Digital India Digital Army

01 July 2015 marked the commencement of the Digital India week in India. Digital India is an umbrella programme to transform India into a digitally empowered society and knowledge economy. The expectations from this programme are huge and will affect all sections of the society, including all ranks of the Indian Army. Digital India is an opportunity which can be leveraged by the Army to serve all its ranks as also contribute to this national effort.

Digital India – A Primer

The vision of Digital India is centred on 3 Key Areas

- Digital Infrastructure as a Utility to Every Citizen
- Governance & Services on Demand
- Digital Empowerment of Citizens

To make this vision a reality, Digital India has been based on 9 pillars as summarised below

- **Broadband Highways** – Providing optical fibre backbone based Broadband up to 2.5 Lakh Gram Panchayats.
- **Universal Access to Mobile Connectivity** – Mobile coverage to be extended to remaining uncovered villages.
- **Public Internet Access Programme** – Public access to internet to enable delivery of services
- **e-Governance: Reforming Government through Technology** – Providing governance to the public through electronic means
- **e-Kranti - Electronic Delivery of Services** – This would include education, health care, financial inclusion, GIS based applications etc
- **Information for All** – Online hosting of information for public.
- **Electronics Manufacturing** – Target Net Zero imports of electronics by 2020 by improving domestic electronics manufacturing.
- **IT for Jobs** – Train people in small towns and villages for IT based jobs.
- **Early Harvest Programmes** – This programme includes things like Wi-Fi for all universities, Secure email within government, standardised email design templates, biometric attendance etc.

Army and Digital India

The Army, since Independence, has lead the national effort in a number of ways and Digital India is a programme where it can become a lead contributor.

Some examples where the Army has already taken lead in building the Digital India vision are as under

- Network for Spectrum Optical Fibre project is a pan India network which will have the requisite band width for Broadband Highways.
- ARPAN 3.0, an automation software for Army personnel, has been launched by the Defence Minister. It provides the Army personnel easy access to their service records, such as salary, leave, transfer and postings. This is digital empowerment of members of the Army.

The vision of Digital India can be the vision for all ranks of the Army too. Let us look into the role the Army can play in the 9 pillars of Digital India

- **Broadband Highways** – The Network for Spectrum Optical Fibre Network is already being implemented on ground and will provide the backbone infrastructure required for Broadband Highways. It should be feasible to cover this network right down to battalion level.

- **Universal Access to Mobile Connectivity** – The booming mobile phone industry is enabling access to Smart Phones to all citizens of the country. This is making it possible for all ranks of Armed Forces to have access to Smart Phones. Armed Forces would have a role to play to ensure that mobile tower infrastructure is given access in defence areas to enable Armed Forces personnel to access mobile communications.

- **Public Internet Access Program** – Internet today is becoming a necessity for all citizens. The mobile service providers are already providing this service on mobile phones. The issue of providing free wi-fi hotspots in military areas will have to be examined from the security point of view. It is possible to provide Internet access to all ranks with suitable security instructions and a monitoring mechanism without impinging on privacy.

- **eGovernance** – In respect of Army, this would imply providing administrative services in e-format.This is one area where Army needs to work a lot. Our services,for example in Cantonments, are still paper based with large lead times. Army needs to make an eGovernance task force to steer this on a fast track basis. Another aspect which needs consideration is to provide all ranksaccess to their home station eGovernance portal from their place of posting.This will ease a large number of their problems.

- **e-Kranti** – With expectations on the rise ,eKranti is another area where the Army can make a difference for its personnel. Some areas of activity can be

  - **e-Education** – All training institutions can be interconnected and Digital based education can be provided. We can develop pilot projects on Massive Online Open Courses (MOOCs). Some work is already underway in this field.

  - **e-Healthcare** – Healthcare is an area which can have a revolutionary effect. Online medical records, Pan India exchange of patient information, online consultation etc are few of the many possibilities in improving health care access to all personnel.

  - **GIS** – Armed Forces can be part of the National GIS Mission Mode Project and use its facilities for GIS based decision making.

  - **Security** – Technology can be leveraged to improve security, something which is a necessity as far as Army is concerned. Cyber Security needs to be given the impetus required to safeguard us from Cyber Threats.

  - **Financial Inclusion** – We are aware that majority of our personnel are financially illiterate and have limited access to financial services. Financial inclusion will help personnel posted in field areas to easily transfer money and do a host of financial transactions without having to visit government offices/banking institutions.

- **Information for All** – The Army has already taken a number of measures to provide information to all ranks on both the Army Intranet and the internet. The Army can easily work towards providing more valuable information to all ranks.

- **Electronics Manufacturing** – Majority of the Indian Army weapon platforms are imported. Key components of these imports are electronics. The Army can contribute towards the aim of net zero import by 2020 by closely working with the industry to source electronics items from local manufacturers.

- **IT for Jobs**- While the aim of IT for jobs is make an IT ready workforce, Army also needs to train all personnel in the IT domain. It will help them being IT literate as well as make them industry ready when they leave the Army.

- **Early Harvest Programme** -The programme can be utilised by the Armed Forces as under

  - **Wi-Fi in all Universities** – For the Army, this can be implemented as Wi-Fi for all Training establishments. Wi-Fi access in Training establishments is feasible with fewer security issues.

  - **Secure email within Government** – The process of providing government emails has already commenced. Army can fast track this process to ensure that all authorised users are provided secure Government email, which in turn would become the primary mode of communication outside of the Army Intranet. It will enable official communications to move away from Gmail, Yahoo Mail etc

  - **Standardised Government email Design** – As is being done by the government, we will also have to design our email design templates as per our requirements .While such templates are already functional in the Army intranet, templates where mail has to be sent by internet needs to be worked out.

As brought out above, it is highly feasible to implement the Digital India program within the Army. To play a lead and a contributory role in implementation and success of the Digital India program, the Army needs to build an ecosystem which takes the programme forward. While it will not be feasible to raise a new organisation to steer it forward, it is possible to nominate an establishment as the nodal agency for monitoring and progressing implementation of the program. Actual implementation responsibility can be given to different directorates/branches/commands as per tasks involved. It would also require the Army to co-opt other organisations like DRDO, other branches of government as required, sister services (Air Force and Navy) etc to efficiently implement this program. The canvas of Digital India in the Army is enormous. It only requires imagination and drive to make this an enormous facilitator for all ranks of the Army.

Security

In the overall gambit of implementing Digital India in the Army, the biggest concern would be security. Security is something which will remain paramount to the Army and it is here that some disconnect in its implementation may exist. In the civil arena, generally, implementation comes first and security follows based on security breaches, security alerts etc whereas in the Army, security precedes implementation of programmes. That is the reason that world over, the networks, communication systems, etc of the Army are a generation behind the civil industry. On the positive side, there are a number of components of the Digital India program which can be easily implemented without any major security issue.

Digital India provides an opportunity for the Army to lead the effort in developing and integrating security in the Digital India infrastructure. Army, sister services, DRDO and other Research and Development agencies can get together to take this effort forward. This effort has to be in house as security cannot be outsourced.

Conclusion

Digital India is an umbrella program to provide efficient services to all citizens. Army can utilise this opportunity to make the program accessible to all ranks. Some organisations within the Army are already implementing few aspects of the Digital India. All the Army needs to do is to also create an umbrella organisation to efficiently implement this program and not let it remain in individual silos.