Project Management Practices in e-Government Projects: A Case Study of Electronic Government Directorate (EGD) in Pakistan

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Abstract

The objective of this research study is to describe the Project Management (PM) practices adopted by the Electronic Government Directorate (EGD) during implementation of e-Government projects in Pakistan. The paper identifies the benefits that can be accrued by using modern PM practices in e-Government projects, as well as highlights issues not adequately addressed by PM tools, methodologies and practices. This paper is one of the few research papers targeting the contemporary and multi-dimensional issue of project management for successful delivery of goals and objectives of e-Government programmes in developing countries. One of the findings of this research study is to understand and realize the difference in Public and private sector organizations during implementation of project management practices. The organization culture of Public sector organizations is different from private sector organizations and there is a need to develop and adopt PM strategies and applications suitable for Public sector organizations. In particular, the change-management and transformational aspects of e-Government programmes make them complex and therefore not amenable and capable of being handled from a purely 'hard' PM perspective.

Keywords: Project management; e-government; public sector; developing countries

1. Introduction

The Importance of E-governance has been realized in most of the countries of the world and most of the countries are in the process of implementation of E-governance setup. The use of e-Government programmes is widespread in the public sector to increase efficiency and effectiveness of government operations; increase transparency and accountability within government; and to provide public services in a more convenient and cost effective manner [15].The objective of this research paper is to review the PM practices implemented by the Electronic Government Directorate (EGD), a public sector entity under the administrative control of the Ministry of IT in Pakistan and to understand to what extent the management of EGD is satisfied with these practices. It will look into the extent these PM practices have contributed to successful deployment and implementation of e-Government projects in Pakistan. It will further identify the problems faced by the management of EGD in projects implementation in the public sectors, try to delineate the gaps between private and public sector organizations, and explore the particular challenges of project management in the public sector.

The research is based on following questions:
- What PM methodologies & practices were developed and implemented by the management of EGD?
- To what extent these PM practices were deemed satisfactory and were successful in achieving organizational goals?
- What challenges were faced by the management in implementation of E-government projects in public sector organizations?

The case of the Electronic Government Directorate (EGD), which is an entity under the Ministry of IT in Pakistan, is presented as a case study to identify the concurrent issues of project management, e-government achievements and public sector reforms; all in the context of a developing country.

2. Literature Review

The word project is so commonplace that people do not usually dwell on its meaning or definition. However it would be useful to have a definition for it since different people can have different perspectives and thus associate different meanings to the word. Kerzner [1] considers a project "*as a set of activities and tasks which have a specific objective; requires to be completed according to some desired specifications; has defined and definite start and end dates; is constrained by funding limitations; requires resources in the shape of funds, people, equipment; and cuts across organizational functional lines*". Chapman [2] defines it as "*a temporary effort to create a unique product or service. Projects usually include constraints and risks regarding cost, schedule or performance outcome.*" The Project Management Institute (PMI), USA [3] defines a project as "*a temporary endeavor undertaken to create a unique product, service, or result*". The Organization of Government Commerce (OGC), UK [4] defines a project as "*a unique set of coordinated activities, with definite starting and finishing points, undertaken by an individual or team to meet specific objectives within defined time, cost and performance parameters as specified in the business case*".

2.1 Project Management

In the past research Management can be defined as the activities associated with planning, directing and controlling an organization or entity in order to achieve its business, operational and strategic objectives [31]. Project Management (PM) has been described both as an art and a science related to conceiving, planning, designing, executing and controlling work related to delivering a product or a service throughout all the phases of the project work, which is divided into a project life cycle [9]. PM's emergence as a discipline during the last half of the 19th century has been attributed as a follow-on to Fredrick Taylor's work related to introduction of scientific practices to industry and management and subsequently companies started applying scientific principles to labour practices and to industry as a whole. In the 20th century, as technology and industry became increasingly complex, project management began to evolve as an activity distinct from general business management.

Kerzner [1] defines project management as, "*the planning, organizing, directing, and controlling of company resources for a relatively short-term objective that has been established to complete specific goals and objectives. Furthermore, project management utilizes the systems approach to management by having functional personnel (the vertical hierarchy) assigned to a specific project (the horizontal hierarchy)*". According to Chapman [2] the processes that are required to be applied and integrated during the project execution include initiating, planning, executing, monitoring and controlling, and closing. OGC [4] defines a good project management method as one that "*will guide the project through a controlled, well managed, visible set of activities to achieve the desired results.*"

The major challenges in project management include specific project challenges of managing the project scope, quality, resources, time and budget [3, 4]; as well as larger organizational challenges of managing stakeholders, communications, project funding [5, 6, 7, 8].Projects can be broken down into various distinct phases like project planning, implementing/executing, monitoring/controlling, and closing; which makes the project delivery sequential, more methodological, easier to track and correct, and easier to apply best practices as well as tools and technologies [1, 2, 3, 4].It comprises a number of tools for managing the various activities associated with the various phases of the project [1, 2, 3, 4, 5, 6, 7, 8]

2.2 Approaches to Project Management

As project management evolved as a distinct discipline, various schools of thoughts and approaches to project management have emerged; and best practices and reference standards developed. Some of these can be termed as proprietary, namely the Microsoft Solutions Framework (MSF) and IBM's Rational Unified Process (RUF) which are based around products from these vendors. However there are some other ones which do not purpose any specific product, but give a broad framework to approach projects and programmes. These include the Project Management Book of Knowledge (PMBOK) [3] approach, which is presented as a compendium of best practices and is published by the Project Management Institute (PMI) based in the USA. Another major one is the Projects in Controlled Environments (Prince2) [4] approach developed by the Organization of Government Commerce (OGC), UK, as a standard for project management by the UK government. The method has evolved into a generic approach for the management of projects both in the public and private sectors. Both these organizations encourage and offer certifications on their framework and methodologies.

The Logical Framework Approach (LFA) is another generic methodology which was initially developed by the United States Agency for International Development (USAID) and is now used by many donor agencies like World Bank, DFID, AusAID [5,6,7,8] etc. It establishes a logical hierarchy of means by which goals and objectives are linked with indicators, risks and assumptions, and inputs and outputs. Some authors [9] divide the various methodologies, frameworks, models, & theories into 'hard' and 'soft' approaches, Approaches suggested by PMI, OGC [3, 4], which focus on planning, executing, controlling, and closing activities of projects with the aim of managing the project triple constraints of scope/quality, cost, and time, are termed as 'hard' system models; while others such as Log Frame, e-GTPM, GDPM etc. focus more on managing project goals, impacts, and stakeholders etc [5, 6, 9, 10, 11].

2.3 Project Management in Public Sector

Project management in the public sector, although having similarities with the private sector in terms of project management stages, processes, tools and technologies nevertheless; has certain unique challenges. Past research argued that there are hardly any similarities of significance between public and private sector organizations and hence by association the private sector project management practices and skills are totally unsuitable for application in the public sector [12, 13]. Others have proposed specific frameworks and methodologies as well as amendments to private sector project management frameworks to better manage public sector environment and unique challenges [9, 10, 11], however these have not been rigorously tested in real life situations. Sarantis [9, 10] proposes a goal-oriented and knowledge based PM, Nilsson [11] proposes using Enterprise Architecture (EA) for managing 'technochange' projects, Yang [14] focuses on managing information flows in the public sector, while Cats-Baril [15] and Stuckenbruck [16] propose modifying private PM to the public sector.

Heeks [17] in extensive research done on projects in the public sector has shown that 35% of public sector ICT projects around the world can be categorized as total failures, 50% as partial failures, and only 15% as successful. Similarly a World Bank study [18] estimates that the majority of public sector ICT applications in Least Developing Countries are either partial or total failures. One of the factors which this report attributed these failures, is poor project design or conception. It is therefore imperative that appropriate methodologies be selected for managing projects while at the same time the key variables that can potentially affect the performance of projects be identified and addressed. Some of the methodologies that can be used are listed in precious section. It must however be kept in mind that each country and organization has a different local and organizational context and hence standard methodologies and frameworks are not recommended to be applied in totality, rather need to be customized to take into consideration local situations [9, 16, 19, 20, 21]. Regardless of whichever methodology is selected, there are some common and key factors which need significantly affect how projects are conceived, planned, executed and controlled. These key success factors include managing multiple areas, encompassing people, process and technology [15].

In the public sector, it is usual practice to have a large component of project goods and services acquired from outside entities, vendors etc. In addition because of involvement of public funds, issues related to efficacy and transparency are involved and elaborate procurement guidelines need to be followed to properly account for the public funds involved [31][15]. Large projects and project based organizations in the public sector, due to issues of standardization, transparency as well as providing insight to senior management, establish a Project Management Office (PMO) or Project Management Unit (PMU). The PMO/PMU defines and maintains the standards of processes generally related to project management within an organization or government agency. It standardizes and introduces concept of re-usability in the execution of projects. It is the source of documentation guidance, metrics, good project management practices, capacity building and resource provision, and giving top management visibility into individual projects [20].

2.4 Difference in Public & Private Sectors

Analysis of literature above yield the following key differentiating factors of public sector from that of private sectors, which are important for project management [9, 10, 22, 23]:

- Monopolistic in nature
- Lack of adequate and appropriate skills within the public sector
- Larger number of stakeholders, often with conflicting interests
- Elaborate bureaucratic processes of projects approval, funds release, reporting, and monitoring
- Larger, and more complex, projects

- Sometimes ambiguous goals, or goals not properly linked with organizational (i.e. national development) goals
- Extensive external dependencies and influences, i.e. from politicians, citizens, external funding agencies etc.
- Diluted personal responsibilities and accountability, sometimes drive by attitude of 'passing the buck'.
- Shorter planning and financial horizons (or perspectives)
- Subject to laws, regulations and oversight that exceed those on private organizations

2.5 Importance of Project Management in E-Government Projects

The successful implementation of E-government project is a challenging task. All such programmes are comprised of a number of separate and inter-related projects, the successful completion of which is important to deliver the programme objectives, especially since larger societal and social implications are present beyond those for IT implementation in the private sector [42]. In view of the increased focus on judicious spending of government finances, decreased availability of public sector funding for such programmes because of global financial crunch; and importance of delivery against such programmes, it is imperative that projects are properly planned, executed, controlled and closed so as to get the desired results in the desired timeframes [11]. This is especially true for developing countries, which not only face an enhanced scarcity of funding as compared to developed countries but for whom e-government programmes assume increased importance due to the larger deficiencies in their internal operations as well as service levels provided to citizens [29].

Since the 1980s many countries have been trying to reform their public organizations, facing pressures to manage within reduced budgets and improve the quality of services provided internally as well as externally to citizens [24, 25, 26, 27, 28, 29, 30]. Countries embarking on providing e-services to citizens through e-Government programmes have been generally explained by various models [25, 26, 27, 28, 29, 30, 31] around maturity of government websites and stages of provision of e-services, or around nature of interactions, i.e. Government to Citizen (G2C), Government to Businesses (G2B), Government to Government (G2G). Yildiz [32] criticizes these models for being output and outcome based, and proposes more focus and research to develop models that better explain the processes and policy making aspects of e-government projects in the context of complex political environment.

e-Government is recognized internationally as an enabler toward achieving good governance, reducing cost of operations for the government, and increasing the ability of citizens and businesses to access public services in an effective and cost efficient manner [24, 25, 26, 27]. While previously ICT technology has been in the domain of private sector companies, and governments in developed countries, continuous maturity and technology diffusion of technology as well as its associated decrease in costs has made e-Government a viable option for developing countries to better serve their citizens; bring down their own costs of operations; and increasing transparency and accountability. The United Nations Conference on Trade and Development (UNCTAD) [33] and other development agencies have proposed that a close linkage exists between usage of ICT and macro-economic development. The key constituents of this linkage include contribution of the ICT sector to the GDP of the country through economic activity and trade; ICT usage by citizens which results in a more informed and connected society; ICT deployment by government for enabling efficient service delivery, improving transparency and effective monitoring; and businesses leveraging ICT to bring about changes to core business processes like supply chain logistics, thereby augmenting operational efficiencies. E-Government projects therefore have a significant potential on national development efforts towards improved living standards. Various research is available on key success factors of e-Government programmes [17, 24, 29, 30, 34, 35], which identify good project selection and delivery process as one of the key contributing factors.

3. Methodology

The research is based on case study conducted at the Electronic Government Directorate (EGD) in Pakistan. One of the authors of this research paper has been working in the top management of this organization. He was supervising different projects and was actively involved in Planning and implementation of E-government projects. Informal interviews were conducted with the team members involved in various projects. The documents in the form of findings of some case studies conducted in EGD were also consulted in this regard.

4 Case Study

4.1 Background: The e-Government programme in Pakistan has been developed and is being implemented by the Electronic Government Directorate (EGD), which is a cell within the Ministry of Information Technology.

EGD is a purely project based organization with a full-time strength of approximately 20 technical professionals mostly hired on contract basis from the private sector. This core team of professionals develops project proposals for automation of internal functions or citizen services of various ministries and departments of the Federal Government, which are then outsourced to the private sector as EGD does not develop or implement any solution in-house. For managing technical as well as administrative activities of approved projects, there is a provision of technical staff within those projects, which are hired once the project is approved, and after coming on board these project staff initiate project procurement activities, within the project procurement framework of the organization. Although work on the e-Government programme was initiated in Pakistan around the year 2000, in the wake of the approval of the first national IT Policy & Action Plan (ITP) [36], it was not until 2005 that the E-Government Strategy & Five Year Plan (eGS) [37] was formulated, which provides the framework for the implementation of the e-Government programme, and outlines the high-level goals indicated for e-Government activities as increasing efficiency and effectiveness of the Government, increasing transparency and accountability in decision-making, and enhancing delivery of public service to citizens efficiently and cost effectively.

The e-Government, like all other development programmes in Pakistan, are supposed to be developed under the umbrella of the national development goals documented in the Vision 2030 [38] document prepared by the Planning Commission and which envisages Pakistan to be a developed, industrialized, just and prosperous nation, at the end of the next 20-25 years. This vision has been proposed to be achieved through rapid and sustainable development, in a resource constrained economy, by deploying knowledge inputs. The method for achieving this objective is proposed to be managed by an intelligent and efficient exploitation of globalization through competitiveness. Pakistan is therefore opting to become an active participant in the globalized economy for goods, labour, capital, technology and services and this option has serious consequences for future governance of the country.

All public sector organizations in Pakistan operate under the programme and projects management framework of the Planning Commission [39], which defines PM as encompassing identification, preparation, appraisal/approval, implementation and post-completion evaluation. Since it is the projects approving authority, centrally coordinating all the development projects of the federal government, it places a lot of emphasis in monitoring and evaluation and continuous reporting to it by the line departments. It divides PM activities in three different levels: (a) Project Director, who supervises day to day affairs of the project; (b) sponsoring Ministry/Department, which takes policy decision, and (c) provincial Planning and Development Department or Projects Wing of Planning Commission, which acts as central agency to oversee execution of projects through periodic monitoring/evaluation. By and large, project monitoring methodology entails physical inspections, studying of day to day & periodic reports and sector implementation reviews covering several or all projects. It places PM as falling in the domain of the head of the project sponsoring Division/Ministry as well as Projects Wing of the Planning Commission. Thus while different organizations, like EGD, may have their methodologies, processes, tools etc for managing projects, these have to operate within and comply with the projects management framework and reporting requirements of the Planning Commission. Another interesting point to note is that the guidelines provided by Planning Commission give no reference to internationally recognized PM methodologies, tools, techniques, software etc, which on the one hand makes the line departments totally dependent on Planning Commission documents and on the other hand seriously handicapped due to non familiarity with modern concepts, tools, etc of PM.

4.2 Inadequacies identified at EGD

Since its inception in 2002, EGD was more or less been moving forward on projects and processes on an adhoc manner. However by 2006 there was a realization that issues in the structure of EGD as well as how it was carrying on its activities was impeding smooth progress of projects. As the number of projects being managed by EGD was increasing manifold, the original adhoc structure has to be augmented. Some of the inadequacies identified included:

- Project Managers were hired well after a project was approval and the recruitment cycle carried on for months after project approval. Lack of involvement of designated project manager during project formulation/definition has been identified as one of the causes of project failures worldwide.
- It needed to be ensured that standardization of various processes was done so that professional skills were consistently applied to all projects.

- Standardized, and internationally recognized project management methodologies and practices needed to be consistently applied to all projects.
- It was important to create a unit within EGD to ensure central coordination, capacity building and centralized oversight into individual projects.
- With the ever increasing portfolio of e-government projects, EGD needed to focus on building the architecture models of current and proposed e-government systems, performance measures, Key Performance Indicators, Critical Success Factors and Standard Methodologies to execute and align the projects towards e-government objectives.
- To realize cost benefits of replication, a coherent policy and strategic framework for E-Government projects in the shape of an Enterprise Architecture encompassing a blueprint for the entire Federal Government was required to be developed.

4.3 Development of Project Management Framework

EGD developed a standardized technical and operational framework, project management methodology, standardized procurement framework, and a revamped organizational structure, which included a Project Management Office (PMO). A project management framework, customized from leading international methodologies like PMI and Prince2 was developed and project work distributed in the following management phases:

- *Initiating the Project*: The purpose of this process is define the terms of engagement; delineate the scope what is to be done; identify key deliverables and timelines; constraints, how quality is to be ensured; risks; how the project is to be controlled; and the communication needs and medium for the various project stakeholders. It concludes with a signed Statement of Work or contract and a detailed plan for starting the engagement.
- *Plan and Mobilize*: This stage addresses the detailed planning and set up activities typically performed at the beginning of an assignment. It typically begins as soon as the contract or Statement of Work has been finalized and signed, and includes the activities necessary to review, make final updates and baseline plans prior to full engagement execution.
- *Direct and Control*: This stage spans the majority of the engagement and involves the execution of work, directing and controlling the activities, managing the product delivery, quality control etc, managing the project risks and catering for the project communication requirements.
- *Close*: This stage involves delivering the expected product to the customer, meeting the acceptance criteria, complete knowledge transfer and closing of the engagement.

4.3 Project Knowledge Areas

Due to the unique characteristics of public sector identified earlier, the following project knowledge areas were given specific focus during the project execution. These areas are governed by the specific government regulations and project management frameworks of the Public Procurement Regulatory Authority (PPRA) [40] Planning Commission [39] in Pakistan.

- *Project HR Management*: To address the issue of availability of dedicated project managers from the stage of initiation of projects as well as retaining the knowledge base within the organization, a project was approved to hire a pool of dedicated project managers who could be trained according to the EGD framework and would handle all projects from inception to completion. Other HR that were hired as part of this project included commonly required resources for all projects including, Business Analysts, Enterprise Architects, BPR Specialists and Quality Assurance specialists. HR processes were developed to expedite hiring of specialized technical resources that were required by specific projects so that they could come on-stream within the required timeframes of individual projects.
- *Project Procurement Management*: Project procurement within EGD is governed by the public procurement rules and guidelines enacted by Public Procurement Regulatory Authority (PPRA). Within the broad guidelines issued by PPRA, EGD developed and documented its procurement processes so that these could be followed in a consistent manner for all projects and make the work of performance evaluation easier and comparable. Standard templates were developed for issuing Expression of Interests (EOIs), Request for Proposals/Quotations (RFPs/RFQs), Contracts as well as approval of deliverables and payments to vendors.

- The various types of procurements for which these were developed included acquisition of hardware, networking, consultancy, System Requirement Specifications (SRS), software development and turnkey solutions.
- *Project Communications Management*: A key factor in ensuring common understanding of projects as well as ensuring timely completion of projects according to scope, schedule and quality/scope is timely and accurate communications with various stakeholders, which include the projects approving authorities (Planning Commisison0, funding authority (Ministry of Finance), sponsoring organization (Ministry of IT), beneficiary organizations, private sector partner IT organizations to which projects are outsourced, and internal stakeholders within EGD (project team). Standard template were developed for documenting meetings, freezing scope requirements as well as change management, project reporting requirements (internal EGD, with partner IT companies as well as to external stakeholders).

4.4 EGD Method (Framework)

An elaborate framework, known as the 'EGD Method' was developed to provide an overarching framework for the project activities of the organization. The framework conceptualizes a comprehensive list of project phases and is customizable according to requirements of individual projects in the sense that all phases may not be required for all types of projects, i.e. consultancy, services, hardware, turnkey projects etc. The framework is supported by a knowledge repository comprising, an engagement model, enterprise architecture and a revamped organizational structure. The knowledge repository is added to as lessons learnt from individual projects are documented by the PMO and then published on the EGD Intranet as guidance for individual project teams. Each project phase comprises of activities, further delineated in process diagrams, and individual roles to support the processes are then defined as well as key deliverables that are to be produced by each phase.

To support the framework, work processes were devised for the technology acquisition so as to standardize the process and ensure a standard process results in standardized deliverables, outputs and outcomes. The work processes were supported by a Responsibility Assignment Matrix (RAM) which delineated the roles of EGD (the executing organization) and the beneficiary organizations. Since most EGD projects involved the development of an IT solution, two phases were identified for standardization of processes to ensure optimum results in technology acquisition. These were first to develop a Systems Requirement Specification (SRS) and subsequently to develop or acquire a software solution. These processes were standardized and standard templates developed for RFPs and Contracts for each type of technology being acquired, i.e. networks, hardware, consultancy, SRS, Application Software, Licensed Software and Turnkey solutions. Again the responsibilities of EGD and beneficiary organizations were delineated to ensure a comprehensive understanding of expectations from all entities.

4.5 Challenges & Issues (Results at EGD – 2008 study)

Subsequent to the implementation of the various processes and standardization of artifacts within EGD a review of how projects were progressing and reasons for delays were carried out to study the impact of changes and identify improvements due to them. A study of the project portfolio of 18 projects in 2008 (subsequent to the implementation of the new PM framework) showed that in general adoption of standardized methodologies widely used in the private sector to EGD projects and developed of revised processes based on these methodologies resulted in a more accurate insight into the progress of projects; timely and accurate identification of delays and reasons thereof; better trained and equipped project human resources; reduction in training of new resources due to more readily available projects lessons learnt, and generally fewer delays on the part of EGD in projects execution. However it also brought out the fact that majority of delays were on the part of external entities and external events over which EGD had little influence. These included delayed approvals from beneficiary organizations on project deliverables, delayed releases to projects, delays in hiring of project human resources, delays due to duplication of monitoring activities by multiple agencies (i.e. Ministry of IT, Planning Commission, Ministry of Finance & organization of Auditor General) and delays in approving project changes by the Planning Commission / Ministry of IT and Ministry of Finance respectively.

The overall delays included late approvals from beneficiary organizations on project deliverables; delays in the hiring of project staff as this process had external dependencies due to involvement of Planning Commission and Ministry of IT; delays in release of funds by the Ministry of Finance and Planning Commission; frequent scope change requirements from beneficiary organizations; lack of incentive on the part of the beneficiary organizations to adequately pursue the development and implementation of an IT solution.

Some of these issues have also been highlighted to the Government of Pakistan by the World Bank in their Governance Policy Note [41] on implementation of E-Governance in Pakistan, which gives a number of policy recommendations, stating that while the country has taken the first steps in this area, the Government of Pakistan now needs to learn from lessons of other countries and mainstream ICT into the government structure as well as provide appropriate leadership and structure for the programme. The review of some available literature [19, 42, 43] as well as the author's personal experience of having been associated with and headed the e-Government Programme in Pakistan, has highlighted the presence of some critical success factors for e-Government projects which are over and above standardized project management practices. These relate to complexity of change management programmes in the public sector, top-level ownership and direction for such programmes, stakeholders (internal and external) buy-in, beneficiary buy-in etc., however details of these are outside the scope of this research paper.

5. *Summary & Conclusions*

This paper has been one of the few research papers targeting the contemporary and multi-dimensional issue of project management for successful delivery of goals and objectives of e-Government projects in developing countries. It has argued that while application of standardized and internationally recognized project management methodologies are important to successful delivery of e-Government project objectives, as demonstrated by the case study of EGD, the public sector continues to differ in some major ways from the private sector. Further the change-management and transformational aspects of e-Government projects make them extremely complex and therefore not amenable and capable of being handled from a purely 'hard' PM perspective.While some authors who have argued for suitable adaptation of PM methodologies that have proved successful in the private sector to the in the public sector, while keeping in view its unique characteristics, others have argued for a total re-think on what works in the public sector. It is recommended that attention must be given while proposing the standardized and internationally recognized project management methodologies and practices to Public sector organizations. The important factors like lack of adequate and appropriate skills within the public sector; larger number of stakeholders with conflicting interests, bureaucratic processes of projects approval and funds release must be considered in advance. Attention must be given to projects progress; timely and accurate identification of delays and reasons thereof; capacity building of project management professionals, and better projects controlling, monitoring, and closing as is demonstrated by the case study of EGD. Further empirical research is also needed to develop a project management framework and/or model for public sector, e-Government projects, and which is based on extensive studies of best-practices from successful e-Government programmes around the world.

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