

TRANSFORMATION OF GOVERNANCE THROUGH INFORMATION TECHNOLOGY

A RAMCO WHITE PAPER

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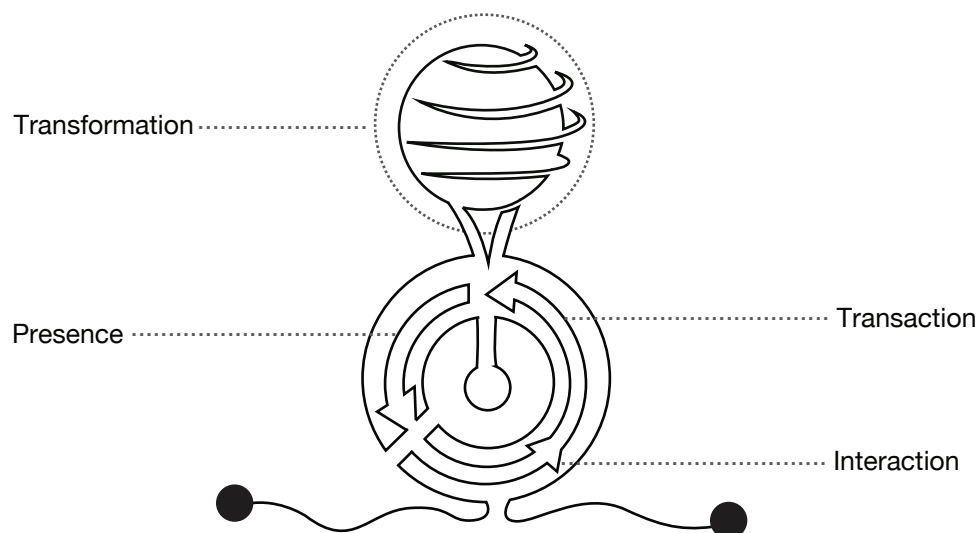
Introduction

This paper covers the approach of governments to information technology and their relationship with application of information, business knowledge, information systems, and information and communication technologies in the process of enabling good governance. Good governance is based on the premise that government and its associated bodies are accountable, transparent, effective and efficient, participatory and consensus-oriented. Governments are responsible for managing the present and long-term needs of the society and its resources at large. As citizens' expectation of governance is growing, governments are trying to leverage the power of Information, Communication and Technology (ICT) to provide high quality services on time, and professionally manage decisions throughout its associated organizational machinery. ICT, at any governmental department, is envisioned as a business transformation tool and it plays an integral role in effectively and efficiently managing all kinds of resources on a day-to-day basis.

According to the United Nation's reports on various parameters that enable the e-governance drive, there is a divide in trends among developed and developing nations. In line with the assessment of UNDESA (United Nations Department of Economic and Social Affairs), it is foreseen that e-governance will continue to grow and expand rapidly, but with different directions, drivers, and opportunities in different parts of the world. Almost every country and government around the world today has e-governance or IT implementation in some manner and has its own vision, roadmap and objectives for future course. Although all governments have many commonalities in their functions, structures and processes, implementation of e-governance projects have not been homogeneous. e-governance can enhance the speed and efficiency of operations by streamlining processes, lowering costs, improving research capabilities and improving documentation and record-keeping. e-governance can enable the government to become leaner, more cost-effective and citizen-friendly. By using appropriate technologies, e-governance can facilitate communication and improve the coordination of authorities within the different tiers of government, starting with the Central / Federal Government and spanning across state levels to extend through municipal corporations and local self-governments. Success of e-governance can be measured in the true sense when it impacts all the stakeholders involved.

Although different e-government initiatives strive to accomplish different goals, some observers argue that one of the overarching themes of e-governance is to fully realize the capabilities of available information technology so as to transform the government from an agency-centric, limited service operation into an automated, citizen-centric operation, capable of delivering services to citizens, businesses, and other government agencies 24 X 7. However, for a variety of technical, economic, and political reasons, it will take time for these initiatives to evolve into their full potential. For that reason, some observers use a common schema for classifying the stages of evolution of e-government programs. The schema is based on the degree to which the properties of IT have been utilized to enable the delivery of services electronically. Using this school of thought, there are four stages of evolution:

Presence, Interaction, Transaction, and Transformation



It is important to note that an e-government initiative does not necessarily have to start at the first stage and work its way through all of the stages. Instead, a project can skip levels, either from its inception or as it develops. Transformation is the highest order of evolution for e-government initiatives, and the effort should be to utilize the full capabilities of the technology to transform how government functions are conceived, organized, and executed. Such initiatives would have the robust GRP (Government Resource Planning) and CRM (Customer Relationship Management) capabilities required to handle a full range of questions, problems, and needs of citizens.

Currently, there are very few examples of this type of initiative, in part due to administrative, technical, and fiscal constraints. One of the distinctions of these initiatives is that GRP and CRM facilitate the seamless flow of information and collaborative decision-making between federal, state, local, public, and private partners. In other words, transformative e-government initiatives often seek to remove the organizational barriers that promote agency-centric solutions and instead, promote customer-centric solutions.

Some advocates suggest that, at its most advanced level, e-governance could potentially reorganize, combine, and/or eliminate existing agencies and replace them with virtual organizations. Governments started emphasizing and giving special attention to Green ICT / Environmental ICT issues. Other trends observed is the use of Government 2.0 mashups using Web 2.0 technology. In particular, there is an increase in real-time social networking site applications such as Twitter in government sites. This leads to another trend -- the increase in the quality and depth of e-participation between citizens and governments. Stronger linkages between local and central government are also implemented. Cloud Computing is another topic of great interest to many governments with a view towards reducing operating costs as well as carbon footprints.

Different Classes of Applications in e-governments

Although e-government encompasses a wide range of activities and actors, three distinct sectors can be identified. These include Government-to-Government (G2G), Government-to-Business (G2B), and Government-to-Citizen (G2C). There are other sectors like Government-to-Employee (G2E). However, since G2E operations are intra-agency activities, these sometimes are considered a subset of G2G. Similarly, Government - to Non-Government (G2N) are also part of G2C sometimes. Different categories are briefly explained to show how G2G, G2B and G2E are encompassed in GRP.

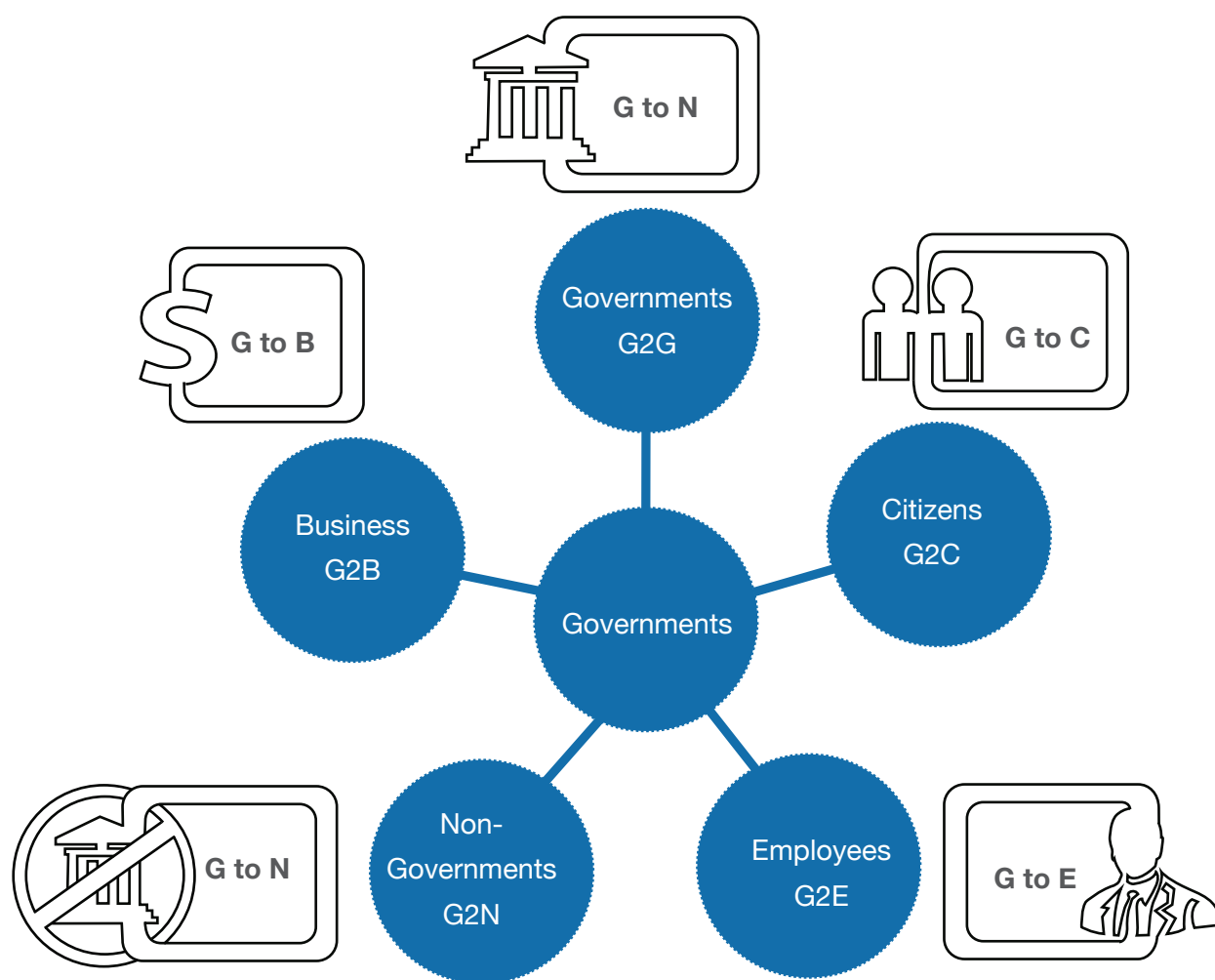
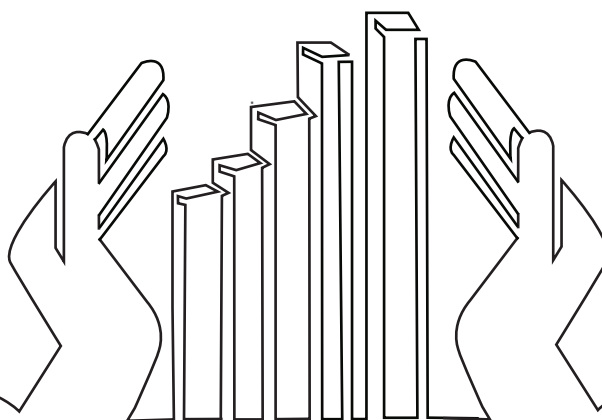


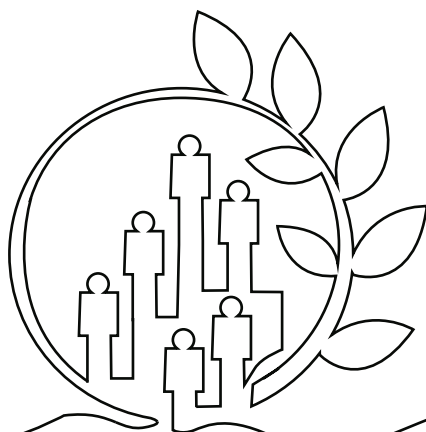
Figure – 1: Different Classes of Applications [1]

- **Government-to-Government (G2G)** is the backbone of e-government and Government Resource Planning. It focuses on its own internal departmental systems and procedures to enable commencement of electronic transactions with citizens and businesses. The objective of these services is to establish partnership among various levels of government, in order to provide better services. This involves sharing of data and improving collaboration between Federal, State and Local Governments. This means both intra and inter-departmental exchanges that facilitate collaboration between levels of government and empower state and local governments to deliver services more effectively. This can also be referred to as e-administration. It involves improving government processes by cutting costs, by managing performance and by making strategic connections within the government through empowerment. It will involve networking with government offices so as to produce synergy among them. Some examples of G2G services include nationwide Government Resources Planning (GRP) by the federal government and administration of the various process at secretariats through the Internet. In many respects, the G2G sector represents the backbone of e-government. Hence, governments (federal, state, local) target to establish their own internal systems and procedures before electronic transactions with citizens and businesses can be successful. G2G e-governance involves sharing data and conducting electronic exchanges between governmental units.

- **Government-to-Business (G2B)** represents the relationship between the public and private sector. This covers the relationships between government and corporate bodies and organizations of the private sector. The aim is to reduce burden on businesses, provide one-stop access to information and enable electronic communication. Online government to business allows entrepreneurs to access information about legislations and regulations. This sector also gives access to the relevant forms that are needed to comply with governmental requirements for their business. The main objective of G2B is a national economy with flexibility and competitiveness within the global markets. Some examples of G2B services include corporate tax filing or government procurement processes through the Internet.



- **Government-to-Citizen (G2C)** services enable citizens to interact with the government through a single window 24/7. Citizens enjoy immediate access to government processes and representatives through electronic governance portals that host application forms, legislation, news and assorted information. In a political sense, a 'Citizen' is a person who possesses political rights. Therefore, G2C describes the internet-based communication between the government and the citizen in political affairs. e-governance provides one-stop access to interactive government information. An e-government performs in a manner that citizens find what they need quickly and easily, and access information in minutes or seconds, instead of days or hours. Some examples of G2C services include online payment of utility bills or submission of various government forms from the Internet.
- **Government-to-Employee (G2E)** solutions are about empowering government employees so that they can effectively support citizens, speed up their internal administrative processes and render optimal solutions. It streamlines internal processes, improves knowledge sharing, collaboration and staff productivity. In this case, the government acts as an employer, and interacts with its employees, specially the civil servants, using information technology to enhance internal management efficiency with low administrative costs. It allows co-ordination with other government employees anytime, anywhere. Some examples of G2E services include software for maintaining personnel information and records of staff, which can be accessed easily and conveniently.
- **Government-to-NGO (G2N)** refers to building interactions beyond the boundaries of government, by developing communities and partnering with civil society. It will involve building various associations or interest groups that will ensure the betterment of society. Such initiatives deal particularly with the relationship between government and citizens, either as voters/stakeholders from whom the public sector derives its legitimacy, or as customers who consume public services.

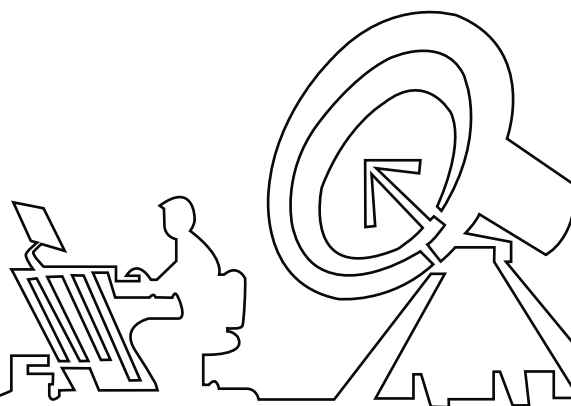


Emerging Trends and Glimpses of Futuristic Governmental Operations with a Focus on Integrated IT Solutions

Several countries around the world are attempting to revitalize their public administration and make it more proactive, efficient, transparent and service-oriented. To accomplish this transformation, governments are introducing innovations in their organizational structure, practices, capacities, and in the ways they mobilize, deploy and utilize human capital, information, technological and financial resources for service delivery to citizens.

In this context, the appropriate use of ICT is playing a crucial role in advancing the goals of the public sector and in contributing towards an enabling environment for social and critical thinking in e-governance economic growth. The results of the United Nations e-government Survey 2010 indicate that governments are moving forward in e-government development around the world [2]. However, the approach and priorities differ across governments and countries. For some, especially those focused on improving access and delivery of services, this is primarily about the front-end interface with customers and citizens. It is about providing better organized, aligned and often integrated information flows, new transactional capacities, as well as new mechanisms for feedback and consultation. For others, especially those engaged in the management and delivery of public administration, it is about driving down costs and improving the effectiveness and efficiency of 'back office' functions and the basic machinery of government. For those working at the transnational level it is about removing the barriers to international cooperation and development and creating an agenda of connected governance globally.

However, given the high demands placed by e-government on a multitude of foundational pillars which include prerequisites of infrastructure, appropriate policies, capacity development, ICT applications and relevant content, progress is slow. Only a few governments have made the necessary investment to move from e-government applications to a more integrated and interconnected governance stage.



New trends in the e-government arena, deal not just with process changes and technological developments, but also in 'paradigms' of how ICT is to be viewed within the context of providing solutions for good governance. The trends, which show great promise or are already impacting e-government developments, are listed for reference.

Government 2.0 •

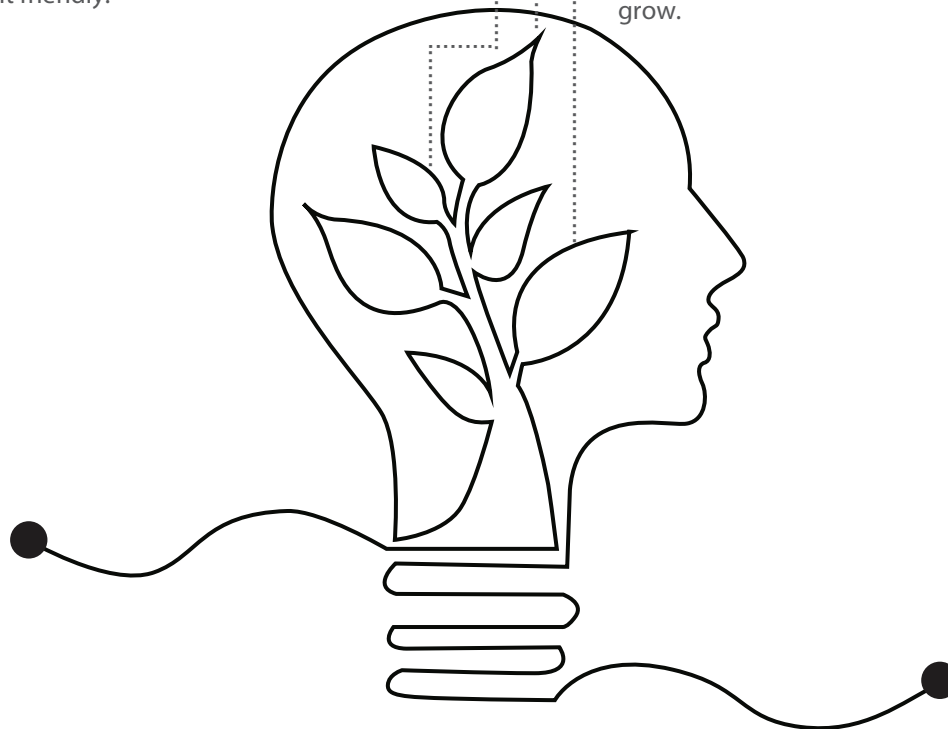
The increased usage of Social Media tools or government 2.0 applications has improved interaction between citizens and the government. Social media is the fastest growing channel where citizens are engaging with government agencies, and it demands real-time attention. The next frontier in government is thinking about and implementing Web 3.0, with a social twist. The Government 3.0 is about citizen-centered innovation (Level 2 participation), the convergence of business applications and social media platforms, the semantic web (self-learning knowledge and technology) and personalization.

Smart-grid and Green Technology •

The growing interest of ICT government organizations in green ICT is to be noted. A number of governments have responded and have already begun looking at ICT as a tool to address environmental problems, as well as looking at making ICT usage itself more environment friendly.

• Cloud computing, Data Center Virtualization and Shift to all-IP network

Many governments' ICT managers are showing interest in the above areas. Cloud Computing promises real costs savings and agility to customers. Through Cloud Computing, an e-government can rapidly deploy applications where the underlying technology components can expand and contract with the natural ebb and flow of the business life cycle. Cloud computing and web-based technology are transforming the software industry and revolutionizing the way enterprises deliver and manage their applications. Opportunities abound for those that can make the transition to Software as a Service (SaaS). Yet, there are many business, technological and architectural challenges to overcome to maximize SaaS payoffs. Other services like Infrastructure as a Service (IaaS), and integrated services to design, develop, deploy and manage cloud applications using Platform as a Service (PaaS), are also expected to grow.



Mobile Government •

With the availability of internet access on mobile devices, ubiquitous connectivity has become a reality. The advancement of ICT explains why new m-government applications emerge and why a government has many opportunities through wireless channels. m-government via Smartphone will join the mainstream in the near future.

Disaster Reduction & Business Continuity

Planning (BCP) •

In the light of terrorist threats, natural disasters, and cyber security threats, governments have been looking at and reviewing their disaster mitigation and business continuity plans.

One Stop Service •

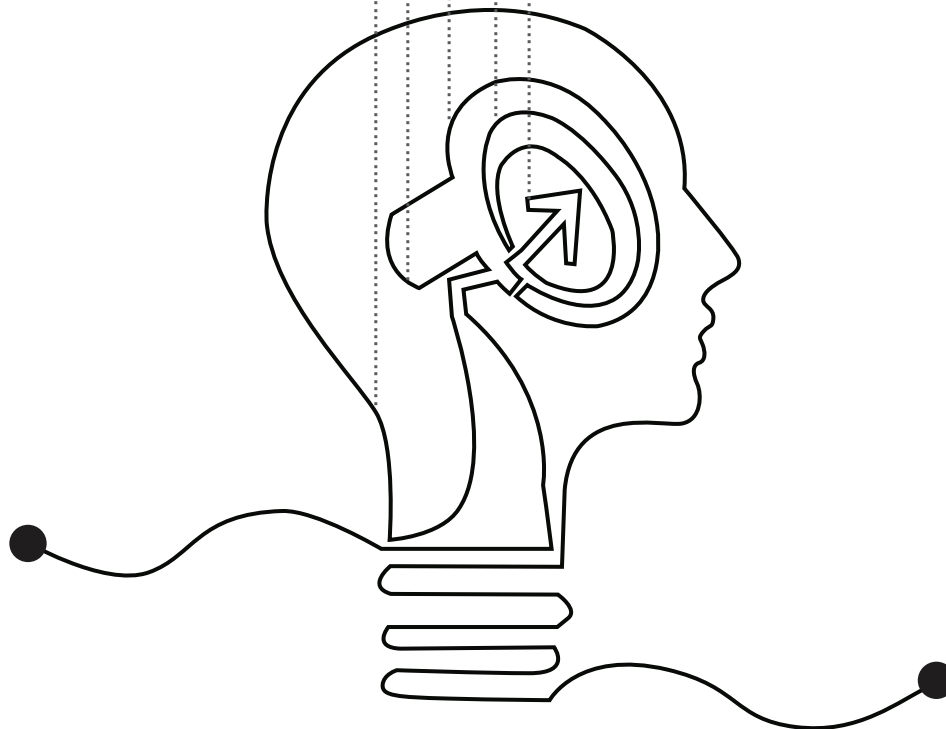
With the shift to user-oriented strategies to service delivery, many countries are putting their efforts to offer much more diverse, advanced, and comprehensive electronic services through one-stop portals. Coordination and collaboration between central and local governments is a key factor for delivery of public services.

• E-Inclusion and Digital Divide

This means both inclusive ICT and the use of ICT to achieve wider inclusion objectives. It focuses on the participation of all individuals and communities in all aspects of the information society. The Digital Divide, indicating levels of inequality in access to ICTs, still remain high, around twice the average level of income inequality.

• Citizen centric e-participation

This is about reconnecting ordinary people with politics and policy-making, and making the decision-making processes easier to understand and follow through the use of new Information and Communication Technologies (ICTs).



Transformation Perspective and Challenges of Developed and Developing Nations in Adopting the Power of ICT

e-governance applications will continue to grow at a rapid pace. Governments across the globe can ill afford to ignore the change. Technology will only be at best a tool to meet the desired governance delivery objective. The next few years will see some of the developing countries challenging the developed countries in the area of e-governance.

Table 1.0	e-government	
Regional Comparisons	Development Index Value [4]	
Region	2008	2010
Africa	0.2739	0.2733
Eastern Africa	0.2879	0.2782
Middle Africa	0.2530	0.2603
Northern Africa	0.3403	0.3692
Southern Africa	0.3893	0.3505
Western Africa	0.2110	0.2156
Americas	0.4936	0.4790
Caribbean	0.4480	0.4454
Central America	0.4604	0.4295
Northern America	0.8408	0.8479
South America	0.5072	0.4869
Asia	0.4470	0.4424
Central Asia	0.3881	0.4239
Eastern Asia	0.6443	0.6470
Southern Asia	0.3395	0.3248
South-Eastern Asia	0.4290	0.4250
Western Asia	0.4857	0.4732
Europe	0.6490	0.6227
Eastern Europe	0.5689	0.5449
Northern Europe	0.7721	0.7113
Southern Europe	0.5648	0.5566
Western Europe	0.7329	0.7165
Oceania	0.4338	0.4193
World average	0.4514	0.4406

Table 1: E-Government Development Index [2]

The 2010 global survey report of the United Nations (UN) has made some significant and path-breaking observations and suggestions. The theme of the previous report published in 2005 [3] was 'From e-Government to e-Inclusion'. The report specified a unilateral and uni-directional goal for e-government for all countries. In 2005, the main concerns were the disparity between e-haves and e-have-nots. It therefore focused on presenting the disparities in access and use of ICTs around the world. The 2008 survey acknowledges that these disparities exist but not necessarily as a chasm between e-haves and e-have-nots. In the last three years, e-governance has been embraced by almost all 193 nations who are members of the UN. The emphasis now is on the e-government roadmap chalked out by different nations based on their unique set of priorities and challenges. The theme of the 2008 report [4] is 'From e-Government to connected Governance' and the second half of the report assesses the challenges in moving from e-government to connected government. The 2010 United Nations e-Government Survey: Leveraging e-government at a time of Financial and Economic Crisis, categorically reports that governments have made great strides in development of online services, especially in middle-income countries. The costs associated with ICT and human capital continues to impede e-government development.

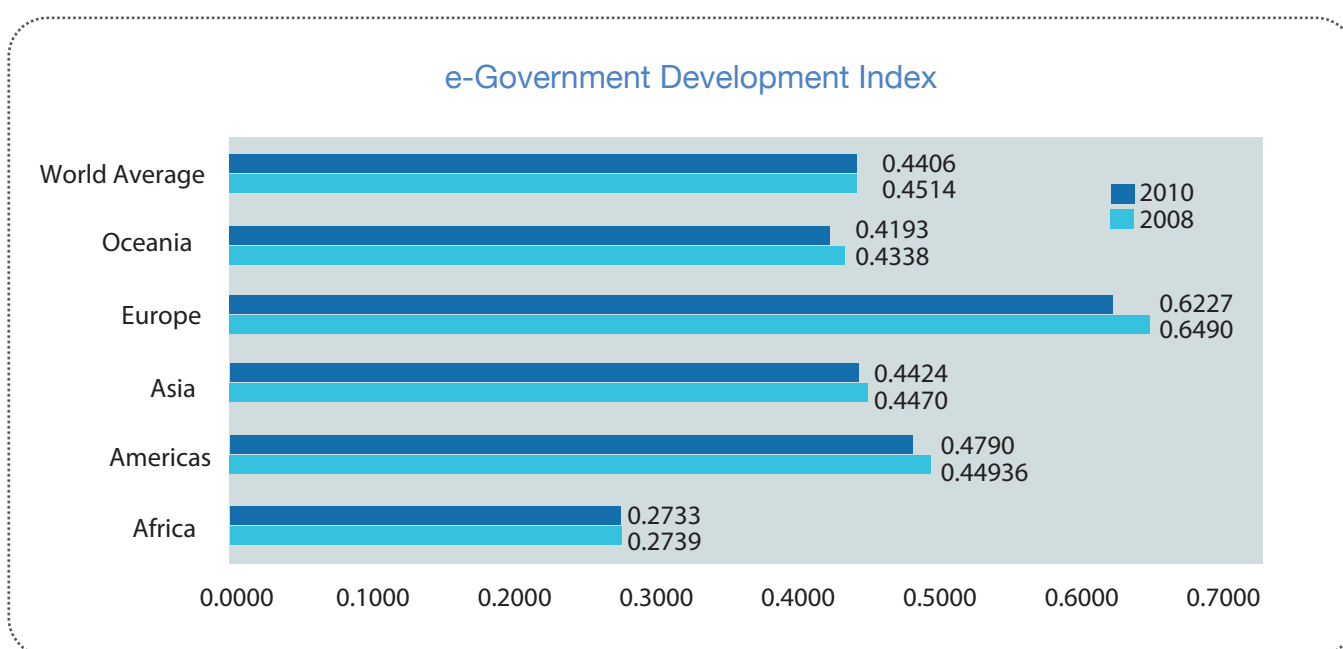


Figure – 2: E-Government Development Index across different geographic regions

In line with the assessment of UNDESA, it is foreseen that e-governance will continue to grow and expand rapidly, but with different directions, drivers, and opportunities in different parts of the world. For the sake of further analysis, we have grouped the nations into two groups viz:

- Developed nations (matured ICT usage)
- Developing nations (emerging ICT usage)

The following Table 2 summarizes the predictions about the directions and goals that are most likely to be pursued by nations in the two categories. These are not in any ranking.

Table2: E-Government Trends

	Developed Nations	Developing Nations
1	Portals – Increasing use of e-com / e-biz	Portals – Increasing
2	Consolidation of Websites	Proliferation of Websites
3	One-Stop Government	First time Creation of Huge Govt. Database
4	Unique Citizen ID	Government Resource Planning Programs
5	Life Cycle Management	Mobile Governance (M-Gov), Mobile Commerce (m-commerce)
6	Asset Consolidation	Capacity Building and Content Management
7	Employee Consolidation	Policies, Laws Rules and Standards
8	Radical Organizational Restructuring (Beyond BPR and Change Management)	Increase in Citizen Service Centers (CSC) and Kiosks

The developed nations shall pursue the goals of connected government, service innovation and huge amount of cost savings by leveraging e-government for asset and employee consolidation. The consolidation will obviously require a radical way of structuring government organizations and hierarchies. On the other hand, developing nations' focus shall be on creating information infrastructure both within the public sector and across society at large, and delivering services through more efficient and citizen-centric governance models, encompassing multiple delivery channels [5]. An important aspect of the infrastructure creation shall be framing of policies, laws, rules and standards and we can expect to see hectic activity in this area.

From the above table on the directions of development, flow the concerns amongst the public administrators and the political fraternity. The following Table 3 summarizes assessment about e-government concerns across developed nations and developing nations. (They do not follow any particular ranking methodology.)

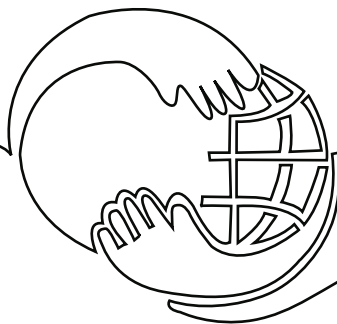
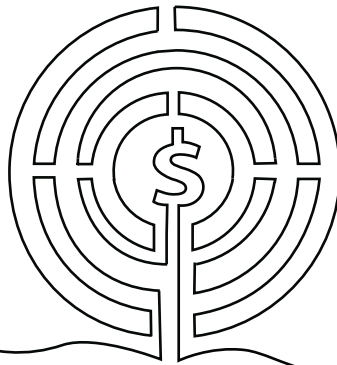


Table 3: E-Government Concerns

Developed Nations		Developing Nations
1	Identity thefts	Content Management
2	Protection of Data Privacy (Privacy concerns of citizens)	Business Continuity Planning (BCP) and Disaster Recovery (DR)
3	Technology Advances	Standards Development and Adoption
4	Citizen participation, e-participation (e-information, e-consultation, e-decision making)	Collaboration, Efficiency, Change Management
5	Going Green	Digital inclusion: Bridging the gap between e-haves and e-have-nots.

There are key market challenges facing public sector markets. On the federal side, budget deficits are growing and more robust performance goals are being set by the administration. Moreover, with the federal workforce experiencing shortages, technology is being used as the lynchpin for improved federal operations and acquisition. Reform goals are introducing more transparency. State and local market challenges include large state budget deficits, policy priorities driving spending and demographics driving revenue growth and service demand. The public sector has key technology challenges including integration and management of disparate, large-scale IT systems and programs with unparalleled scope and complexity. IT professionals must adhere to unique technical requirements and deliver on government mandates.



Opportunities in Developing or Delivering IT Solutions for Governments

Despite economic challenges, IT spending is still a key priority for governments.

As the technology landscape continues to shift, federal, state and local governments across the U.S. refuse to let the current economic strains hinder IT spending plans, according to research released by the Computing Technology Industry Association [5]. The Government IT Spending Plans study notes that federal, state and local governments will spend more than \$100 billion a year on IT products and services in the next 12 months. The IDC Government insights report states IT spending by central and local governments in Western Europe for hardware, software, and IT services is expected to increase to \$68.5 billion in 2013 from \$56.6 billion in 2008 [6]. Similarly IT spending by governments in the Middle East and Africa during 2011 will increase by 10.7% over the previous year, according to IDC, and the latest report states that 2010 investment stood at \$5.35 billion. IDC's expectations should near \$6 billion this year [7].

Most of the concerns described above are new challenges for the policy makers and implementers of e-government. While the CIOs of developed nations shall struggle to keep on top of technology at all times, citizens shall be more skeptical of connected governments in the absence of foolproof methods for privacy protection and prevention of identity thefts. Furthermore, when e-government moves from the passive provision of information to an interactive provision of information phase (whereby government services are being electronically delivered or the government is acquiring services and/or goods online) e-government assumes a role equivalent to e-commerce, necessitating the public administration to act as the fulcrum of the transaction to ensure a proper regulatory framework to guard against data theft [8]. A robust implementation of e-participation may throw up a political surprise resulting in possible turmoil and review of democratic processes and institutions. Among developing nations, the focus will shift to continuity and content management. The more advanced among developing nations shall try to embark on to the connected government paradigm. And last but not the least, e-inclusion will become the chief concern for sharing the benefits of a functioning e-government across the society. This analysis leads us to our ultimate projection about possible future opportunities for the ICT vendors, solution providers and service providers as the readiness index of many emerging nations is less than the world average. The following Table 4 summarizes opportunities .(They do not follow any particular ranking methodology.)

Developed Nations		Developing Nations
1	Identity Management	Content Creation & Content Management
2	New Technology Absorption	Capacity Building & Content Management Services
3	Breach of Privacy (Watchdog Solutions)	Data protection & maintenance services
4	One-Stop Government Systems	BCP & DR Management
		Government Resource Planning, Mobile Governance (M-Gov), Mobile Commerce (m-commerce)

Table 4: E-Government opportunities for building solutions

Government Operations, Business Needs and Compliances are Complex

Governments and their operational functions are different from private organizations as these organizations are expected to balance accountability to citizens vs. adaptability to international standards. The financial management system and its budget preparation cycle is a complex and lengthy process. A typical cycle is depicted in the schematic picture below. Budget management constitutes planning of developmental programs, which are generally large project implementations with huge funds management, and control is one of the complex integrated processes.

Budget preparations for the following year generally demand large data sets from various operational units. Without systems in place, it is a nightmare to get consistent data on time. However, with an integrated system in place, such a complex mandate is effectively transformed into a simple, effective business process, by any National/State / Local Governmental body involved in budget planning and execution. These processes will not compromise on requirements for adherence to executive and / or legislative compliance procedures.

For better fiscal discipline of budget management & control, always demand for complex reporting requirements as prescribed in International Standards [10, 11, 12, and 13] like the IMF Government Finance Statistics (GFS), United Nations Common Functions of Government (COFOG), IMF Code of Good Practices on Fiscal Transparency, International Public Sector Accounting Standards (IPSAS).

Government revenue and expenditures are managed during Budget Execution using commitment accounting. Commitment accounting is used only in government and other forms of public financial management. Funds are generated from external agencies and internal debt instruments. Expenditures are managed to ensure that the budget is not exceeded. Changes in the government financial situation result in budget transfers to ensure fiscal discipline with a prudent apex national bank.

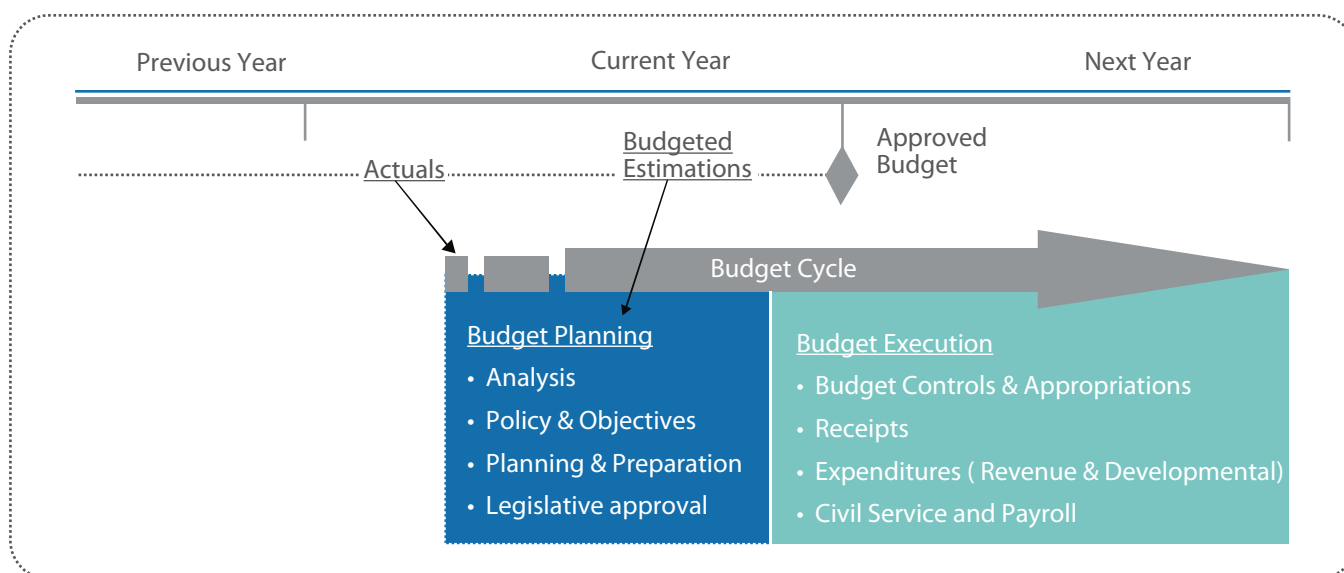


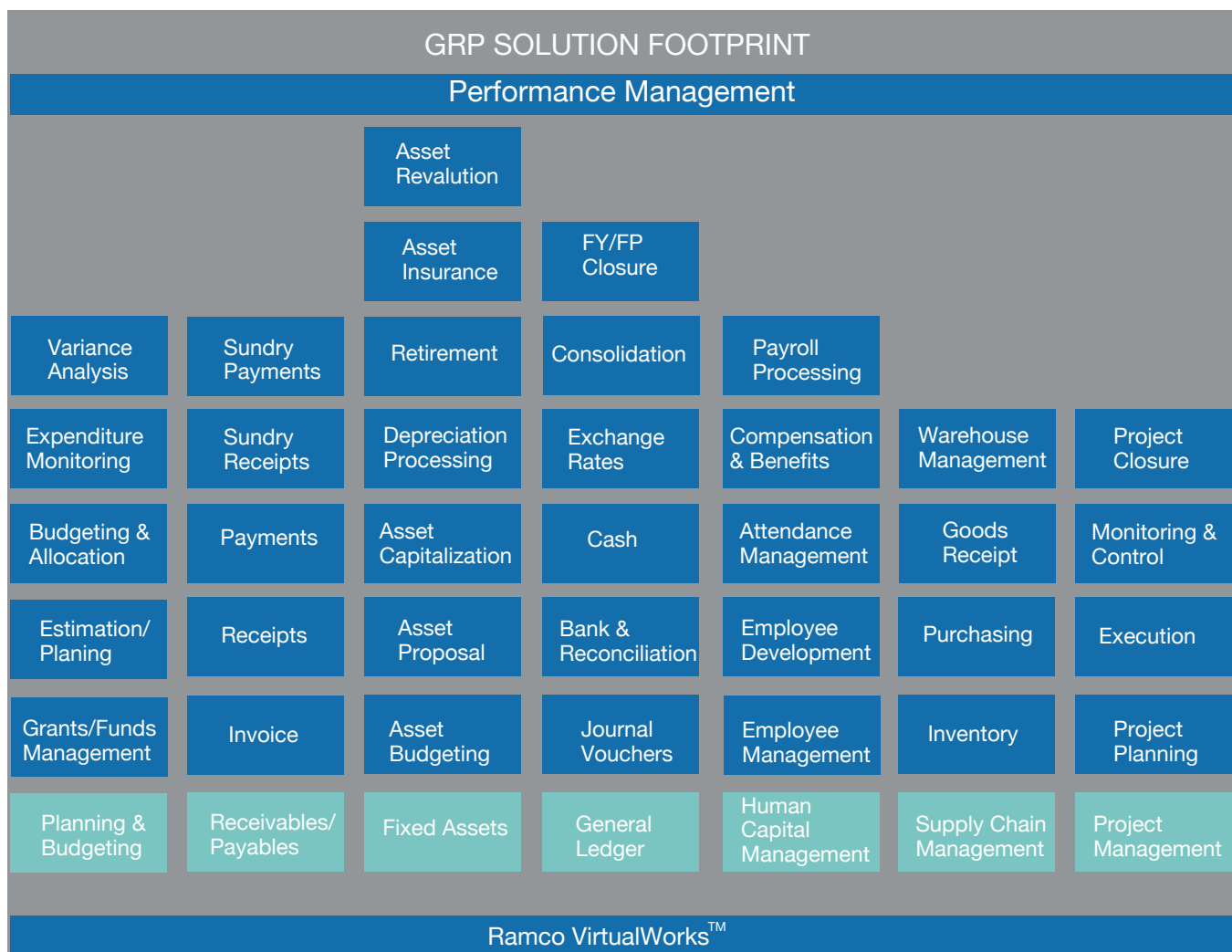
Figure – 2: Typical complex budget cycle

The intersection between federal, state and local governments continues to grow. IGTs or Intergovernmental Transfers, involve federal funding for state and local programs, which then flows to localities. Federal , state and local governments collaborate on anti-terrorism programs, cyber security partnerships, data sharing and providing service to the citizen.

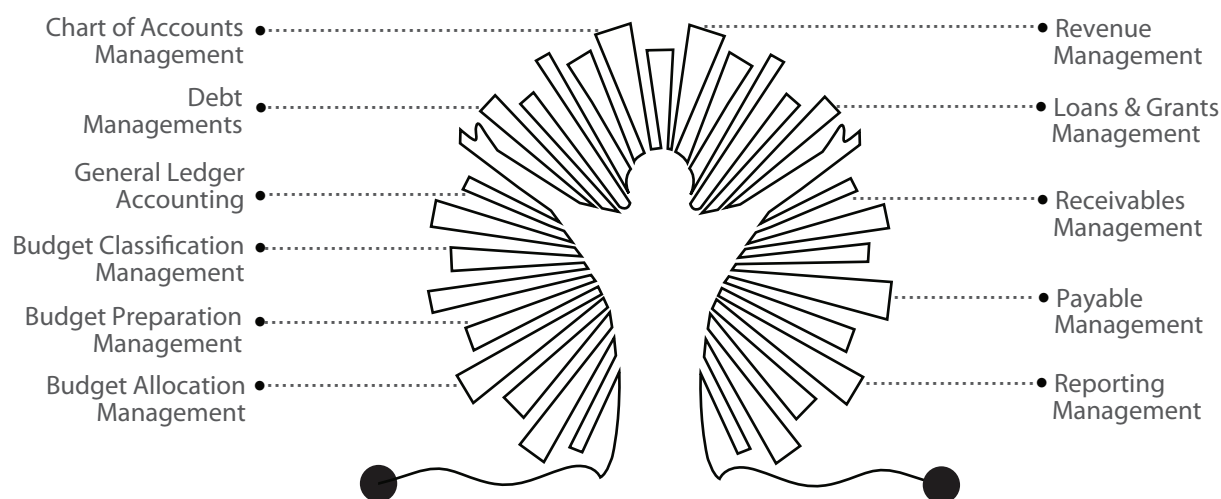
RAMCO: A Strong GRP Solution

Ramco's **Government Resource Planning (GRP)** is enabling governments to transform internal and external relationships and achieve efficient service delivery, participation and governance. It is a web-based comprehensive resource planning solution that supports management of finance, human resource, assets, inventory and procurement, all integrated in one product, allowing related operational elements to work together in the most effective manner.

Our GRP product integrates, automates and streamlines all facets and business practices associated with government operations. It is a cross-functional solution where each module represents a complete business cycle that seamlessly integrates with and feeds into the other module. It thus eliminates data redundancy, and makes information available to relevant departments and authorized users at any time, allowing for consolidated data availability, and timely closing of government reports and figures. The solution helps governments increase public administration efficiency and performance, resulting in decreased operational costs, and eventually, providing better service quality to citizens at a lower cost. The solution also helps improve accountability across government organizations, and provides the ability for centralized decision-making, based on consolidated real data and reports with enriched Business Analytics (Performance Management).



- **Financial Management** is the main framework for financial transactions. Our solution provides an integrated information system to capture, execute and consolidate budget management information at all levels in the organization and assists in monitoring financial plans and the status of projects. The financial solution supports budget preparation, budget execution, fiscal reporting, and management of procurement, commitment, payment, receipts, assets and cash. The solution controls the mechanisms to ensure that organizational spending complies with allocated budgets and provides accurate reports of budgeted and actual revenues and expenditures. The GRP completes financial functionality through the following functions



- **Human Capital Management** offers solutions to organize the business cycles for civil services structure, defining job positions, laws and regulations, departmental assignments and duties etc. The human resource function consists of tracking innumerable data points on employees such as personal histories, skills, capabilities etc. The payroll module of the GRP solution provides full flexibility and high accuracy to perform payroll operations, in a flawless manner that reduces human error to almost zero levels. This module is integrated to the Financial Management module.

- **Fixed Assets Module** manages the government's assets and equipment. It optimizes management of the assets during its operational life from financial depreciation to decommissioning and disposal.

- **Procurement and Inventory Management** provides tools to streamline the process of material purchase from need identification to order receipt. It integrates the procurement and inventory management process into the overall management structure, providing transparency in procedures, increased purchasing efficiency and enhanced decision making for supplies and contracts.

How Ramco GRP is the Key Differentiator in Enabling Transformation

The implementation of Ramco GRP is expected to bring the following key benefits to any government:

1. The Ramco suit is a comprehensive, fully web based GRP application suit that supports the entire budget cycle, project management & accounting and debt management and strengthens governance by improving budgetary transparency, fiscal control and predictability.
2. It integrates all modules to enhance the financial processes such that manual and tedious consolidation is replaced with flexible structural definitions to handle multiple sectors / sub sectors across states. Scalability will enable configuration and roll-out to multiple units without sacrificing security and standardization.
3. It makes available real-time treasury management, predictable revenue management and expenditure controls through COFOG guidelines as per international financial bodies like IMF and WB.
4. It effectively manages financial and non- financial assets when used for tracking of financial operations and related financial reports carried out by the government, thus providing greater efficiency in organizational development, creating transparency and saving costs.
5. It is proven in government implementations, developed on the Ramco VirtualWorks™ platform and progressively activated to adapt to the current and changing government context. Many government organizations have unique mandated requirements that cannot be satisfied by Commercial Off-the-Shelf (COTS) applications by standard ERP vendors in the market or shared services. These specialized applications are difficult to integrate, particularly as complex business processes are involved along with standards progress. Government organizations can leverage the COTS supported Ramco VirtualWorks platform, a GRP suit used to develop and maintain these specialized applications. Platform and applications includes a set of reusable and supported government entities or business objects. This option reduces development and support costs, and strategically helps in rolling out the suit across various governmental units.

Summary

There are exciting developments occurring today in the e-governance space that will have far reaching effects on the citizen centric services environment. According to the 1105 Government Information Group [15], federal , state and local government IT spending has seen a steady increase year-on-year in developed and emerging countries with a growth rate of 4%. Total governmental IT spending is forecasted to grow from \$133 billion in fiscal year 2010 to about \$190 billion by fiscal year 2015. There are many nations, whose e-government development index is below the world average which represents a large opportunity for ICT companies that are interested in offering solutions to meet the IT needs of the public sector.

There is a growing demand from the marketplace for e-governance applications like GRP, wherein Government IT decision makers and policy makers are relying on such applications to drive initiatives and make transformation programs run more efficiently. New trends are forcing different stakeholders like national leaders, policy makers, executive decision makers, IT decision makers, international bodies (like the UN), consulting firms and systems integrators to collaborate and play different roles in deciding what solutions, products and services will help achieve the transformational needs of national missions. With more Government initiatives, ICT vendors and international bodies will increase collaborations to levels we have never before experienced. This larger e-governance market space has its demands for high-end, secured web-based applications that meet complex requirements and statutes. While none of the demands are totally new or profound, the level of rich functionalities expected in these areas will be unprecedented, and Ramco having made inroads into this market, has a great opportunity to be different from the other players with its niche offering -- GRP application and readily configurable modules.

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Profile of Ravi Kiran M

Ravi Kiran M has 19 years of versatile experience across the engineering and IT sectors, in both public and private sector companies. He has worked with Ramco Systems for over 12 years, in the Complex Enterprise (ERP) / Government (GRP) and IT solutions space. As the General Manager – Projects, Mr. Kiran handles a large Government Resource Planning (GRP) program and helps Ministries leverage transformation through the adoption of robust IT solutions. He brings to the table wide international experience and leadership in critical business operations, product development, consulting and implementation across geographies with divergent business cultures. Mr. Kiran holds a Masters Degree in Technology from IIT (Khargapur) and an MBA from IIM (Calcutta), as well as advanced technical and management certifications from reputed Japanese associations.

About Ramco

Ramco Systems, a part of the USD 952 million Ramco Group, is a leading software company focused on consulting, product and managed services business. Headquartered in Chennai, Ramco Systems was started as an R&D division of Ramco Industries Limited in 1992, and later established as an independent company in 1999. The company focuses on providing innovative business solutions that can be delivered quickly and cost-effectively in complex environments. Globally, Ramco has over 140,000 users from 950+ customer organizations since inception. The company currently has 15 offices spread across India, USA, Canada, Europe, Middle East, South Africa and APAC and employs over 1,800 employees.

Ramco's key differentiator is its innovative approach to develop products through its revolutionary enterprise application assembly and delivery platform - Ramco VirtualWorks™. Ramco Systems has seven major product suites – Ramco Enterprise Suite, Ramco Enterprise Asset Management Suite, Ramco Aviation, Ramco OnDemand ERP (ERP on Cloud), Ramco Enterprise Information Management Suite, Ramco Advanced Process Control, and Ramco Mine Management. Strong domain knowledge coupled with proven implementation expertise enables Ramco to provide specialized solutions in verticals such as Manufacturing, Real Estate & Construction, Energy & Utilities, Logistics, Service, BFSI, Aviation, Government and Defense.

Ramco Systems has been assessed for ISO 9001:2008 and ISO 27001:2005 information security standards. Ramco's BPO unit is SAS 70 Type II certified.