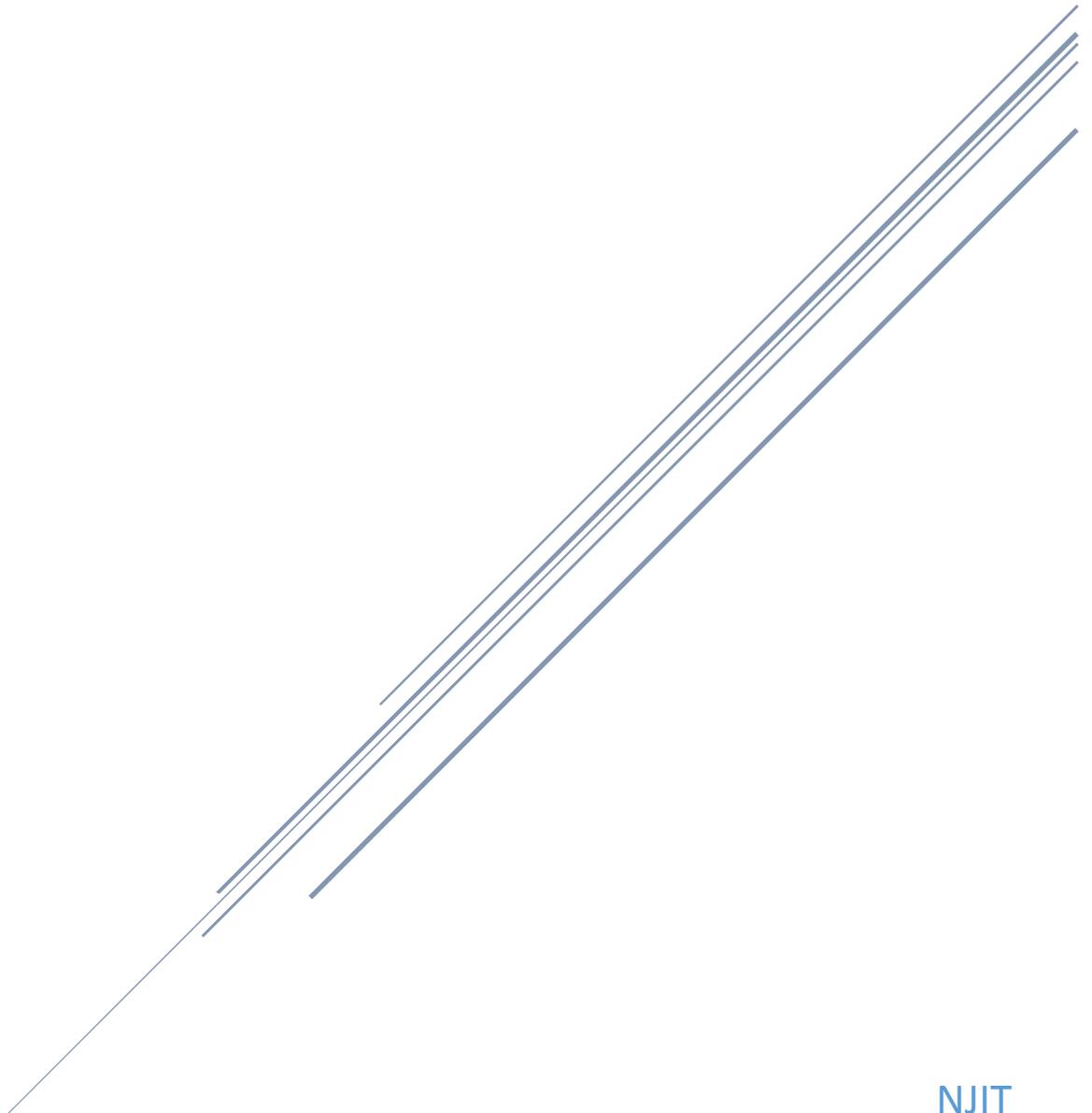


BUILDING A 21ST CENTURY GOVERNMENT

USING OPEN DATA TECHNOLOGY AND REDUCING LIABILITY

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Entrepreneurship returns to its origins of being a government that was once a startup itself. The idea may sound like an oxymoron to government bashers. Entrepreneurs in government? Yet a move is on to bring successful entrepreneurs into state agencies, city halls and economic development agencies to help stimulate business and job growth and, important to many advocates, help bureaucracies become more creative, efficient and responsive to the public. (Stinson, 2014). The public deserves competent, efficient, and responsive service from the Federal Government. Most of the governments around the world are developing more sophisticated ways to foster citizens' active participation in governmental activities and offer them access to their services in a more effective way. In today's vast moving economy; use of modern tools, equipment and technologies the digital opportunity and fundamentally change the landscape. Federal Government serves internal and external customers. Building a 21st century platform to better serve the American People (U.S., 2012).

The Digital Government Strategy main priority is aimed at building a 21st century government that works better for the American people. It sets out to accomplish three goals is to enable the American people with secure access and an increasingly mobile workforce to access high-quality digital government information and services anywhere, anytime, on any device or platform. Operationalizing an information-centric model, we can architect our systems for interoperability and openness, modernize our content publication model, and deliver better, device-agnostic digital services at a lower cost. Ensure that as the government adjusts to this new digital world, we seize the opportunity

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to procure and manage devices, applications, and data in smart, secure and affordable ways (U.S., 2012).

Learning from the previous transition of moving information and services online, we now have an opportunity to break free from the inefficient, costly, and fragmented practices of the past, build a sound governance structure for digital services, and do mobile “right” from the beginning. Unlock the power of government data to spur innovation across our Nation and improve the quality of services for the American people. We must enable the public, entrepreneurs, and our own government programs to better leverage the rich wealth of federal data to pour into applications and services by ensuring that data is open and machine-readable by default. Governments around the world are designing and developing various ways to facilitate, sophisticated ways in providing citizens with active participation in governmental activities and access to their (governments’) services in a more effective way (Akram & Malik, 2012). Humanity has always attempted, through engineering and technology, to make the world a better place. In the last decade, countries all over the globe have sought to deliver public services through new working relationships among governments and private and nonprofit organizations. Government agencies have found that when Lean is implemented, they see an improved understanding of how their own processes work, that it facilitates the quick identification and implementation of improvements and that it builds a culture of continuous improvement. Infuse many of the same operational and creative solutions-oriented principles found in startups and small businesses into the inner workings of government.

We categorized countries by economic position, digital maturity and strategies for digital transformation.



Technology is a proud talking point for politicians, yet there is a severe lack of resource allocation and participation in the ecosystem

In the last decade, countries all over the globe have sought to deliver public services through new working relationships among governments and private and nonprofit organizations. Technology is a proud talking point for politicians, yet there is a severe lack of resource allocation and participation in the ecosystem. Across a wide variety of domains, stakeholders are demanding increased functionality, higher reliability, shorter product life cycles, and lower prices. Stakeholder Expectations Drive System Trends - System performance expectations and many system characteristics will reflect the global societal and technological trends that shape stakeholder values (Nam & Sayogo, 2011). E-government aims not only at reinventing government actions but also at improving interactions with citizens/ businesses through making high quality services accessible. The reason being the success of adoption of e-government is not dependent on the technology but citizens. Though governments and businesses are beneficiaries of e-government yet citizens are the one receiving the benefits from it.

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In the context of e-government typical needs of the citizens must be given priority so that they can convey their needs to the developers of related systems and adopt the technology. E- Government can help citizens develop their full potential catering to their needs and interests, lead healthy lives, participate in the activities of government and community to maintain a reasonable. Citizens' trust in government is different from trust in people so its antecedents are likely to differ. Trust in both the government and the online technology generates citizens' beliefs about e- government services (Nam & Sayogo, 2011). To build a 21st century Government, where technology and data helps Americans and helps Entrepreneurs Innovate; there are things that must be in place. They are trust in the medium only is not sufficient for citizens' adoption of e-government services; trust in government providing these services through internet is vital. Trust enables citizens to believe that the government will be able to effectively address different technical issues involved in the website usability. Trust in e-government includes the trustor (their disposition to trust), supposition made about the traits of the trustee (trust of the government), and institutional factors (trust of the internet). Trust in the government positively relates to citizens' adoption of e-government. It refers to the perception that government agencies are capable of delivering e-services effectively by ensuring citizens' privacy (Nam & Sayogo, 2011).

To build for the future, the Federal Government needs a Digital Strategy that embraces the opportunity to innovate more with less, and enables entrepreneurs to better leverage government data to improve the quality of services to the American people. Early mobile adopters in government—like the early web adopters—are beginning to experiment in pursuit of innovation. Some have created products that leverage the unique capabilities of mobile devices. Others have launched programs and strategies and brought personal

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devices into the workplace. Absent coordination, however, the work is being done in isolated, programmatic silos within agencies. Building for the future requires us to think beyond programmatic lines. To keep up with the pace of change in technology, we need to securely architect our systems for interoperability and openness from conception. We need to have common standards and more rapidly share the lessons learned by early adopters. We need to produce better content and data, and present it through multiple channels in a program and device-agnostic way. We need to adopt a coordinated approach to ensure privacy and security in a digital age (U.S., 2012).

Today's amazing mix of cloud computing, ever-smarter mobile devices, and collaboration tools is changing the consumer landscape and bleeding into government as both an opportunity and a challenge (Smith, 2012). New expectations require the Federal Government to be ready to deliver and receive digital information, see Fig 1.

Mission drives agencies, and the need to deliver better services to customers at a lower cost leads to Lean Government; which refers to the application of principles and methods to both identify and then implement the most efficient. Also, lean government is another way to add value to entrepreneurs as a way to provide government services. The Freedom of Information Act (FOIA) gives you the right to access information from the federal government, accessing configuration managed data from secure information systems at a cost effective and faster way serves both its internal and external customers.

Figure 1

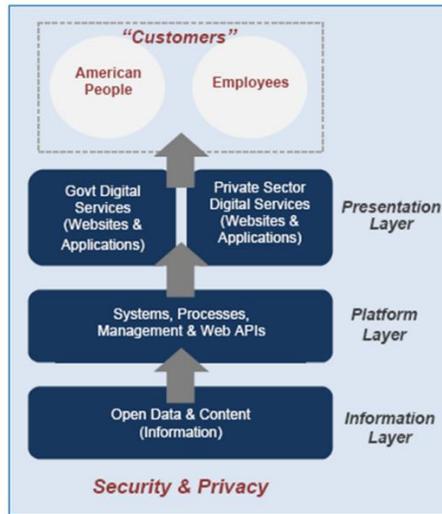
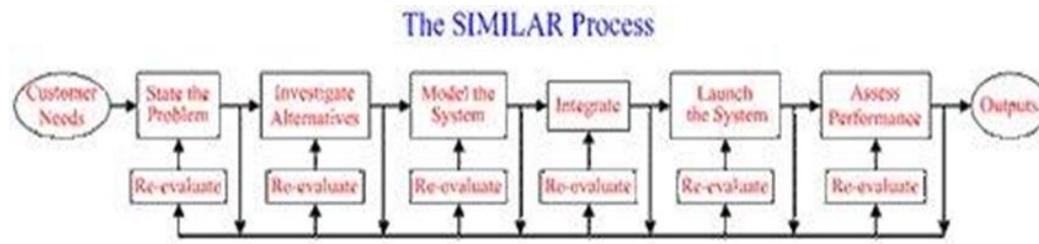


Figure 1: The Layers of Digital Services

In implementing such lean processes within government, entrepreneurs can use systems engineering tools and principles to consider both the business and the technical needs of all customers with the goal of providing a quality product that meets the user needs.

There are several benefits to applying System Engineering (SE) processes into Government, they are as follows: SE will provide unmeasurable value to the Government by reducing cost and to Consumers who will in return have a more simplified access to data, in some cases 24/7. E- Government will provide a one stop shop to a solution for fast, economical, and secure access, it promotes citizens' greater interaction with government and E-government intends to enrich government services and the quality of its interactions with citizens and businesses with the help of improved connectivity, high quality services and better systems. Also, these processes help reduce confusions in the minds of citizens regarding e- government adoption. **See process below for other benefits and process.**

Operations	Cost & Schedule
Performance	Training & Support
Test	Disposal



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Across a wide variety of domains, stakeholders are demanding increased functionality, higher reliability, shorter product life cycles, and lower prices. Stakeholder Expectations Drive System Trends -System performance expectations and many system characteristics will reflect the global societal and technological trends that shape stakeholder values (Engineering, 2014). To keep up with the pace of change in technology, Government will need to securely architect our systems for interoperability and openness from conception,

Figure 2 below.

ACCESS TO INFORMATION,
COMMUNICATION,
EDUCATION



Figure 2: Systems, businesses and people must be integrated so that they interact with one another. (Engineering, 2014)

Government, and all its agencies are a mission driven, where SE principles share the same common incentives and purposes. Take for example The Social Security Administration (SSA), the agency have initiatives to help make the agency transparent to Consumers and other agencies. SSA vision for 2025 are as follows: Make Open Data, Content, and Web APIs the New Default, Exploring SE vision and practices as a foundation to address using modern tools and technologies such as responsive web design. Search engine optimization is critical if the government is to adapt to an ever-changing digital landscape and deliver services to any device, anytime, anywhere. Optimizing content for modern platforms, rather than just translating content from paper-based documents to the Web, will help ensure the American people and employees can access content regardless of platform (Administration, n.d.) Whereas, SE Vision for 2025 is increasing globalization at higher levels of political and economic interdependence, the need to share resources and interconnect systems for global partnerships. Also, new collaboration from agencies, including information and communication security, and sharing of knowledge and technology; combined with global changes impose new demands on the types of systems that are needed, yet are often impacted by the very technology and system developments meant to satisfy the human needs. When

implementing technology within government for transparency, government will have to ensure citizens adopt e-government; where they must be convinced that the governments' word can be trusted and that their data or services is secure and it will not exploit them. When building a 21st Century government, satisfaction of content to citizens present and experience in providing the desired information to the individual retrieving the information. The success of an e-government website depends on citizens' satisfaction and their continuous use of that website. Also, satisfaction toward an e-government website concerns their cognitive judgment of the experiences with that website. User satisfaction influences much on adoption and use of e-government services. A satisfactory experience with e-government services may improve a citizen's trust and support for government; on the other hand, a less satisfactory experience may weaken positive attitude toward government. E-government remains to be an important area for research as it will affect the life of a citizen and his government on a global scale (Akram & Malik, 2012). The intelligent use of information and communication technologies helps governments get maximum benefits and to provide better and more functional government. As always, the data retrieve from any government agency should be accurate, up to date, precise and relevant. Further, the system quality of the e-government website should be improved by making the websites reliable, flexible and making information to be readily available.

Moreover, the service quality should be ensured by making citizens' believe that the e-government is competent enough to help citizens in solving their problems and understands their specific needs. This is how government can play a role in helping entrepreneurs bring innovation to the forefront and increase awareness to help reduce cost and eliminate waste. Government is missing out on various opportunities with businesses

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and entrepreneurs, to share their ideas and resources within the digital services platform.

Inefficiencies such as fragmented procurement and development practices waste taxpayer dollars and stymie the consistent adoption of new technologies and approaches. The shift to a shared platform culture will require strong leadership at the government-wide and agency levels. Government agencies should look first to shared solutions and existing infrastructure when developing new projects, rather than procuring new infrastructure and systems for each new project. Also, government should share ownership of common service areas, within and across agencies; instead of creating multiple websites on the same topic (U.S., 2012)

In conclusion, with the unlocking of the power of government data to spur innovation across our Nation will help to improve the quality of services for the American people. Also, this will enable the public, entrepreneurs, and our own government programs to better leverage the rich wealth of federal data to pour into applications and services by ensuring that data is open and machine-readable by default and drive this transformation. A “Shared Platform” approach and a “Customer-Centric” approach. Systems engineering must scale and add value to a broad range of systems, stakeholders, and organizations with a diversity of size and complexity.

“I want us to ask ourselves every day, how are we using technology to make a real difference in people’s lives.” —President Barack Obama

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