

TECHNOLOGY LED TRANSFORMATION

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Background:



Not many years passed when

-We used to line up to get our money from bank

We used to take rounds of Government office to get application form

We used to run pillar to post to get any Government documents

We used to line up to pay utility bills...

Now... Scenario has changed for those who have the power of “e” & power of “m”. They generally do not line up or wait for availing Services from Government / Corporate. They use online facility to avail the services.

The Social Media has also transformed the way of functioning of Government and Corporate as well in India. Twitter has emerged as frontend for political parties. Their leaders announce major decisions and perform critical activities on Twitter. If you post your grievance against Government, Corporate, etc on social media, the chances are that top notch of the organization come forward to resolve your problem. Was it earlier? No. Certainly not.

Therefore transformation has already started and cruising to its next phase. We must visualize ingredients of Transformation in Governance. One must understand that merely translation of existing process and terming as automation is biggest enemy of Transformation.

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Even those, who are serious critic of Government, will also agree that in last two decades Governance has changed, and the process is at continuity. This happened because of the emergence of the enabling technologies; Governance process Re-engineering took place and there was a political will for this change across the country.

The Opportunities:

Transformation is a paradigm shift in the system. It requires a very strong political will. Fortunately, the Prime Minister of India has given a very clear mandate as:-



The future of Governance will highly rely on efficient uses of emerging technologies. We Indians by nature are adoptive especially in using latest technologies. It is pleasant to see that 'Adoptability' of technology is more in lower, lower middle class and middle class public. The penetration of 100 Crore Mobile phones² & uses of 2.08 Lacs ATMs tells the story of 'Technology Enabled India. There are 88 Cr Debits Cards and 3 Cr Credit Card users³.

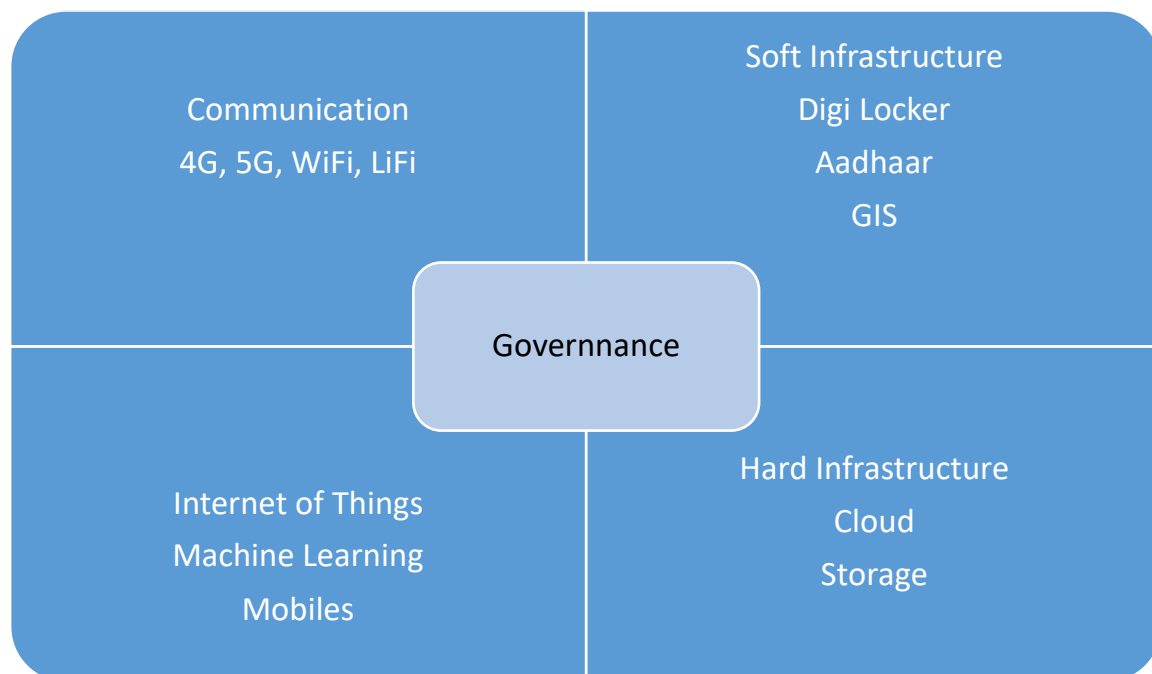
In this country of great diversity, the change process is at different stages in different parts of country; those states, who started late, are running fast because they got learning from others and support of better technology. This trend will continue in future also.

² As per the information available at Forbes Website <https://www.forbes.com/sites/saritharai/2016/01/06/india-just-crossed-1-billion-mobile-subscribers-milestone-and-the-excitements-just-beginning/#420237ab7db0>

³ As per the data available at website of Reserve bank of India <https://www.rbi.org.in/scripts/atmview.aspx>

Efficient use of technology will result in Transformation if there are strong catalysts, in form of efficient processes re-engineering and adoption of technology by people of this country.

In the first phase of the computerization, we translated the existing processes into computer friendly versions and reduced number of visits to the Department providing the services. We also developed soft infrastructure like Database of citizens in form of Aadhaar Number, PAN and Election Photo Identity Cards (EPIC). Now in its next avatar, we are ready to use this soft infrastructure with other emerging and diffusing technology like Cloud Computing, Internet of Things (IoT), GIS, etc.



Fortunately, India got a mature & forward looking think tank at the top with a very strong political will to implement eGovernance across the country. We have National eGovernance Plan (NeGP) and now its next version is as e-Kranti (NeGP v 2.0) is being implemented.

There will be a major change in the field of communication technology. We have witnessed the 4G revolution. Its speed and its coverage gave birth to new business models. In near future, we will be channelling data on very high speed networks.

The launch of **Goods and Service Tax (GST)** reforms in India is just a beginning of a huge technology led transformations affecting almost everyone in the country.

Proactive Governance:

In early days of Governance, the purpose of creating multiple departments and ministries was to organize the work in a structured way. There was very limited mode of communication, therefore information was asked in multiple forms. The information availability was also highly decentralized.

In today's scenario, with high availability of information and high processing



speed and connectivity, many departments have lost their relevance, as the entire eco system of Information processing has changed. At present, the Government is overloaded with many departments and their conflicting roles and responsibilities in. The present format of Governance is very complex. The Government offices of now must be converted into friendly modern virtual

offices (Visible to public!). The interaction of public with Government offices is to be brought to a minimum leading to zero. The concept of virtual office is not new in corporate world, but it is yet to be initiated in the Government. Less Paper Office is to be merged with Minimum Human Intervention which facilitates in providing services to the citizens.

Despite of fanfare and appreciation of passport process computerization, not much has changed (The frontend seems nicer). Despite the fact that they issued the old passports in the first place, they still need a copy of the old passports, with the photocopy of original document. Why can they not fetch all the required data about the passport applicant from their own database? Process reengineering must be done in this case, apparently to a well sung process reengineering project of India.

The proactive Governance will empower the citizens in such a way that:-

- *When he/she is born, his/her birth certificate is automatically available at Digi Locker*
- *Aadhaar number is assigned and linked with Parent/Guardian.*
- *When he/she turns 18 years old, his/her Election Photo Identity Card (EPIC) is automatically available in Digital Locker.*
- *Income Tax returns are waived off as Income Tax Department know exactly all financial transactions of the citizens.*
- *All entitlements from the Government are automatically available at Digi Locker.*
- *No need of applications for getting Government Service. For additional services, just online request will give the citizens their Aadhaar card and service will be added in their Digital Locker.*
- *When He/she turns 60 years old, the old age pension is automatically initiated in the bank account.*
- *Renewal of passport happens just over a phone call.*

Building Blocks

E-Office is one-step forward to create virtual offices in Government. The present version of e-Office is not a transformation, but a translation of existing procedure. Its new versions might improve upon its user experience and lead of actual transformation in Office Procedures. In fact, easy availability of hand held devices and high bandwidth would give a better user experience and access to the Government employees.

In the next decade, **Fibre to Home** will give wings to the imagination of office less Governance. Let every node of internet network turn into a virtual office, where citizens may transact with Government. With enough will, it is possible in the next decade. Online shopping has created virtual markets where multiple choice are available for the public to exercise the options.

The Financial Institutions have already taken a lead in this direction. We cannot leave our villages and town behind, therefore the target should be to connect each citizen with network, either wireless or Fibre.

Geo Spatial Information System (GIS) is to be used to create a unique identification number for each land property across India. This is one of the

reforms leading to the transformation of our nation towards an efficient management of the land resources.

Traditionally, the applications for Government services are either developed by its own agencies like NIC, C-DAC etc. or work is outsourced to some private companies. This trend must change now. Government owns a lots of valuable data in digital or manual form. This data can be made open to the innovators in our society and they can invent wonderful things using this data; for starters, by developing many useful applications. There has already been initiated by the Government in form of **open data**. For example, if Delhi Transport Corporation (DTC) starts sharing GPS locations of its buses in the form of open data, many enthusiastic developers will come out to develop useful applications using GPS data.

The Government must involve these innovators in its development program by the means of **Hackathons** to address many of its problem areas. These innovators will act as catalysts in the process of technology led transformations.

Smart Cities, Smart town & Smart Village shall lead our country as Smart India. The next big thing which the Government must focus on should be **Internet of Things (IOT)**. Not much progress has been made in IOT in India, especially in Government sector. The process of automation will require the use of IoT, ultimately resulting in power saving, intelligent switching of routes, decision making, etc.

Traditionally, all online forms are available in the Government websites or mobile applications developed by them. The citizens/users have to bear with the flat and non-user-friendly designs created by the Government. The next decade will be decade of involving private and public sectors in hosting input forms (Applications) also. Government is to declare the input parameters in public and let innovation take place in creating user friendly forms and mobile apps. The parameters required for processing can be passed to the Government. The basic concept of “**Government works on mistrust**” must be removed from the mind of public.

Environment friendly processes:

The outcome of the transformation should be such that the people only go out for fitness, recreational activities and social activities and to attend medical emergencies, etc. The environment will improve with the transformation taking place in Governance. Activities like rushing to office, rushing for appointments to submit application forms etc. must go out of scene when a 360° transformation takes place.

Challenges:

Transformation is a slow process. It takes lots of effort, time and resistance. Some of the major challenges are -

Digital Divide: India is a large country and there huge swaths of gaps amongst have and haven't. Though, this gap will always be there but this gap must be reduced as close as possible to have effective transformations. This can be done by making base technology affordable and uniform to everyone. Availability of high speed network across the country is the need of today so much so that the slogan of "Roti, Kapda, Makan aur Internet" becomes a saying.

Cyber Security: The other challenge is Cyber Security. As the government takes on new challenges, and bring out the change to its citizens, it is also responsibility of the government to provide adequate security to them in the cyber space. The recent ransomware attack is just a small example of the criticality. Comprehensive Cyber Security Policies and a strict compliance of the policies will prevent almost all the breach attempts on the government networks. We need to create an exclusive army of cyber experts to combat future attacks.

Flexible Acts/Rules: 18th and 19th Century Acts and Rules cannot be worked with 21st century technologies. The Government has rightly got rid of many non-relevant Acts and Rules recently. This is not one time activity to be performed in every two centuries. In fact, consideration part in our Rules must be dynamic and must change automatically with Time, Technology and Trends. For example: *General Financial Rules (2005) allowed*

*good/services worth **Rs 15,000** could be procured from any shop/company. This was ok in the year 2005 but coming until 2016, the rule went non-relevant due to inflation. Very simple ideal situation would have been that every year, the limit could be enhance by 10%.*

Similarly if penalty to commit a crime was Rs 200/- in 1860, the same penalty cannot be continued in 2017. There is no relevance of such rules.

Employee Empowerment: Successful Human Resource Management (HRM) is biggest challenge in Technology Led Transformation. Government is still working and relying on age old conduct rules. It is surprising to see that as per the order of the Government, a laptop can only be issued to the Joint Secretary and above officers! Still almost every officer has one laptop! This mind-set that a laptop is a luxury, must not be entertained. Not only laptops, but all gadgets involved in communication systems must be given to all employees regardless of the ranks as entitlement. Technology has no cost but the moral boosting have many advantages. In technology led scenario, we need to be more open hearted while considering to provide latest technology to employees.

“Technology matters to people: bad technology is depressing.”