Targeting Results: Lessons Learned from UAE National ID Program

Ali M. Al-Khouri
Emirates Identity Authority, Abu Dhabi, UAE

Abstract

Many governments around the world have invested inestimably in modernizing their identity management systems to enable more complex and secure forms of identification. However, these programs have been challenged to achieve their desired targets due to several factors; political, organizational, technical, etc. This article presents the strategy adopted in one of the major programs in the Middle East region launched in 2003, and key challenges that were identified and addressed during the course of implementation to achieve its strategic objectives. It also presents some key management consideration areas for the purpose of sharing knowledge and experience in the field.

1. Introduction

Governments around the world have been very much attracted to modern identity management systems; more specifically national ID programs [1]. These programs are globally justified on the basis of building an identity management system to achieve primarily two objectives: support national security and improve access to services [2]. More than 30 countries have initiated smart ID card programs in the last decade with a total value of those projects exceeding $100 billion. In fact, India has launched recently its project with a total value of around $33.5 billion. Besides, more than 15 countries are in the process of upgrading their current ID cards to biometric based systems such as Canada, Australia, New Zealand, USA, etc.

GCC countries have been among the first countries to launch biometric based smart ID card initiatives. Due to nature and complexity of such schemes, these initiatives have been challenged to meet its specified projects scope, timelines, and budgets [3]. Our observations of national ID card programs overall show that many countries are struggling with the enrolment of population in their ID schemes. Apart from the technical complexity of such projects, the most significant challenge lies in the fact that these programs include biometric acquisition which entails the presence of individuals. Some countries capture only two fingerprints, others capture a full set of fingerprints including palm prints and writers, while others use a variety of biometric identification systems such facial, iris, and fingerprints.

The practice of biometric acquisition was previously limited to forensic and traditional law enforcement applications. For obvious reasons, developments of systems like fingerprints compared to other biometric systems and hence the maturity of the overall technology, did not take into consideration higher levels of customer or service satisfaction since the intended users were in forensic and police jurisdictions. Therefore, and based on the biometrics and verification procedures, the registration process can be time consuming and inconvenient. A well thought through enrolment plan that captures an understanding of population demographics and cultural elements, and follows a modular approach of gradual registration based on geographical distribution and other segmentation factors, is likely to yield more successful results. This article presents a case study of the process followed to develop an enrolment plan to register the population of the United Arab Emirates. It touches upon a broader organizational scope, and presents essential lessons learned and important building blocks for government officials working in this field. Though the project size and targeted population is considered relatively small in comparison to other countries, the presented processes and overall thoughts are believed to contribute and advance existing knowledge.

2. UAE National ID Program

The UAE national ID program was launched in 2003 to build a federal identity management system for the country. The government relied primarily on a social marketing strategy to enroll the population and its copious developed strategies only succeeded to enroll less than 20% of the total population over a 5 year period. This represented a challenge to overcome and a difficulty to justify the heavy budget expenses and no clear return on investment (ROI) upshots. Altogether, this forced the government to go through muscular change process to address this problem area.

A four-staged change process was developed to guide the change implementation, as depicted in Figure 1 below. The change process was instigated to enact an organizational mindset change with the aim of developing a service driven and result oriented organization. It also aimed to increase accountability, improve efficiency, overall performance and high quality services.
The initial phase of the change process dealt with the identification of the change requirements and building the overall case for change. The second phase was more of a planning phase, and included detailed assessment of the impact of change to the overall program. The third phase was about implementing the change according to the plan, and the fourth was more of an improvement and sustainability stage. The outcome of the first phase was the development of an operating model that captured the fundamental and evolving functions of the program. It provided the foundation and flexibility required to execute the program initiatives. As depicted in Figure 2, the primary function that needed to be addressed at first was population enrolment. As the project progresses, the function of enrolment will shrink down to become less than 20% of the overall operation. The program role will turn gradually into a service delivery function related to authentication and identification. This model is considered to be a valuable knowledge to existing literature in the field, as it is generic and applicable to all ID card programs.

Another outcome of the first phase was the development of the core pillars of strategic directions that would determine the success of the overall program. See also Figure 3. They were later used in the development process of the corporate strategy and the design of the consequent initiatives. These pillars included:

- Develop strategies to increase population enrolment, that incorporates marketing, outreach, program, and staff development efforts to increase enrolment in an effective manner.
- To become a customer focused organisation, and complement enrolment strategy through renewed attention to the customers’ interface with the organisation.
- To develop secure and robust infrastructure to support Governmental electronic services, in relation to the validation and authentication of online identities in electronic transactions.
- Keeping the population register database timely updated, is essential to the overall success of the program. Connecting to the databases of "data owners" is therefore inevitable. Six government entities were identified: (1) Ministry of Interior: immigration; (2) Health Ministry: birth and death; (3) Labour Ministry (4) Justice: marriage and divorce; (5) Education, and (6) Higher Education.
According to the original enrolment strategy, it was envisaged that a total of 5 million people will be registered by the end of 2010. However, the national census revealed that the population in the UAE has grown to over 8 million in 2010 (see also Figure 3). A study conducted to evaluate and forecast enrolment, showed that it would take more than 10 years to register the population with existing enrolment rates. Another factor that forced the development of a new enrolment strategy was the increasing financial cost to the organization and reprehensible revenues. Figure 4 shows that the cost of the card have gone up more than 30% higher than the fees paid by the applicants, as the cost of the card is dependent on specific annual registration. This meant that for each card, the organization issued, it lost around $68. In fact, it was needed to produce 1.6 million cards a year to make the breakeven point, and as depicted in Figure 4. All together, these factors forced the organization to rethink its value proposition, and rework the overall enrolment strategy, which is discussed next.

4. The New Enrolment Strategy

As indicated earlier, the previous enrolment strategy adopted in the organization was a marketing based. The fundamental thinking that guided the development of the new enrolment strategy was to follow a process driven approach. The principles of this approach were
based on the relationships between business processes that would promote public participation. The new strategy consisted of three main focus themes as depicted in Figure 5, and discussed next.

4.1 The new process: Reengineering of the enrolment process

The new process divided the registration into three segregated functions, see also Figure 6. More than 3000 typing centers in the government were equipped with a new application form that allowed them to key-in personal information, scan in documents, scan in photos for those below 15’s, and accept payments, and automatically generate appointments to applicants. All these functions apart from the application form were previously done at registration centers. Registration centers new role was limited to do portrait and biometric acquisition only. This implied an 8-10 minute process compared to 20 to 25 minute previously. Applicants’ data is then transferred electronically to the internal data audit office (back office) which verifies the complete dossier against the Ministry of Interior's database, and authorizes or rejects applications. The new process made more than half of the previous procedures invisible to the applicants, as they were shifted to either back end or typing centers. The new process also had a great impact on the existing registration centers layout. The new process was considered as a one stop shopping office, and allowed higher capacity in terms of enrolment rates, and space utilization.

4.2 Linking registration with immigration procedures

The second focus theme of the enrolment strategy was to link the ID registration with the issuance and renewal of residency permits. Taking into consideration that the maximum validity of residency permits is 3 years, then it was assumed that all residents will be enrolled in this timeframe given that all registration sites are operational. In order to make the process more convenient to the applicants, new registration centers were envisaged to be built near existing preventative medicine centers; responsible to issue medical fitness certificates to complete the residency procedures. According to statistics, there were around 9,000 to 15,000 daily transactions of new and renewal of residencies in the UAE. This process merge between ID card and residency permit, was envisaged to enforce and increase the daily registration rate remarkably. It was also noted in this focus area, that the residents during their application for issuance and renewal of residency permits fill different application forms for different entities, e.g., immigration form, labor form, and ID card form. Comparing the three forms, it was fond that they were almost identical. It was then decided to merge the three forms to be a unified form for the three entities, besides the preventative medicine which also issues separate forms. This step would contribute to prevent double implementation of such procedures and promote data accuracy. The new 3+1 form will also include the feature of central fees collection for all four entities, payable at typing centers. The fees will be automatically transferred to the beneficiary authorities through an electronic clearance system.

4.2.1 Registration Process

The registration process starts with the applicant or a representative visiting the typing centre to fill the unified application form. The form will also include the new functionalities described in section (4.1). Applicants aged 15 and above will go to the preventative medicine centre for medical check up and go through the ID card registration office for portrait and biometric acquisition. Upon the acceptance of the issuance/renewal of residency permit, the immigration database at the Ministry of Interior, electronically notifies the ID card database, which will trigger card printing request, and dispatch it to the applicant through a registered courier. For the purpose of unification, ID card validity is linked with the residency permit. It is envisaged that once the process is streamlined, and reached to a satisfactory level, the residency sticker and labor card will be replaced with the ID card, as a single identity document for residents.
4.3 Labor Registration

The third focus theme is the registration of labor population through mobile registration devices at labor campus or their workplaces. This will relax the traffic at existing registration centers. Existing statistics refer that the UAE has around two million unskilled labor population. The registration of this category was planned with the Ministry of Labor to ensure prompt registration and enforcement through their employing companies. Statistics also show that large number of labor camps have been developed in the past five years, with average residents in those camps ranging from 5,000 to 50,000 people.

Having presented the components of the enrolment strategy, the next two sections will briefly discuss the three remaining pillars of the strategic directions presented in section 2.

5. Integration with Key Organizations

One of the most strategic objectives of building an identity management system in the UAE was to make a central identity reference repository for the UAE government about population demographics, timely available census and statistical surveys. This database was also foreseen to provide decision makers with key data to enable informed planning decisions. Maintaining an up to date and accurate population database is considered an impossible objective without a centralized e-information infrastructure to bring different databases together into one centralized repository. An initiative was developed called citizen data-hub that aimed to connect six key government databases together that were considered the "primary data owners". The secondary objective of this initiative was to establish dynamic and real-time links between administrative government departments across the country, thus enabling information sharing that ultimately contributes to the better administration of the country and provision of service delivery.

6. Supporting e-Government

Development of a national population infrastructure should consist of enabling the basis for online authentication of users. It should address the overall requirements of trust, identity management and privacy and in the context of electronic governance. The federated identity management initiative was designed to facilitate implementation of e-Government services within the United Arab Emirates. This is envisaged to support advanced development of e-government specifically in areas related to e-inclusion and e-participation, as well as the end-to-end integrated government work processes.

7. Customer Service Orientation

Given the challenges the UAE ID card program is facing, it is confronted with key building blocks represented accelerating enrolment rates, meeting stakeholders expectations, improving quality of service, etc. The new organization thinking as explained above shifted more towards a customer driven business organization. The aim was to positively embrace a customer focused culture, where core competencies are identified and developed to deliver value for customers. A customer service standard was developed based on guidelines specified in the International customer service institute [4]. This focus area described a management culture that emphasized centrality of the citizen or customer in the process, as well as accountability for results.

This section concluded the change management program and the developed enrolment strategy overview. The next section presents some key management consideration areas that require management attention.
8. Management Considerations

8.1 Change Management and Communication Plan

Change management as a discipline has grown tremendously over the last few years in the Gulf region. Our close interactions with government organizations in the region show us that a large number of public sector organizations used consultancy firms to develop and implement structured approach to managing change programs. Indeed, a carefully planned change management program is imperative to the overall success of any strategic endeavor. Figure 8 shows that the success of a change program is determined by the awareness of the involved individuals or groups of the need and objectives of the change program. A change program is likely to be associated with vagueness, rumors, distrust even among those involved in the change process. Strong and consistent leadership is needed to draw a clear path and set out performance and expectations of outcomes.

![Figure 8: The need for clear communication plan](image)

Management would prefer to implement change and expect least resistance and with the most buy-in as possible. For this to occur, change must be applied with a structured approach so that transition from one type of behavior to another organization wide will be smooth. Management need to carefully assess employees’ reaction to an implemented change and attempt to understand the reaction to it. Although change programs are implemented to achieve organizational goals and objectives, certain changes do sometimes produce tremendous amount of resistance at several operational and management levels. Management is expected to provide support throughout the process of these changes, which are at times very difficult. Managing changes especially in public sector organizations requires a broad set of skills like political, analytical, communication, people, system, and business skills.

8.2 Organizational Development Principles

Due to the enormous pressure on management to create value and bring out tangible results, it is easily found that we get distracted with day to day operations. A commendable framework management need to always keep in mind is the EFQM model (see also Figure 9). The model was found to sustain a management focus on key governance perspectives. It is a good management assessment tool to measure the strengths and improvement areas of an organization across all business operations, and to define the organization’s capability and performance.

![Figure 9: EFQM excellence framework](image)
The three main elements that were considered crucial to the success of the overall organization strategy were: (1) to become a result driven organization, and focus on (2) employing and developing highly qualified and trained staff, who should enable and promote (3) creativity, innovation and learning organization culture. The framework supported management to rethink values, policies, and controls and a restructuring that reflected a renewed sense of mission.

8.3 Users training
User training is a critical success factor for. The routine nature of work at registration centers caused a shortage of workers with the necessary skills to cope with the rapid growth and expansion of centers. This shortage forced the organization to continuously hire and train new employees who lack adequate technology skills, and to accept the chore of constantly retraining present employees. In ID card schemes, fingerprint quality has huge impact on the identification/verification system. Therefore, and to meet these challenges, organizations need to develop a system to manage end-user training, and focus to enhance fingerprint capture quality.

8.4 Media and Marketing Strategy
National ID schemes have been a very much subject to controversial debate on international levels [5,9]. It is seen by privacy advocates to be a 'massive invasion' of their liberty and freedom rights, and promotes the concept of setting up 'big brother' or 'big government'. It was therefore important for the organization to develop a social media marketing strategy to better understand community interests by running customer and market surveys within the social communities, and promote engagement and social participation into the project value proposition. The second component of the media strategy was related to building visibility about the program through information sharing and interactions. The communication strategy included specific aspects that considered the cultural diversity of the target society (eg. multiple language communication, information leaflets etc).

9. Conclusion

Without a clear blueprint and plan, organizations are more likely to drift and run in different directions (see for example the illustration in Fig 10). Management critical decisions that are not based on solid understanding of impact and well-deliberated calculations will most probably yield to an unknown outcome [see also 10, 11]. Public sectors projects are to a great degree involve risk and uncertainty. This article was written in an attempt to reveal some of the challenges experienced in the implementation of a strategic and large scale government program. National ID schemes and due to their size and complexity need scrupulous planning to achieve their audacious goals. Population enrolment in such schemes is considered a challenging chore. The presented case study expounded how the UAE government reacted to this challenge. Though it could be argued that population size in the UAE is lower than many other larger initiatives in other countries, the presented approach in this article is believed to provide a virtuous thinking path to address similar issues. Besides, the presented management consideration areas are assumed to be important knowledge building blocks for those in the field to address fundamental organizational and project management rudiments.

References

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References
Dr. Al-Khour is a senior government official working in the United Arab Emirates. He is currently working with Emirates Identity Authority as a Director General. He has been involved in the UAE ID Card project since its early conception phases. He obtained his doctorate from Warwick University in the UK in field of project management of large scale initiatives in the public sector. He has been an active researcher in the field of strategic management in public sector, and has published many articles in the last few years.