment program, transform Bahrain into an electronic society, as well as support public and private entities through the execution process. Moreover; it encourages

presenting the country in regional and international events, in addition to preparing reports and studies for international presentations to recommend best methods of improving country's knowledge activities in order to achieve the set objectives.

• **eGovernment Authority:**

The eGovernment Authority coordinates and implements the country's eGovernment program in accordance with the strategies, plans, and programs developed or adopted by the SCICT. eGA undertakes all missions and powers to achieve the eGovernment program's objectives. The following directorates and departments support the functions of the eGA with the active assistance of the Chief Executive Officer and Vice Chief Executive Officer.

- a) Awareness & Marketing Directorate
- b) eService & Channel Enhancement Directorate
- c) Strategy & eBusiness Process Re-engineering Directorate
- d) Enterprise Architecture & Information Technology Directorate
- e) Human Resources & Finance Directorate
- f) Enterprise Program Management Office
- g) Quality Management
- h) Legal Affairs

a) Awareness & Marketing Directorate:

The directorate promotes the usage of next-generation government services throughout the Kingdom of Bahrain, handles the associated constituents' feedback and complaints, manages public relations and media interactions related to the eGovernment program, promotes ICT capabilities of citizens and government employees as well as ensures consistent delivery of the eGovernment information content. Directorate's objectives include, but not limited to:

- Changing consumer behavior among key segments on day-to-day basis
- Transforming customers' awareness into action by increasing the usage and building loyalty
- Actively engaging customers in shaping eServices and eParticipation
- Establishing internal and external communication channels that effectively deliver key messages
- Positioning eGovernment as the first choice for customers and stakeholders

These objectives are achieved through robust processes and techniques in the fields of Marketing Communications, Public Relations and Media, eContent Management and Customer Care. Some of the Marketing Communication techniques include campaigns of above-the-line, below-the-line and online; blogs; and contests such as Government App Star, guerilla marketing, awareness roadshows, as well as utilizing social media accounts such as Facebook, Twitter, LinkedIn, Instagram etc. The directorate considers the practices related to communication, stakeholders, reputation management and evaluation as the key success factors in designing and implementing public relations and media programs. The directorate's eContent Management and Customer Care activities focus more on ensuring seamless user-experience for eServices and mobile applications; while ensuring adherence to international standards and guidelines, as well as nurturing active participation and engagement of stakeholders.

b) eServices & Channel Enhancement Directorate:

The directorate facilitates service transformation within the country by driving modernization and integration of high priority and cross-ministry services; providing government entities with required expertise and tools to continuously drive service transformation; introducing and maintaining eChannels; controlling the Government Service Portfolio; coordinating changes; as well as reporting on service performance. It has delivered more than 339 eServices till date through various channels which include the Mobile Portal, eService Centers, eKiosks and the National Contact Centre (NCC). The directorate uses custom-made methodology 'Service Development Life Cycle' to deliver the eServices which provide key deliverables such as testing, business process re-engineering, analysis and design, development, quality assurance and security, production and management.

c) Strategy & eBusiness Process Re-engineering Directorate:

The directorate drives Bahrain's eGovernment vision through setting strategies and policies, liaising with government entities, incorporating leading edge best practices and managing international as well as private-public partnerships. It ensures that the eGovernment vision is cascaded throughout the organization; leads eGovernment innovation and incubation programs on behalf of the country – executing self-sustainability programs by introducing and maintaining premium products and services.

d) Enterprise Architecture & Information Technology Directorate:

The directorate promotes government-wide IT architecture, standards maturity, information security; provides IT services and internal support to the authority. Besides backing IT investment and decision-making of ICTGC, it is currently entrusted with the tasks of Enterprise Architecture Maturity Improvement Program among the government entities. It also supports the IT strategy planning by developing, deploying and training these entities in using the IT strategy toolkit.

e) Human Resources & Finance Directorate:

The directorate provides professional and administrative internal support to eGA's functions, including recruitment and training, financial services and budgeting as well as administration and purchasing. Additionally, it is entrusted with the tasks of planning and implementing the Capacity Building Program that is intended to raise eLiteracy of Bahrain's citizens.

f) Enterprise Program Management Office (EPMO):

EPMO oversees the eGovernment program and manages its Key Performance Indicators (KPIs); ensures effective and efficient project delivery of eGA-owned projects and the eGovernment projects owned by other governmental organizations, when required. EPMO's mission is to improve the understanding of project management, deliver successful methodology, encourage professional development, create the required professional tools for successful project management, and promote the need for continuous improvement.

EPMO services include:

- Portfolio Management
- Project Management
- Auxiliary Services
- Procurement and Vendor Management
- Business and Requirement Analysis

g) Quality Management:

The quality management of eServices are developed and handled by the Service Delivery department which tests services and reviews source codes; leads internal quality management and quality assurance framework. The department also sets and maintains the authority's quality standards and policies; ensures creation of procedures for eGA's internal processes through respective eGA departments and certifies that they are adhered to so as to achieve and maintain ISO:9001 and ISO:27001 certifications. Moreover, it performs QA testing and periodic quality checking for portal services, mobile apps and National Contact Centre services besides carrying-out other functions such as integrated internal audit, standards development, change control, Request for Proposal (RFP) & Request for Quotation (RFQ) review, evaluation of bids, awareness and training, government website evaluation and Quality Management System (QMS) process identification. The department extensively conducts the quality and security testing - the scope of quality testing includes accessibility, usability, functional, performance, optimization, availability, and information security while the scope of security testing includes code review, penetration testing, security review and vulnerability assessment.

h) Legal Affairs:

The Legal Affairs office is responsible for the legal representations and jurisprudence of the eGA. It drafts, prepares and reviews legislations contracts, agreements and Memorandum of Understandings that eGA is involved in. The office coordinates, collaborates and exchanges legal expertise with all other legal units at ministries and governmental entities.

• **Central Informatics Organisation:**

The vision of Central Informatics Organisation (CIO) is to set the highest standard of living for citizens through comprehensive, secure, accurate and timely information and services. Under the Ministry of Interior, CIO provides the following:

- a. Identity card services
- b. Information technology services
- c. Statistics services
- d. Geographic information system services
- e. Wireless licensing, frequency and monitoring services

• **Telecommunications Regulatory Authority:**

Bahrain's Telecommunications Regulatory Authority (TRA) was established by legislative decree no. 48 of 2002 - promulgating the telecommunications law. TRA is an independent body with duties and powers that include protecting the interests of subscribers and users, as well as promoting effective and fair competition among established and new licensed operators. The authority's vision is to have a communications environment that enriches the country's social and commercial fabric.

• **Civil Service Bureau:**

The Civil Service Bureau (CSB) is responsible for managing the Human Resources and payrolls of all ministries' staff in the Kingdom. It also acts as the consulting agency for ministries concerning Human Resources and other related activities. CSB's other main role is to run the payroll for the staff of all ministries in the

Kingdom. It has ten directorates including Management Information Systems (MIS), Quality, Administration and Finance, as well as Recruitment.

- **Ministry of Social Development:**

The Ministry of Social Development (MoSD) in its current form was constituted in the month of January 2005. It seeks to work on the dissemination of social welfare and rehabilitation among a large segment of citizens in need of such services; it also developed various programs that contributed in improving the standard of living of needy families through self-work opportunities which ensure a decent life for the Bahraini individual in the society.

- **Ministry of Industries & Commerce - Bahrain Investors Centre:**

Under the Ministry of Industry & Commerce (MoIC), Bahrain Investors Centre (BIC) was established to facilitate the business start-up process, from the initial application submission to the start of business operations.

All investors can direct their applications to a single point of contact through the various delivery channels provided at the BIC. Major government entities involved in the licensing and approval process are either represented in BIC or linked to its Commercial Registration System (CRS). In addition, private sector partners at the centre provide vital services to investors such as consultancy, finance, banking and telecommunications. The centre's core objectives involve:

- a. Addressing investor queries, application and Commercial Registration (CR) issuance via a single point-of-contact
- b. Rationalizing all aspects of the commercial registration process from issuance, renewal up to amendments
- c. Satisfying investor needs and improving rendered services
- d. Bringing customers closer to MoIC partners and providing value-added services

The centre, managed with over 80 multi-lingual proactive employees, provides an ideal work environment along with an integrated approach for registering businesses.

Queries and general information are addressed through an information desk manned by bilingual and trained customer service representatives.

- **Ministry of Finance:**

The Ministry of Finance (MoF) is responsible for formulating and implementing the country's financial policies within the overall government vision. The ministry prepares the State General Budget in coordination with other ministries and public entities in such manner that reflects the financial and economic objectives of the Kingdom, particularly concerning the improvement of living standards and increasing levels of economic growth.

MoF assures the progress of public investment in compliance with the Kingdom's financial policies. It also manages public debt and maintains its levels within internationally approved limits. Financial stability is sought through the best allocation of available financial resources.

- **Ministry of Works, Municipalities Affairs and Urban Planning:**

The Ministry of Works, Municipalities Affairs and Urban Planning (MoWMAUP) provides infrastructure in accordance with the legal frameworks set-out in the National Strategic Master Plan for Bahrain - the Economic Vision 2030. MoWMAUP is the construction arm of Bahrain's government and has functions in line with the Master Plan in the following areas:

- a. Infrastructure development consists of strategic planning, design, construction and maintenance of the public road network as well as the drainage system in the Kingdom
- b. Design, construction, project management and maintenance of public buildings

- **Bahrain Information Technology Society:**

Formerly known as the Bahrain Computer Society; Bahrain Information Technology Society (BITS) was founded in March 1981 with the main objectives of promoting Information Technology profession in the Kingdom, as well as improving general public and community awareness of IT events and advancements.

The society achieves its objectives by providing a forum for information exchange on current and future trends in IT innovations. The information is communicated through a process of regular meetings, seminars, conferences, lectures in addition to publication of newsletters, periodicals and electronic newsletters.

IV. eGOVERNMENT PROGRAM BEST PRACTICES

The Kingdom of Bahrain has pursued the implementation of ICT innovations in the public sector in order to enhance the performance, effectiveness, and efficiency of government entities. It is to be noted that the implementation of ICT innovations is complex and requires a powerful alignment amongst technology, businesses as well as people-related factors. ICT innovations in the Kingdom's public service delivery are obtained in various forms, namely eServices, awareness and marketing, as well as organizational approaches and ICT policies that address economic or societal challenges.

The country has taken key steps to encourage innovation teams in government entities through award innovation prizes; and adapted private sector innovation in the field of public service delivery. The following section provides a glimpse of the major ICT innovations in the public service delivery which were revealed to the delegates of the UNDESA study tour 2015. The ICT initiatives presented to the delegates aimed at tackling the challenges related to improving accessibility, promoting new or available channels for effective and efficient public service delivery, refining social cohesion as well as eliminating inequalities in regards to ICT access. Meeting these challenges requires essential elements such as awareness, active policies and proactive planning in addition to strong leadership support.

SL #	INITIATIVE NAME	OWNER	INNOVATION DIMENSION	REACH OF INITIATIVE
1	National eGovernment Portal	eGA	Service Channel	National
2	Mobile Channel	eGA	Service Channel	National
3	National Enterprise Architecture Framework	eGA	Governance	National
4	eMeeting++ System	eGA	eServices	Organizational
5	Measuring & Monitoring of eGovernment Program	eGA	Governance	National
6	Capacity Building Program	eGA	Society Engagement	National
7	National Payment Aggregator	eGA	Infrastructure	National
8	National Suggestions & Complaints System	eGA	eServices	National
9	Business Licensing Integrated System	BIC	eServices	National
10	Bahrain Spatial Data Infrastructure	CIO	Infrastructure	National

SL #	INITIATIVE NAME	OWNER	INNOVATION DIMENSION	REACH OF INITIATIVE
11	eWayLeave Clearance System	CIO	eServices	National
12	GIS Application	CIO	eServices	National
13	Ministry of Housing (GIS Application)	MoH*	eServices	National
14	Bahrain Locator	CIO	eServices	National
15	CSB eServices: MIS for HR Self-Services, Government Time Attendance System, Document Management	CSB	eServices	National
16	King Hamad Schools of the Future Project	MoE	eServices	National
17	Central Financial System	MoF	eServices	National
18	National Health Information System (I-SEHA)	MoH	eServices	National
19	Social Information System	MoSD	eServices	National
20	Ministry of Works eServices	MoW	eServices	Organizational
21	National Contact Centre	Silah Gulf	eServices	National

*Service provided by CIO

ICT INNOVATIVE INITIATIVES

INITIATIVE	#1
NAME OF INITIATIVE	The National eGovernment Portal
INITIATIVE OWNER	eGovernment Authority
YEAR OF INITIATION	2006
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Social services, business, government
REACH OF THE INITIATIVE	National

BUSINESS NEED

The major issues related to public service delivery are bureaucratic hurdles, inefficient processes, outdated policies and the inability of existing government mechanisms to handle the ever-increasing demand for services. At the same time, Bahrain has one of the best ICT infrastructures in the Middle East.

The Kingdom has a government-wide data network connecting ministries, one of the highest rates of personal-computer penetration in the Arab world, high mobile and Internet penetration, advanced telecommunication infrastructure and a high literacy rate.

Although each ministry had undertaken some initiatives on its own and a high degree of intra-ministerial computerization existed; a full-fledged and integrated service delivery mechanism for people was not in force. Effective computer utilization and ICT investments remained a problem.

The absence of a strategy to guide investments was leading to duplication of initiatives across the ministries of which their information systems were working independently, creating information silos.

The redundant and inaccurate nature of information across various ministry systems was degrading the quality of services, and the lack of inter-operability between systems was another impediment to effective service delivery.

Therefore, providing government services through several electronic channels took a lot of time and effort. With this backdrop, the Kingdom decided to leverage its ICT strength to improve public service delivery.

The following were the primary identified issues:

TRANSPARENCY:

- Limited information regarding the status of service requests
- Lack of online availability of latest government information
- Limited available channels for interaction with citizens

ACCOUNTABILITY:

- Lack of information regarding the status of service requests
- Lack of online availability of latest governmental information
- Limited channels available for interaction with citizens

RESPONSIVENESS:

- Lack of one-stop-shop for citizens to access government services
- Mutual processes that led to bureaucratic hurdles

SOLUTION OVERVIEW

The national eGovernment portal (Bahrain.bh) is the one-stop-shop for online services offered by the government of Bahrain. It is currently undergoing a complete upgrade to resolve several critical issues such as design, availability, features' advancement, standards, inter-operability, along with outdated infrastructure.

KEY OBJECTIVES

- Offer convenience to citizens: save citizens' time and money by sparing them the need to visit government offices in order to attain services.
- Provide integrated, best-in-class services: offer cross-ministry, integrated services to ensure minimal lags and bureaucracy delays.
- Benefit the state: achieve administrative cost-efficiencies and optimal use of resources through better resource allocation.
- Offer a choice of delivery channels: provide citizens with alternative ways to access government services; for instance, national portal and mobile-phone portal.
- Ensure access by anyone, anytime and anywhere: deliver citizens with 24/7 access to government services without geographic restrictions.

IMPACT

- Increased convenience and transparency: the project has led to round-the-clock availability of a wide array of government services through a single portal, as well as online availability of the latest government information: budgets, policies, government directory, survey reports, etc. Tools for eParticipation facilitate two-way interaction between the government and citizens. The status of service requests can now be checked online.
- More accountability: online publication of Customer Charter and service level agreements has placed the responsibility of performance on the government. Online feedback and complaint mechanisms make it easier for citizens to raise objections.
- Greater responsiveness: online discussion forums and blogs on the national portal and community pages on Facebook have led to enhanced responsiveness from government officials. Automation has reduced service turnaround time; and common practices as well as standards have reduced the timeline for enablement of eServices.
- Technological improvements: a secured and scalable infrastructure hosts the National Portal. There is a common platform for customers and government to interact with each other. The government currently has the ability to track service usage trends.

KEY LESSONS LEARNT

- Regularly review the list of available eServices - making additions as necessary to ensure that all important services are available online to citizens.
- Conduct business process re-engineering, initiate administrative reforms to improve government operations and simplify the process by which citizens interact with the government.
- Establish common policies and standards for ICT initiatives by implementing Kingdom-wide enterprise architecture to enable service integration and interoperability.
- Motivate project teams by expressing appreciation for their dedication and good work.
- Organize focus groups of external stakeholders (industry representatives, government officials, academics, citizens, etc.) to review the usability and accessibility of the national portal.
- Analyze the outcomes of focus-group meetings and implement participants' suggestions.
- Undertake marketing efforts to publicize eGovernment initiatives.
- Conduct biannual citizen surveys to assess satisfaction levels and the scope for further improvements.

CRITICAL SUCCESS FACTORS

- A clear political mandate and buy-in from the top leadership, leading to a highly motivated eGovernment team and alignment of ministry-level goals to the eGovernment strategy.
- A well-defined framework for project governance.
- A strategy that clearly addresses citizen's needs.
- Engage stakeholders at every crucial stage of projects.
- Become proactive to enable project owners to be in a better position in order to respond to challenges rather than become overwhelmed by them.
- Stable and scalable infrastructure.

INITIATIVE	#2
NAME OF INITIATIVE	Mobile Channel
INITIATIVE OWNER	eGovernment Authority
YEAR OF INITIATION	2009
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Social services
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	All government entities and private sector

BUSINESS NEED

Bahrain's eGovernment Authority has noticed the increasing demand as well as usage of Smartphones and their applications globally and locally. Such observation triggered a unique opportunity of engaging the public through a

new channel that utilizes unique characteristics. It was included in the National eGovernment Strategy to capitalize this opportunity in order to deliver public services; thus, a plan of action was to enrich the channel with a new batch of mobile applications which will serve citizens and residents along with government entities and private sector organizations.

SOLUTION OVERVIEW

At the beginning, the launched national mobile portal was specifically customized for mobile phones to support WAP. It provided a mobile version of the eGovernment portal and acted as a one-stop-source of information, which was cost-effective to the government and assisted in delivering timely information to citizens. Later on, in addition to the WAP, all mobile portal services were transformed to be utilized through simple SMS pull and push communication to avail eGovernment services through their preferred telecommunication carrier using SMS short codes reserved for the eGovernment. With technology being incredibly popular, eGA opted to make applications to conform to the huge variety of devices and gadgets. This required real-time business analysis, study of various platforms and market shares in order to launch the mobile apps. Currently, the authority delivers its mobile app services in three leading platforms, namely iOS, Android and Windows. The top five services include:

- Student exam results
- Civil Service Bureau services
- Traffic services
- Payment of Electricity & Water Bill
- Bahrain Today (comprises weather report, prayer timings, events calendar, BNA news and information related to the nearest local mosques)

KEY OBJECTIVES

- Facilitated-use of mobile services for customers, lead to more frequent and larger utilization base
- Added-value of service through mobile-centric functionalities (i.e. location-based and identification-based)

IMPACT

The impact caused on entities include:

- High quality service delivery
- Set branding and built loyalty
- Reduced channel traffic in physical counters
- Improved access promotes equality
- Reduction of front-office operations
- Leverage hardware features to deliver innovated services

The impact on customers include:

- Availability of services anywhere and anytime
- User-friendly and easy-to-use services
- Receive electronic notifications and SMS or email reminders
- Convenience to customers

KEY LESSONS LEARNT

- Development of a robust criteria for selection of mobile app services
- Create a platform that balances reach and richness
- Enable a secure environment to carry-out mobile transactions

CRITICAL SUCCESS FACTORS

- Engagement of stakeholders at every crucial stage of the project
- Choice of mobile app services and the relevant platform that supports both reach and richness
- Leadership commitment

INITIATIVE	#3
NAME OF INITIATIVE	National Enterprise Architecture Framework
INITIATIVE OWNER	eGovernment Authority
YEAR OF INITIATION	2009
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Public administration
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Government entities and private sector

BUSINESS NEED

In order to achieve the objective of improving service delivery through seamless integration and connected governance, eGA realized the need for a Kingdom-wide strategy and holistic guiding plans; hence, decided to design and develop a National Enterprise Architecture Framework (NEAF).

SOLUTION OVERVIEW

NEAF is an aggregation of models and meta-models, governance and compliance mechanisms, technology standards and guidelines put together to guide effective development and implementation of Enterprise Architecture (EA) by numerous government entities across the country.

KEY OBJECTIVES

- Simplify and speed-up service deployment to citizens
- Diversity of service delivery channels
- Ease and improved integration amongst various ministries and governmental authorities
- Achieve cost benefits of consolidation and standardization

IMPACT

- Fully integrated services to citizens
- Reduced cost per service
- Initiatives aligned with the eGovernment vision
- Cross leveraging of best practices
- Trust relationship for data sharing

KEY LESSONS LEARNT

- Sustain efforts to reach benefits
- Capacity building at various ministries
- Timely sign-off from stakeholders to meet project milestones

CRITICAL SUCCESS FACTORS

- Ownership and buy-in from relevant stakeholders
- Adherence by ministries by way of following of EA recommendations
- Availability of relevant data (apps and infrastructure) in ministries

INITIATIVE	#4
NAME OF INITIATIVE	eMeeting++
INITIATIVE OWNER	eGovernment Authority
YEAR OF INITIATION	2014
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Public administration
REACH OF THE INITIATIVE	Organizational
PARTNERS (IF ANY)	Private Sector

BUSINESS NEED

With the rise of mobile technology, increase in the availability of internet connectivity, coupled with software designed to fit the needs of board meeting users; today it is possible for fully digital, mobile executive meetings. In the past, eGA has conducted a market research and survey on the potential opportunities of investing in Cloud services for various existing eGovernment solutions like eMeeting++ systems. In light of this study, the authority conducted a demand analysis and identified that a number of government entities are interested in replacing and leveraging the capabilities of the effective and efficient eMeeting++ system with their current traditional meeting systems.

SOLUTION OVERVIEW

eMeeting++ is an online solution for meetings that create and manage meetings, this product is an enterprise-grade mobile or tablet application for meetings and collaborations. It is designed to address the needs of executive and non-executive directors, key management, administrators, and corporate secretaries in several fields such as preparation, communication, mobility, document, access notes and recording security.

KEY OBJECTIVES

- Generate revenue for eGA to support the self-sustainability program
- Enhance the features of the existing eMeeting++ solution
- Improve the efficiency and effectiveness of meetings held by government entities
- Support the concept of shared services within the government

IMPACT

- Green environment (paperless)
- Cost savings
- Secured environment
- Centralized repository
- Instant/live updates
- Collaborative, paperless environment accessible anytime and place

KEY LESSONS LEARNT

- Proper planning
- Realistic project execution timeframe

CRITICAL SUCCESS FACTORS

- Support from government entities for moving to a digital meeting environment
- Ease-of-use and user-friendly interface
- Security of meeting data

INITIATIVE	#5
NAME OF INITIATIVE	Measurement & Monitoring of eGovernment Program
INITIATIVE OWNER	eGovernment Authority
YEAR OF INITIATION	2009
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Social services and public administration
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Private sector

BUSINESS NEED

Bahrain's eGovernment Strategy has been designed with a customer-centric approach. The authority considers the following as the integral inputs for an eTransformative government and uses customer satisfaction as an index to measure the progress of its eGovernment program.

- Understand and manage customer expectations
- Constant and consistent monitoring of customer experience while availing services
- Measure customer satisfaction
- Identify improvement areas and gain customer's loyalty and retention

SOLUTION OVERVIEW

The eGovernment Authority constantly monitors the quantitative data of customer interaction with various channels which provides a clear indication on how these channels perform and how customers interact with these channels. Customer satisfaction aspect is also measured on the Return on Investment and Campaign Log by comparing the percentage change on the usage before and after the campaign. The results of the monitoring and measurement are analyzed and reported as very high on a weekly report, and a monthly report with more details is conducted to the management identifying key improvement areas, suggesting recommendations and corrective actions to each concerned directorate. Apart from the regular monitoring, eGA also conducts an annual Customer Satisfaction Index (CSI) survey along with Focus Group Discussions (FGD) among the constituents of the eGovernment program. In order to maintain customer comfort in revealing their satisfaction, expressing their experience and providing their opinion about eGovernment services and channels; the authority usually employs external independent firm of repute to run the satisfaction survey. It includes physical and online survey by utilizing American Customer Satisfaction Index (ACSI) - one of the leading indicators of customer satisfaction since 1994. The survey also considers other techniques to measure customer experience and future behavior like the Net Promoter Score (NPS) which is to monitor customers' behavior related to recommending eGovernment services to others. Researches have shown that customers are more likely to believe other customers' experiences with a specific organization or service more than believing organizations' promotions about the service. The output of the survey is produced to the Customer Satisfaction Index Committee which then establishes a plan of action to implement the recommendations and suggestions.

KEY OBJECTIVES

- Build a strong relationship with eGovernment program customers
- Enhance customer experience while accessing the eGovernment program services
- Create a customer-centered culture in the eGA

IMPACT

- Customers' inputs and feedback in several focus group sessions as well as interviews was a major part and fundamental block in developing the 2016 national strategy.
- The recommendations from the Customer Satisfaction Index survey led to the revamp of the eKiosks, national portal, mobile apps and introduction of new eServices that caters to the needs of constituents.

KEY LESSONS LEARNT

Constant monitoring of customer experience and feedback from customers will lead to significant improvement in the introduction of eServices and channels of choice.

Measurement and monitoring of the eGovernment program successfully bridges the communication gap between the constituents and the eGovernment program

CRITICAL SUCCESS FACTORS

- Use of relevant tools and adherence to best practices
- Unbiased monitoring and reporting
- Stakeholder commitment
- Leadership support

INITIATIVE	#6
NAME OF INITIATIVE	Capacity Building Program
INITIATIVE OWNER	eGovernment Authority
YEAR OF INITIATION	2009
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Social services and public administration
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Non-Government Organizations, BIPA and private sector

BUSINESS NEED

The country's eGovernment strategy places paramount importance on the capacity building in an effort to harness the power of ICT for technological and socio-economic development. This capacity building is required in multiple areas which include improved governance, citizen participation, leadership, mission, strategy, human resource development, administration, financial management, program development, program implementation, fundraising, income generation, diversity, partnerships, collaborations, evaluation, advocacy, policy change, marketing, positioning, and planning, only to name the least. Based on the study conducted by the authority, it was identified that gaps exist in the ICT literacy rate of public as well as government employees.

SOLUTION OVERVIEW

Aimed at enhancing the use of IT specifically in the government sector and its services, eGA initiated various capacity building initiatives in 2009 including the setting-up of adequate information technology infrastructure for learning IT skills and training citizens as well as government staff in ICT domains. The initiatives include various tailor-made projects like:

- Capacity building infrastructure development
- Qudurat training program targeted to citizens
- eGovernment and ICT-specialized programs for government employees
- Support and train youth in the field of eContent management

KEY OBJECTIVES

- Improved eLiteracy of Bahraini citizens
- Higher uptake of eServices

- Train and equip Bahraini youth in ICT and eGovernment disciplines such as eContent management
- Improve ICT skills of government employees

IMPACT

- 15,000+ citizens are trained in basic ICT skills
- 150+ government employees are trained annually in advanced eGovernment and ICT skills
- 10+ computer labs are established across the Kingdom

KEY LESSONS LEARNT

- Sustainability of business
- Increasing organizational maturity
- Retention and experience
- Consistency of quality outputs

CRITICAL SUCCESS FACTORS

- Leadership support
- Dedicated and motivated team
- Marketing and spreading awareness of the program

INITIATIVE	#7
NAME OF INITIATIVE	National Payment Aggregator
INITIATIVE OWNER	eGovernment Authority
YEAR OF INITIATION	2012
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Finance
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Government entities and private sector

BUSINESS NEED

The prevailing method of service delivery involved a decentralized point-to-point connectivity model which posed major challenges such as payment transaction overview and control issues. There was no exact end-to-end payment transaction overview prior to the National Payment Aggregator (NPA) system. It was impossible to obtain a consolidated overview of payment transactions across all channels for a single service due to multiple payment fulfillment agencies.

SOLUTION OVERVIEW

NPA is an initiative for setting-up a single, unified electronic payment solution across all government entities. The objective is to aggregate various payment mechanisms, payment service providers, payment availing entities, central

monitoring and reconciliation processing. Seamless integration with existing and new services is intended with existing systems and applications, industry standard integration with Payment Service Providers (PSPs) such as card companies, financial houses, banks, regional payment switches, etc.

NPA solution features include:

- Payment authorization through PSPs
- Integration of existing online channel services (portal, mobile, kiosks)
- Integration of future payment modes and channels (IVR, eBanking)
- Providing of comprehensive reporting facility and views
- Facilitation, reconciliation and settlement of reporting and processes
- Providing of on-site resource for implementing and managing solutions
- Facilitation of future growth and expansion in payment transactions and services
- The aggregation solution results in a single point of interface for all channels, citizens and businesses to complete their payments and support all popular payment methods. The aggregation will eventually offer and help drive down payment costs levied by payment agencies and intermediaries; thus, substantially saving for the country.

KEY OBJECTIVES

- Set-up a single, unified electronic payment solution across all government entities
- Enable all government entities with payment services under one umbrella; making it an easy, convenient and secure payment process for all its citizens, businesses and the government
- Greater payment flexibility, features and methods
- Centrally managed payments gateway for better controls
- Comprehensive MIS reporting
- Scalability and flexibility to cope with the increasing number of transactions and the growing number of online services

IMPACT

- Centralized ePayment hub for all government entities
- Configurable merchant IDs
- PCI-DSS compliance and PSP mandates
- Management of fees and charges
- Business logic-enabled transaction routing
- Enabling of most-recent payment methods without service impact
- Standard reports, reconciliation and settlements
- System reports for monitoring and analysis
- A 360 degree view of transaction for attending customer payment disputes
- Scalable infrastructure (hardware and software)

KEY LESSONS LEARNT

- Progressive onboarding of entities to NPA
- Establishment of shared services platform to avoid duplication of investment in individual payment infrastructure

CRITICAL SUCCESS FACTORS

- Senior management support
- Project management

INITIATIVE	#8
NAME OF INITIATIVE	National Suggestions & Complaints System 'Tawasul'
INITIATIVE OWNER	eGovernment Authority
YEAR OF INITIATION	2013
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Social services and public administration
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Government entities

BUSINESS NEED

From customer and government perspective, the following challenges led to the introduction of the National Suggestions & Complaints System 'Tawasul':

Challenges faced by customers:

- Difficulty in tracking status of requests, complaints and suggestions
- Limited service window availability
- Few communication channels and inability to provide feedback
- General distrust from citizens in terms of government response or action

Challenges faced by government entities:

- No unified system for government complaints, suggestions and enquiries
- No standardized processes and lack of automation
- No proper documentation process and methodology; different departments handle cases independently
- Lack of measuring the impacts of complaints received, overall KPIs and measuring tools

Hence, Tawasul was introduced by eGA in close coordination with several government entities to allow the public to freely share their feedback on the quality of government services by submitting complaints of any shortcomings or failures; which in return will allow government entities to address and resolve the issues raised by the citizens and residents.

SOLUTION OVERVIEW

The system is designed to increase government performance and maintain transparency; it also acts as a unified platform for interaction between all government bodies and the public. Suggestions and complaints submitted via the system are swiftly addressed and utilized to generate mechanisms and policies to prevent similar problems from recurring in the future. Available 24/7, the system is established to handle all complaints, suggestions and enquiries relevant to the concerned entity with the aim of promptly meeting customer expectations by inspiring them with confidence. With this aim in mind, each case is submitted to the concerned department within the entity in order to proceed according to the agreed Service Level Agreement. Tawasul has been

designed as an 'intelligent system' that offers a tracking mechanism to monitor the progress of each complaint. Furthermore, it has a responsive system that disseminates text messages and emails to users allowing them to track their complaints. Each complaint is allocated with a reference number and stored in a database accessible to all ministers; this method allows government entities to monitor the performance of staff in addressing the complaints and suggestions submitted. The system also allows decision-makers within a governmental entity to analyze, improve and amend the process of addressing a complaint. The versatility of the system reflects the government's keenness to involve the public and receive enquiries.

KEY OBJECTIVES

Technical objective:

- User-friendly interface
- Responsive design
- Tailor-made process using BPR

Project business objective:

- Easy integration with ministry's applications
- Custom dashboards
- Predictive analysis

IMPACT

The impact of the national suggestions & complaints system can be identified based on three perspectives; the customer, national leadership, as well as ministries and governmental entities.

Customer:

- Single entry point
- Anytime and place access
- Multi-channel support
- Timely notification
- End-to-end case tracking using the National Authentication Framework (eKey)
- Customer feedback option
- Availability of FAQ

National leadership:

- Overall dashboard including all entities
- Track ministry performance against SLA
- Custom reports

Ministries and governmental entities:

- Management of integrated complaints
- Automated escalation based on SLA
- Integration with the National Contact centre
- Performance dashboard
- Custom reports
- Internal alerts and notification
- Secured interface

KEY LESSONS LEARNT

- Determine the optimum SLA
- Continuous improvement and development
- Highly skilled and experienced staff
- Improve the level of customer satisfaction
- Educate customers on the various communication channels available on Tawasul

CRITICAL SUCCESS FACTORS

- Political endorsement
- Awareness and marketing

INITIATIVE	#9
NAME OF INITIATIVE	Business Licensing Information System
INITIATIVE OWNER	Bahrain Investors Center
YEAR OF INITIATION	2013
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Public Services
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Private sector

BUSINESS NEED

In line with the directives of HRH Prince Salman bin Hamad Al Khalifa - Crown Prince, Deputy Supreme Commander and First Deputy Prime Minister - on facilitating the procedures for exercising trade and economic businesses in the Kingdom in conformity with the Economic Vision 2030 adopted by the government; it was decided to initiate a unified and comprehensive guide for establishing businesses in Bahrain in cooperation with the eGovernment Authority, the Economic Development Board and other relevant government agencies.

SOLUTION OVERVIEW

Business Licensing Information System (BLIS) is a virtual one-stop solution available through multiple channels offering an integrated 'Whole of Government' service where users - citizens, investors, CR applicants and holders, as well as professional bodies - can use a single streamlined form to apply, update, renew and terminate multiple licenses concurrently. BLIS represents a major transformational mindset change, deliver innovative, pro-enterprise and customer-centric licensing solution, through an extensive collaboration rather than working in silos. The BLIS project is a 'Whole of Government' effort in innovation and mindset change to foster a pro-enterprise environment and improve customer service for the country's businesses. The new solution will allow start-up entrepreneurs to apply for licenses with far

greater speed and convenience, without having to be suffocated by red tape, and become able to start the business and generate revenue earlier. From government point of view, the solution is expected to simplify and shorten the processes for CR and licensing, ensure better allocation of staff and resources, improve efficiency and productivity in government entities as well as reduce the initial and subsequent cost to these entities for each license.

KEY OBJECTIVES

The objective of the project is to position the Kingdom as the best place to start a business; by fostering a pro-enterprise environment - making the application of business licenses customer-friendly, efficient, more affordable and hassle-free.

IMPACT

BLIS project is expected to define and deliver a new level of excellence, for the convenience and benefit of the business community when it comes to government services offered by the Kingdom.

KEY LESSONS LEARNT

- Change management
- Stakeholder engagement
- Business process reengineering
- Robust ICT infrastructure

CRITICAL SUCCESS FACTORS

- Dedicated and multi-disciplinary taskforce for execution
- Buy-in and support from senior leadership

INITIATIVE	#10
NAME OF INITIATIVE	Bahrain Spatial Data Infrastructure
INITIATIVE OWNER	Central Informatics Organisation
YEAR OF INITIATION	2004
STATUS OF THE INITIATIVE	Operational
ADDRESSED SECTORS	Infrastructure
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Government entities

BUSINESS NEED

Prior to the introduction of the Bahrain Spatial Data Infrastructure, the following challenges were confronted.

Challenges:

- 42+ government cells working individually
- No infrastructure for data sharing
- No standards applied
- Many data formats and redundancies
- Non-integrated electronization efforts

The above challenges led to the identification of opportunities as listed below:

- There was a need for a centralized spatial data infrastructure at national level
- National Geographic Information System Steering Committee was established and the Bahrain Spatial Data Infrastructure (BSDI) was a manifestation of the committee

SOLUTION OVERVIEW

The BSDI portal is a manifestation of the National Spatial Data Infrastructure (NSDI) which aspires to cater to the geospatial requirements of government organizations, private sectors, academic institutions and the public sector of Bahrain. Moreover, BSDI aims towards facilitating and co-coordinating the exchange and sharing of spatial data among the stakeholders within the government and private sectors as well as other GIS role players in the Kingdom; thus, creating an information highway, facilitating smooth transactions as well as integrating sophisticated geospatial data sets. BSDI operates on a GIS database of data layers containing important information such as street centerlines, addresses, electricity and water transmission as well as distribution, telecommunications, gas and oil pipelines, sewerage and drainage, along with many others. It is a powerful tool for economic, social and environmental management; enabling the potential of Geographic Information System (GIS) technology to be realized in supporting decision-making processes at the local, national, regional and global levels. Currently, more than thirty government and private authorities are benefiting from the BSDI portal.

KEY OBJECTIVES

- Cater to geospatial requirements of Bahrain
- Facilitate and coordinate the exchange and sharing of spatial data among stakeholders within the government as well as private sectors

IMPACT

- Curtailed duplication of data creation among stakeholders
- 75% reduction in time of service delivery
- Data availability made planning much more efficient and effective
- Real time data availability enabled decision-makers to analyze and predict situations much more accurately with enhanced confidence
- Increased integrity and transparency
- Decreased cost of ownership of the spatial technology
- Significant governance, partnership and collaboration through sharing and easy access to geospatial information

KEY LESSONS LEARNT

- A solid IT and GIS infrastructure is essential to provide reliable, fast and high level service to the stakeholders
- Security of the data must be ensured to engage the stakeholders in an appropriate way

CRITICAL SUCCESS FACTORS

- Engage stakeholders from the beginning of the project
- Advance identification of resources had been implemented for meticulous planning and strategize implementation

INITIATIVE	#11
NAME OF INITIATIVE	eWayLeave Clearance System
INITIATIVE OWNER	Central Informatics Organisation
YEAR OF INITIATION	2011
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Infrastructure
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Government entities

BUSINESS NEED

Prior to the introduction of the eWayLeave Clearance System, the following challenges were confronted:

- Different stakeholder WayLeave policies and internal workflows
- Huge increase in number of users
- Computer Aided Design (CAD) and engineering formats integration with GIS
- Data inconsistency and coordinate system mismatch
- Risk of business disruption in transitioning from manual WayLeave to eWayLeave approval process
- Significant changes in user requirement
- Lack of stakeholder commitment and buy-ins or ability to modify current business processes
- Data-sharing reluctance

The above challenges led to the identification of opportunities as listed below:

- Create opportunities to provide additional value to procedures in terms of the next phase of development which will include interfaces with the municipalities and the General Directorate of Traffic on the management of traffic diversion and lane closure due to diversions
- Provide opportunities for government and public sector future collaborations
- Availability of solid GIS infrastructure (BSDI portal)

SOLUTION OVERVIEW

A web-based solution through which stakeholders can manage their Way Leaves; allowing them to create, search, comment, track, edit, print and approve WayLeaves. The application is tightly integrated with a GIS viewer through which users can review the projects especially on a Bahrain-based map. The viewer also allows users to overlay various utility and infrastructure network along with the project/WayLeave details to support their approvals and recommendations.

KEY OBJECTIVES

- Automate the WayLeave clearance process
- Efficient and transparent WayLeave clearance process
- Increase the level of confidence in WayLeave approval through supplying comprehensive, accurate and up-to-date data

IMPACT

- Promote co-operation and accountability; thereby, provide an integrated service to increase public value
- Improve operational governance
- Minimize duplication of effort and reduce the cost of ownership of technology through implementing a one-stop-shop to share, access and discover information as well as subsequently process it in a meaningful manner to improve the level of WayLeave approval confidence
- Highly increase the efficiency in WayLeave administration and the immediate submission of WayLeaves to all stakeholders. In the past, it took one week of processing to submit a WayLeave.
- Provide clarity in the planning stage by reducing error rates
- Transparency through the WayLeave process

KEY LESSONS LEARNT

- A solid IT and GIS infrastructure is essential to provide reliable, fast and high-level service to stakeholders
- Considering the internal workflow for each stakeholder is crucial
- Security of the data has to be provided to engage stakeholders in an appropriate manner
- For projects in dimensions such as the eWayLeave Clearance System, ample time should be given for planning
- An agile methodology would be more appropriate since requirements continue to change

CRITICAL SUCCESS FACTORS

- Engage stakeholders from the inception of the project to obtain support and manage expectations for the initiative
- Advance identification of resources for meticulous planning and manage implementation

INITIATIVE	#12
NAME OF INITIATIVE	GIS Application
INITIATIVE OWNER	Central Informatics Organisation
YEAR OF INITIATION	2013
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Social services
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Government entities

BUSINESS NEED

Prior to the introduction of the application system, there was no uniform platform to manage government service projects. Due to the lack of information and data in various entities; the difficulty in planning, analyzing and decision-making were highlighted challenges. The GIS directorate at the CIO witnessed a change with the geospatial technologies; it provided the opportunity for the FDPM Office to plan and analyze processes through use of GIS technologies.

SOLUTION OVERVIEW

This application provides high-level decision-makers in the Kingdom with accurate and sufficient geographic and geospatial information related to government services such as education, health, housing, social development, youth and sports.

KEY OBJECTIVES

- Fast and accurate decision-making
- Support future planning
- Support spatial analysis
- Cost effectiveness
- Ensure data centralization
- Track the change visibilities

IMPACT

- Having all the required data in a single platform makes it easy and fast for decision-makers in Bahrain to plan, analyze and take decisions.

KEY LESSONS LEARNT

- GIS can act as a critical tool for decision-makers in their day-to-day operations.
- The system has made the process of planning and monitoring projects easy and effective for the decision-makers in Bahrain.

CRITICAL SUCCESS FACTORS

- Senior leadership buy-in

INITIATIVE	#13
NAME OF INITIATIVE	Ministry of Housing (GIS Application)
INITIATIVE OWNER	Ministry of Housing
YEAR OF INITIATION	2011
STATUS OF THE INITIATIVE	Operational and undergoing Enhancement
ADDRESSED SECTORS	Social services
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Government entities

BUSINESS NEED

There was no uniform platform for managing housing project and service allocations. The GIS Directorate at CIO saw that the geospatial technologies provided the appropriate opportunities for MoH to streamline its allotment process through the use of GIS technologies.

SOLUTION OVERVIEW

Applications will allow the Housing Service Directorate users to allocate houses, flats and lands (collectively called MoH Property) from various housing projects as and when they are ready to be distributed to the public.

KEY OBJECTIVES

- Assign houses and flats from different housing projects
- Display all project site locations on a GIS base map
- View the status of houses or flats in each project by providing thematic maps
- Show the statistics of housing allocations; users can view the allocation per governorate or availability across the Kingdom
- General search functionality
- Option to overlay all the utilities such as electricity, water, sewer, and telecom network within the project's site location along with the buildings
- Update the allocation as and when required

IMPACT

- Having all the required data in a single platform makes it easy and fast for decision-makers at MoH to plan, analyze and take decisions.

KEY LESSONS LEARNT

- GIS can act as a critical tool for decision-makers in their day-to-day operations.
- The system has made the process of allocating houses and monitoring related projects easy and effective for the decision-makers at MoH.

CRITICAL SUCCESS FACTORS

- Project management
- Stakeholder buy-in

INITIATIVE	#14
NAME OF INITIATIVE	Bahrain Locator
INITIATIVE OWNER	Central Informatics Organisation
YEAR OF INITIATION	2005
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Others
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Government entities

BUSINESS NEED

There was no data or information to accurately locate addresses, admin boundaries and points of interests since such data is only available with government organizations. The GIS Directorate at CIO utilized the geospatial technologies to provide the opportunity for government organizations, public and private sectors, citizens and residents to search for addresses and roads, also locate places of interests such as restaurants, hospitals, schools, pharmacies, shopping malls, etc. on the map through the use of GIS technologies.

SOLUTION OVERVIEW

The directorate has developed the Bahrain Locator website by utilizing benefits of the state-of-the-art GIS technology that can be effectively used by public and private sectors along with residents to search for addresses and roads to locate places of interests.

KEY OBJECTIVES

- The ability to search for an address by building number or name
- The ability to search for any desired landmark such as hotels, restaurants, hospitals, universities, etc.
- The ability to search for an administrative boundary which includes governorates, areas, and blocks
- The ability to draw shapes or mark locations with labels on the map for events planning

IMPACT

- Using GIS technologies today has enabled every society segment to extensively explore geospatial data for location base services and search for addresses, roads as well as locate places of interests.

KEY LESSONS LEARNT

- The ease-of-use and flexibility of the website drives the engagement among public and private sectors along with residents to use the website.

CRITICAL SUCCESS FACTORS

- Project management
- Stakeholder buy-in

INITIATIVE	#15
NAME OF INITIATIVE	CSB eServices
INITIATIVE OWNER	Civil Service Bureau
YEAR OF INITIATION	2002
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Public Administration
REACH OF THE INITIATIVE	Organizational
PARTNERS (IF ANY)	Government entities and private sector

BUSINESS NEED

The Management Information Directorate of Civil Service Bureau (CSB) is entrusted with the task of provisioning advanced IT to support and implement the goals of the bureau. This is carried-out by developing and implementing various solutions that cater to the functions of CSB.

SOLUTION OVERVIEW

Horizon:

- The core central strategic system in managing information for human resources. It has contributed to the modernization of the administrative work, increased productivity and speed of the transactions through an integrated information system for the delivery of services electronically to various ministries, agencies and employees.

Self-Services (SSHR):

- SSHR was implemented in 2007 and designed to enable the employee to pass and look at some of the functional measures directly from the automated system.

Government Time Attendance System:

- A unified system to attend and meet the needs of all government agencies within the framework of the Civil Service Law.

eServices:

- These services allow registered employees to view and update their personal details such as contact information and salary bank account details; view monthly salary slips; and request salary as well as service certificates.

Mobile Apps:

- A new service with needed functionalities launched in April 2014 for all government employees.

Document Management and eArchive Application (Saperion):

- This application is intended to provide an electronic system to archive and search for documents in a user-friendly interface application.

KEY OBJECTIVES

- Provide high-quality and high-efficiency services to ministries and governmental bodies
- Facilitate the completion of electronic transactions and reduce the use of papers
- Expedite the completion of transactions and increase productivity
- Increase accuracy and reduce the time and effort by referring to a common source-of-information
- Enable employees and supervisors to provide the right information and desktop support through self-service portals
- Streamline operations and reduce administrative costs
- Enable safe and secure access to files

IMPACT

- Increase accuracy and reduce the time
- Streamline operations
- Modern desktop through self-service portals
- Shorten procedures in CSB by eliminating the manual search of documents from the records repository
- Share the documents in the employees' files between CSB and other ministries and organizations
- Enable ministries to update the data (documents) of their employees through the application

KEY LESSONS LEARNT

- Business Process Reengineering is of paramount importance
- Engaging stakeholders at all levels is necessary to achieve success of the project

CRITICAL SUCCESS FACTORS

- Effective coordination of project activities
- Effective communication between project's team members
- Top management support

INITIATIVE	#16
NAME OF INITIATIVE	King Hamad Schools of the Future Project
INITIATIVE OWNER	Ministry of Education
YEAR OF INITIATION	2005
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Social services (Education)
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Private sector

BUSINESS NEED

Education in Bahrain is compulsory and all school-aged children either attend public or private schools. Children with disabilities also attend special institutions. Bahrain provides free education for all Bahraini and non-Bahraini students within the public schools which distribute free-of-charge textbooks to every student. His Majesty King Hamad introduced the King Hamad Schools of the Future project which uses ICT to support basic and secondary education in Bahrain.

SOLUTION OVERVIEW

The project's execution was carried-out by applying a phased-up approach to provide:

- Establishment of centralized data center
- Centralized education learning
- Integration of the MoE data boot
- Schools to be connected with fiber-optics
- Schools and MoE to be connected via intranet and internet

IMPACT

- It is a fundamental turning point from the traditional teaching-learning process to a future process based on technological employment.
- It provides a learning environment for the students, teachers, administrative staff and society which allows interaction at any given point of time.
- It completely changes the limited resources of the traditional class environment to an open interactive motivated environment which improves the learning process, and helps benefit from various information resources.

KEY LESSONS LEARNT

- Continual monitoring and control
- Continual research and development in education technology

CRITICAL SUCCESS FACTORS

- Stakeholder engagement
- Project management

INITIATIVE	#17
NAME OF INITIATIVE	Central Financial System (CFS)
INITIATIVE OWNER	Ministry of Finance
YEAR OF INITIATION	1997
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Finance
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Government entities

BUSINESS NEED

The Ministry of Finance (MoF) is responsible for the formulation and control of the country's budget. Prior to the introduction of a Central Financial System (CFS), the ministry had an outdated system that allowed the expenditure to be higher than the budget. The situation was characterized by:

- Suppliers were not informed about payments
- Period closing and reporting was never on time
- Delays in procurement process which lead to delays in execution of key projects
- Dependence on paper led to delays and loss of sensitive information
- Development of interfaces between systems turned to be more expensive
- Lack of proper historical data restricted the planning and budgeting process
- Absence of records for fixed assets and inventories

SOLUTION OVERVIEW

To facilitate this control, MoF provides Oracle eBusiness Suite applications to ministries and government organizations for the purpose of managing their operational, financial and budgetary affairs. The currently in-use applications are:

- General Ledger
- Payables
- Fixed Assets
- Cash Management & Treasury Management
- Purchasing
- Inventory
- Order Management
- Payroll Interface & Payment System

Hosted and administered by MoF, CFS is accessed online by 32 ministries. Connectivity is achieved through the Government Data Network (GDN) which is provided by CIO. In total, the system currently supports around 1,300 users in 60 locations within Bahrain.

KEY OBJECTIVES

- Ensure stringent budgetary control
- Enable online system, periodic reporting and accrual basis of accounting
- Enforce the control as per the standard finance manual

IMPACT

- Avoidance of duplicate data entry
- Cost savings due to a unified system
- Ministries cannot spend more than their allocated budget
- Centralized payment process
- Electronic remittance advices to the suppliers
- Assets maintained and depreciated on consistent basis
- Management of inventories using min-max planning, lot control, etc.
- Period closing and timely reporting
- Adaptation of standard finance manual and accrual basis of accounting

KEY LESSONS LEARNT

- Commitment of the top management - resources
- Network connectivity, PCs and printers

- Resistance from the IT teams managing bespoke systems
- Lack of qualified staff - training
- No parallel runs force users to utilize the system
- Customization kept to minimum

CRITICAL SUCCESS FACTORS

- Commitment from the top management
- Continuous training
- Network connectivity and hardware

INITIATIVE	#18
NAME OF INITIATIVE	I-SEHA
INITIATIVE OWNER	Ministry of Health
YEAR OF INITIATION	2011
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Health
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Private sector (BOOT model)

BUSINESS NEED

The Kingdom of Bahrain has implemented a series of social, political and economic initiatives to improve the quality of life for all Bahraini nationals and residents. Enhancing the health sector in the Kingdom was one of the government’s priorities to ensure a quick, easy and equitable access to high-quality healthcare to all of Bahrain’s residents.

SOLUTION OVERVIEW

I-SEHA is an intelligent, integrated, clinical as well as administrative system that provides a secure nationwide information system to all governmental health facilities. It contains all patients’ information in a single electronic health record available when needed; intended to serve over 1.4 million people and more than 5,000 healthcare professionals. The system’s modules that were developed include:

- Electronic health record
- Scheduling an appointment
- Radiology information system
- Web-viewer
- Laboratory information system
- Pharmacy

KEY OBJECTIVES

Create a national health medical record by implementing a health information system which continually strives for excellence towards patients' care. This can be accomplished through a change in management activities which optimizes health care practitioner's knowledge and expertise in evidence-based clinical practice.

IMPACT

Informed decision-makers:

- Ministry's decision-makers will be able to track the progress of health service performance.
- The abundance of data will contribute to better planning of efficient, high-quality health services.
- Development expenditure controls and exchange through knowledge of the approved budget compared with expenses.
- The ability to measure the total cost of health services based on services provided to individual patients.
- Tracking the system allows medical service providers to measure the functionality and level of provided services.

Informed health service providers:

- Build a comprehensive, electronic medical patient data that contains the merits of the case; in addition to treatment history and an access to patient's results of laboratory as well as radiological images.
- Enable physician speed diagnosis and make the best decisions.
- Provide the ability to request medicine through an electronic link to the pharmacy as well as check the availability of medications in hospitals' stores.
- Reduce potential medical errors due to the prescribed medication. The system has the ability to raise medical warning automatically by examining the effectiveness of medicines, other pharmaceutical incompatibility with foods or sensitivity of patients.

Informed consumers:

- Patients will be able to book and confirm appointments via emails through web access.
- Patients can electronically access their medical records that will ensure better continuity of care.

KEY LESSONS LEARNT

- High availability and security of the system
- Use of best practices
- Have effective change management, training and local support to promote the use of I-SEHA

CRITICAL SUCCESS FACTORS

- Change management
- Buy-in from stakeholders

INITIATIVE	#19
NAME OF INITIATIVE	Social Information System
INITIATIVE OWNER	Ministry of Social Development
YEAR OF INITIATION	2012
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Social services
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Private sector

BUSINESS NEED

The Ministry of Social Development (MoSD) intends to change the way it operates by utilizing ICT in integrating services and resources in order to achieve more beneficial results for citizens as well as ensure higher contribution to the social sector in the Kingdom.

SOLUTION OVERVIEW

Social Information System (SIS2) is a comprehensive system which has two components:

- Financial Support System: Designed and developed to automate all the processes of calculating the amount of financial support to citizens.
- Social Security System: Designed and developed to automate all the processes of calculating the social subsidy for certain society segment.

The social security system provides the following services:

- Social subsidy
- Disability grant
- Fire compensation

NGO System: Facilitates and automates services provided to NGOs by MoSD. The system handles submitted applications - integrated with the CIO - archives documents, provides a Decision Support System, and supports different channels for communications. It is considered to be the first worldwide system that supports NGOs.

KEY OBJECTIVES

- Improve data-informed decision-making
- Simplify business process
- Automate a large portion of the ministry's services and activities; as well as activate different communication channels

IMPACT

- Online registration for the social subsidy service
- Easier calculation of the social subsidy amount - according to specific equations

- Effective evaluation and review of social requests
- Quick release of subsidies payments to beneficiaries
- Efficient budget reporting
- Online provision for updating information for NGOs and easy online submission of registration requests

KEY LESSONS LEARNT

- Data security and integrity
- Business Process Re-engineering

CRITICAL SUCCESS FACTORS

- Change management
- Commitment of senior management
- Stakeholder involvement

INITIATIVE	#20
NAME OF INITIATIVE	eServices
INITIATIVE OWNER	Ministry of Works, Municipalities Affairs and Urban Planning
YEAR OF INITIATION	2009
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Public services
REACH OF THE INITIATIVE	Organizational
PARTNERS (IF ANY)	Private sector

BUSINESS NEED

The vision and mission statement of the Ministry of Works, Municipalities Affairs and Urban Planning (MoWMAUP) is mapped to achieve the aspirations of Bahrain's Economic Vision 2030. The ministry's IT department is entrusted with the tasks of conceptualizing and implementing initiatives that are generally based on specific perspectives – namely, stakeholders and customers along with internal learning and growth. The directorate has developed the Strategic Information System Plan (SISP) which is considered to be the roadmap for the ministry's ICT initiatives as it interprets the aforementioned perspectives into actionable objectives. SISP's five-year timeline is reviewed on a semi-annual basis by the Information System Steering Committee chaired by the minister to ensure proper enforcement.

SOLUTION OVERVIEW

Some of the systems developed by the ministry include:

- Electronic Document Management System
- Project Management Information System
- Enterprise Assets Management System
- Correspondence system

- e. Other internal systems (Contract Awarding, Lab Information Management System, Material Testing, Material Assessment System, as well as Citizen Complaint System).

The ministry is also in the process of implementing green IT end-user computing to all its directorates at the headquarter and implement 50% of green equipment life-cycle as well as datacenter. Other solutions include database technology and infrastructure technology refresh (department-level initiative), disaster recovery initiatives, implementation of IS development processes, IT business process and QA, conducting of Security Audit, ITSM (organizational-level initiatives), etc.

KEY OBJECTIVES

- Automate business processes
- Improve productivity and efficiency of the ministry's directorates and business units
- Improve reporting tools
- Improve user-satisfaction
- Implement green ICT methodologies and techniques

IMPACT

- Improved management of business
- Availability of up-to-date information related to business processes
- Increased productivity of business units
- Improved reporting tools
- Save power

KEY LESSONS LEARNT

- Effective training is key in user acceptance and system usage
- Providing sufficient time for business/technical data requirement gathering and analysis is essential
- Involvement of all key stakeholders during the development lifecycle is essential to minimize changes and increase user-satisfaction

CRITICAL SUCCESS FACTORS

- Availability of clear, approved business requirements and processes
- Effective user-training
- Availability of skilled resources for development and user support
- Deploying 50% of the green topology in the IT centralized data center

INITIATIVE	#21
NAME OF INITIATIVE	National Contact Centre
INITIATIVE OWNER	Silah Gulf
YEAR OF INITIATION	2009
STATUS OF THE INITIATIVE	Operational and undergoing enhancement
ADDRESSED SECTORS	Public services
REACH OF THE INITIATIVE	National
PARTNERS (IF ANY)	Private sector

BUSINESS NEED

As a part of the National eGovernment Strategy, the government of Bahrain has emphasized its efforts to enhance communication between the public, government departments and authorities in the Kingdom of Bahrain. Thus, a revolutionary step towards improving the communication among the different constituents in the country was initiated in the form of developing the National Contact Centre (NCC). The centre, coordinated and supervised by eGA, is a collaborative government effort which supports and underlines the Kingdom's commitment of utilizing modern technology to provide integrated government services under one umbrella.

SOLUTION OVERVIEW

The NCC is the first-of-its-kind in Bahrain; it is a strategic move to enhance communication between the public, private, governmental authorities and ministries in the country. The centre offers eGovernment services through a unified, easy-to-remember toll free number (8000 8001) that operates round-the-clock. It is also designed to create easier access and provide end-to-end government services that will enable customers to interact with the government via telephone, email or fax. It offers a vast range of services for government departments including information on office locations, documentation requirements, government procedures, laws and visa regulations. The NCC also provides services to the private sector.

KEY OBJECTIVES

- Establish effective communication channel with government entities through a unified number
- Provide convenient and speedy customer access to government services
- Create more jobs to Bahraini youth

IMPACT

- Services are provided to all government services available on the national eGovernment portal
- Provisioning of services to private sector assisted in reducing costs of government
- Employment opportunities were generated to eligible Bahraini youths

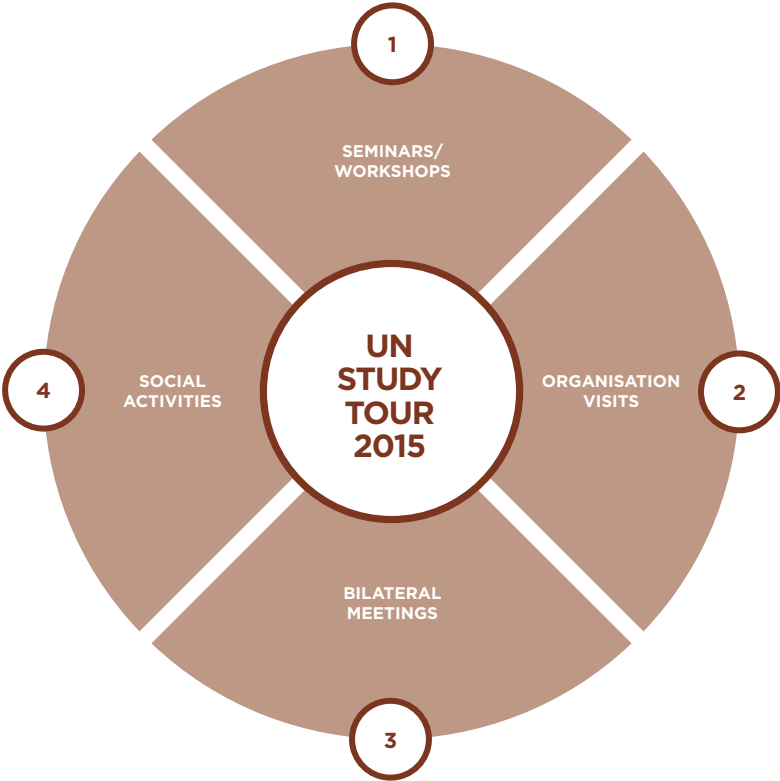
KEY LESSONS LEARNT

- A viable shared service model

CRITICAL SUCCESS FACTORS

- Buy-in from senior government leadership for outsourcing model

V. GLIMPSES OF UN STUDY TOUR 2015 - PHOTO GALLERY



1. SEMINARS / WORKSHOPS















2. ORGANISATION VISITS





3A. BILATERAL MEETINGS



3B. MINISTER INTERACTING WITH DELEGATES



4. SOCIAL ACTIVITIES



VI. FEEDBACK OF DELEGATES AND KEY OFFICIALS

PRESS COVERAGE

"I have learnt many things such as the National eGovernment Strategy, National Payment Aggregator, eServices like eHealth (I-SEHA), King Hamad Schools of the Future project, etc. I wish to take these experiences and transfer the knowledge back home - a step that will bring immense benefits to my country. I am truly impressed as the people are friendly, arrangements were very well-done and I really enjoyed this tour as it will leave me with good memories,"

DR. MOHAMMED ABDUL MANNAN

BANGLADESH

"I have learnt much from the experience of colleagues in Bahrain. We have 75% to 80% of the same projects; however, this tour has made me realize the weakness of our projects back at home. I would certainly share my experiences and knowledge back to my country's senior management. We will surely try to keep in touch to share experiences. Overall, I found Bahrain as a safe, secure country,"

ABDUL MATEEN SAMSOR

AFGHANISTAN

"This study tour revealed how important it is to possess a vision from country leaders, commitment from people who work to achieve this vision and thus, result in eGovernment achievement. Bahrain has undoubtedly helped me to broaden my knowledge and contacts. It has really impressed me in the way Bahrainis are taking eGovernance. I feel it is important to increase cooperation between our two countries,"

CARL CELMONT

REPUBLIC OF HAITI

"During the study tour, I learnt how the eGovernment of Bahrain works. Even though we will not be able to take back all the initiatives presented in the tour, we will certainly try to implement specific areas such as the Payroll Administration (Human Resources Management System) and the eMeeting++ system,"

HASSAN ABSHIROCO MOHAMMED

SOMALIA

"I am incredibly impressed with the way Bahrain is organized in terms of managing ICT strategies and projects. I learnt a lot about the online payment implemented through the National Payment Aggregator. The bilateral meetings helped to identify many aspects that we need to perform as regards to operationalizing eGovernment in our country,"

JIGME TENZING

BHUTAN

DAY ONE - SATURDAY, 24TH JANUARY 2015		
8:30 - 9:00	Registration and indication of focus areas	<i>eGA premises</i>
9:00 - 9:15	Welcome address by eGovernment Authority CEO	<i>Mr. Mohammed AlQaed, CEO, eGA</i>
9:15 - 9:30	Welcome by UNDP Res. Rep.	<i>Mr. Peter Grohmann, UNDP Resident Representative</i>
9:30 - 10:00	Welcome and presentation by UNDESA	<i>Mr. John-Mary Kauzya, Chief, Public Administration Capacity Branch, Division for Public Administration and Development Management, UNDESA</i>
10:00- 10:15	Welcome by BITS Chairman	<i>Mr. Salah AlBinjassim, Chairman, BITS</i>
10:15 - 10:30	Coffee Break	
10:30 - 11:30	Training Module Presentation	<i>Ms. Alex Mills, Consultant</i>
11:30 - 12:30	Bahrain's National eGovernment Strategy 2016	<i>Mr. Feras Ahmed, CEO Consultant, eGA</i>
12:30 - 13:30	Lunch Break	
13:30 - 14:30	Bahrain's National eGovernment Portal	<i>Mr. Mohammed Abdulaziz, Asst. Director, Service Delivery, eServices & Channel Enhancement Directorate, eGA</i>
14:30 - 15:30	Mobile Channel	<i>Mr. Maher AlKhan, Asst. Director, Channel Enhancement, eServices & Channel Enhancement Directorate, eGA</i>

APPENDIX (cont.)

15:30- 16:00	Coffee Break	
16:00 - 16:45	Strategy & eBusiness Process Re-engineering Directorate at the eGovernment Authority	<i>Mrs. Donia Sarhan, Chief BPR, Strategy & eBPR Directorate, eGA</i>
16:45 - 17:30	Awareness & Marketing Directorate at the eGovernment Authority	<i>Ms. Lulwa Sami, Asst. Director, Awareness & Marketing Directorate, eGA</i>
DAY TWO - SUNDAY, 25TH JANUARY 2015		
09:00 - 09:45	Measurement & Monitoring	<i>Mr. Ali Darwish, Chief Customer Care, Awareness & Marketing Directorate, eGA</i>
09:45 - 10:30	Capacity Building at the eGovernment Authority	<i>Mr. Abdulla AlHamad, Chief Capacity Building, Human Resources & Finance Directorate, eGA</i>
10:30 - 10:45	Coffee Break	
10:45 - 11:30	Enterprise Program Management Office	<i>Mr. Mahmood AlBahar, Project Manager, Enterprise PMO, eGA</i>
11:30 - 12:15	National Payment Aggregator	<i>Mr. Abdulla AlJowdar, Chief Channel Enhancement, eServices & Channel Enhancement Directorate, eGA</i>
12:15 - 13:15	Lunch Break	
13:15 - 14:30	Successful anti-corruption practices (UNDP)	<i>Mr. Hussein Hassan, UNDP</i>
14:30 - 15:00	Quality Management	<i>Mr. Salman Al Salman, Head Quality Assurance, eGA</i>
15:00 - 15:30	Coffee Break	

15:30 - 16:30	Enterprise Architecture	<i>Dr. Khalid Al Muttawa, Director, Enterprise Architecture & IT Directorate, eGA</i>
16:30 - 17:30	eMeeting++ System	<i>Mr. Mohammed AlAbbasi, Chief Enterprise Partnership Management, eGA</i>

DAY THREE - MONDAY, 26TH JANUARY 2015

8:00	Delegates to gather at Movenpick Hotel lobby
8:15	Bus departs to Central Informatics Organisation
9:00 - 11:00	Central Informatics Organisation Initiatives and Best Practices
11:30 - 12:50	Bahrain Investors Center
13:00 - 15:00	Lunch Break
15:00	Depart to the National Contact Centre
15:30 - 17:30	Tour of the National Contact Centre
17:30	Transport back to the hotel

DAY FOUR - TUESDAY, 27TH JANUARY 2015

09:00 - 09:45	MoF Financial System	<i>Mr. Hari Prasad, Project Manager - CFS, MoF</i>
09:45 - 10:30	Ministry of Works eServices	<i>Ms. Ghada Jassim, Chief Computer Technical Services Section, IT Department, MoWMAUP</i>
10:30 - 10:45	Coffee Break	

APPENDIX (cont.)

10:45 - 11:30	Telecommunications Regulatory Authority	<i>Mr. Mohammed AlBinali, Director, Market & Competition, TRA</i>
11:30 - 12:30	National Suggestions & Complaints System 'Tawasul'	<i>Mr. Ali Darwish, Chief Customer Care, Awareness & Marketing Directorate, eGA</i>
12:30 - 13:30	Lunch Break	
13:30 - 16:00	Bilateral meetings between counterparts	
16:45	Gather at hotel lobby	
17:00	Social Activity (Desert Camp)	
DAY FIVE - WEDNESDAY, 28TH JANUARY 2015		
09:00 - 09:45	I-SEHA	<i>Ms. Maban Mansouri, Senior Project Manager, Project Management Section, Health Information Directorate, MoH</i>
09:45 - 10:30	King Hamad Schools of the Future Project	<i>Ms. Tefla AlNoaimi, Head of Multi Media Technology, MoE</i>
10:30 - 10:45	Coffee Break	
10:45 - 11:30	CSB eServices	<i>Ms. Amal Shaheen, Director of Management Information Directorate, CSB</i>
11:30 - 12:15	MoSD eServices	<i>Mr. Rashid AlMadani, Director of Information Systems, MoSD</i>
12:15- 14:00	Lunch Break	
14:00 - 17:00	General discussions and clarifications, meetings with eGovernment experts	

19:15	Delegates to gather at Movenpick Hotel Lobby	
19:30	Departure from hotel to dinner venue	
DAY SIX - THURSDAY, 29TH JANUARY 2015		
09:00 - 13:00	Special session on eGovernance Survey 2015	<i>Richard Kerby, UN Advisor</i>
13:00 - 14:00	Lunch Break	
14:00 - 17:30	Special session on eGovernance Survey 2015	<i>continued</i>
17:30 - 18:00	Study tour wrap-up Transfer plans (final) Debriefing a. Participants b. DESA c. eGA d. UNDP	

**Meeting of UNDESA and eGovernment Authority on the way forward and specific assistance from the host to LDCs for the implementation of transfers.*



FOR MORE INFORMATION, PLEASE CONTACT:

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