# Importance of Digital India in improving efficiency for delivery of services to clients of Indirect Tax Administration – Lessons learnt overseas for implementation in India.

### Prepared by

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This working paper is the outcome of research and studies in India, USA and Canada, where the group visited as part of the Mid-Career Training Program [Phase-V] of National Academy of Customs, Excise and Narcotics, Central Board of Excise & Customs (Ministry of Finance, India)

#### **Synopsis**

The Indirect Tax Administration has laid down Citizen's charter and built a system of delivery of various services in a time bound manner. The rapid incorporation of electronic processes have enabled the Administration to consolidate its e-governance initiatives, which promotes delivery of services in digital forms, besides other services which is facilitated by electronic platforms. The 'Digital India' program of the Government of India aims at rapid development of digital/electronic infrastructure, improving universal access through Information and Communication Technology and digital empowerment of citizens, which necessitates re-defining delivery of services to ensure clients' satisfaction and adapt to the new paradigm of collaborative digital platforms for participative governance and portability of entitlements through cloud. The Group framed a few research questions, namely, Extent of the use of digital delivery of service, areas and extent of digitization of their business processes, data warehousing and retrieval for delivery of service, status of IT Infrastructure, the way capacity building of human resources undertaken and the level of preparedness of stake holders/clients before undertaking study in USA and Canada. The Group, enriched by international exposure to emerging practices elsewhere, found limited answers to the questions and also observed that large number of digital services used by other tax administrations is already being implemented in India. However, the Group explored the possibilities of implementing in India two new

digital initiatives, namely, leveraging social networking media to enhance *participative* governance and use of Artificial Intelligence (AI) to create new service, which would improve voluntary tax compliance in the scheme of self-assessment and risk-based system assisted assessment and audit (oversight).

**Keywords:** Digital India, delivery of service, clients' satisfaction, indirect tax administration, Goods and Services Tax (GST), electronic fiscal devices [EFD], Information & Communication Technology [ICT], participative governance.

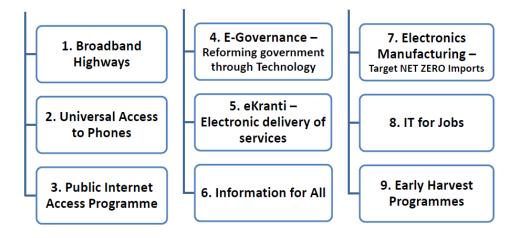
#### **Introduction:**

'Digital India' is a Government of India initiative<sup>1</sup> and is designed to transform India 1.1 into a digitally empowered society and knowledge economy. Its vision involves three elements: creating digital Infrastructure as a utility to every citizen, governance & services on demand and digital empowerment of citizens. Creating of digital infrastructure involves high speed internet as a core utility; cradle to grave digital identity -unique, lifelong, online, authenticable; mobile phone & Bank account enabling participation in digital & financial space; easy access to a Common Service Centre; shareable private space on a public cloud and safe and secure Cyber-space. In the area of governance & services on demand, the aim is to provide seamlessly integrated across departments or jurisdictions; making services available in real time from online &mobile platform; making all citizen entitlements to be available on the cloud; making services digitally transformed for improving Ease of Doing Business; making financial transactions electronic & cashless etc. The digital empowerment of citizens involve universal digital literacy; universally accessible digital resources; making all documents/ certificates to be available on cloud; ensuring availability of digital resources / services in Indian languages; collaborative digital platforms for participative governance and portability of all entitlements through cloud.

<sup>&</sup>lt;sup>1</sup> Source: http://deity.gov.in/sites/upload\_files/dit/files/Digital%20India.pdf – Department of Electronics and Information Technology (Government of India)

#### DIGITAL INDIA

# **Nine Pillars of Digital India**



The entire tax administration is required to adapt to the new digital paradigm 1.2 being created in the next 4 to 5 years, and the public 'digital need' is going to be of colossal magnitude. It is discernible that 'delivery of service' forms one of the central pillars of e-governance through 'Digital India' initiatives. When we refer to 'delivery of service' in the context of a tax administration, it means broadly the various enablers, through legal, procedural and technological structures and devices created to help the assesses and any person at global level, to know about the particular tax system including the obligations and responsibilities, documentation, aids for tax compliance, tracking benefits (like refunds), reaching concerned tax officials in special circumstances etc. The traditional way of delivery of service always rested on 'one-to-one interaction' with the tax officials, either by personal interviews or through letters by mail or submission in office, telex, telegram or fax etc. The traditional system, apart from being time consuming, heavily depended upon personal interface, which was highly subjective and depended upon the efficiency of particular officers. The technological or digital revolution (Information & Communication Technology [ICT]) has opened vistas for using electronic fiscal devices [EFD) as part of a comprehensive compliance improvement strategy by several tax administrations<sup>2</sup>. EFDs and EFD-related services are yet to be implemented in India. Further, the Digital India initiative has made it imperative for the

<sup>&</sup>lt;sup>2</sup> Peter Casey and Patricio Castro - IMF Working Paper, Fiscal Affairs Department: Electronic Fiscal Devises – An Empirical Study of their Impacts on Tax Payer Compliance and Administrative Efficiency- prepared by Peter Casey and Patricio Castro

Department of Revenue to augment capacities (infrastructure and human resource) to ensure digital delivery of services. The 'digital locker service' under 'Digital India' meant for storing documents has commenced with huge success and this will have definite relevance to digital service delivery by Indirect Tax Administration by way of its integration with the electronic platforms of the Indirect Tax Administration.

- 1.3 Indirect Tax administration (Union) in India comprises of Customs, Central Excise and Service Tax departments. The 'delivery of services' as such is not a new phenomenon for these departments. There is, however, marked difference in the nature of services required to be delivered by the Customs Administration as compared to nature of services required to be delivered by the Central Excise and Service Tax Administration, except a few. E-Kranti of Digital India envisages electronic delivery of services and it has been recognized that the indirect tax administration is actively rendering such services, which is a sub-set of e-governance (electronic fiscal devices by International Monetary Fund). Yet, in the changing digital paradigm in India and an aggressive digital policy, it is necessary to redefine the scope and mode of delivery of services, including electronic delivery of services.
- The super structure of the delivery of services by the Indirect Tax Administration is predicated upon two <u>core</u> objectives, which operate with contra-forces: (1) maximizing revenue and (2) voluntary tax compliance. A delicate balance is required between these two contra-directional gravitational forces. It involves facilitating trade and industry by removing administrative irritants and lowering the cost of compliance; providing simple and easy procedures and applying them uniformly; making notifications and procedures compatible with information technology; increasing reliance on self-declarations and voluntary compliance on the one hand and a tight leash on unscrupulous players so as to check any revenue leakage (enforcement) on the other. Besides these, there are microobjectives (to achieve the core objectives) also that the government would like to focus on for effective and efficient tax administration for bringing balance between the two competing core objectives, namely, reducing personal interface between the

<sup>3</sup> Peter Casey and Patricio Castro – IMF Working Paper - (same as cited earlier)

Department and the assesses; minimizing the areas of discretion; reducing response time; reducing paper work; ensuring transparent and time-bound decision making; ensuring timely and accurate accounting of revenue; improving information management to ensure proper support for policy planning and management; ensuring coordination with other agencies.

- 1.5 It is felt that digital deliveries of services are low cost, expeditious and transparent in nature. These are extremely helpful to the small and medium enterprises who cannot afford to have a contingent of consultants and lawyers to guide them for more accurate compliance of tax laws and procedure. Moreover, the online deliveries of services or online processes reduce transaction cost and enhance voluntary tax compliance for everybody. It also brings uniformity and certainty in tax collection process, which is *sine qua non* for any good tax administration.
- 1.6 On creating a timeline, it is noticed that there has been a continuous shift over time from strict 'control-based paradigm' and 'closed' tax administration to 'facilitation-based paradigm' and 'transparent and open' tax administration in India, like several other countries striving to make their respective tax system transparent and less intrusive, yet effective and efficient. The current deliverable by government in USA is termed as 'Open Government Initiative', which is essentially bringing in transparency through sharing of information on governance and providing information to public in usable format, which involves Open Data Policy, Innovation Gallery, use of social network media etc. This progression of the indirect tax administration in India has also be been recognized by the 'Digital India' framework.
- 1.7 The Citizen's Charter<sup>4</sup> and Mission Statement of the Central Board of Excise & Customs have laid down the minimum service benchmarks and standards, which are required to be achieved in realistic manner. The Mission Statement (which is part of Citizens' Charter) reads as under:

<sup>&</sup>lt;sup>4</sup> Citizens' Charter: http://www.cbec.gov.in/whoweare/ctzen-chtre.pdf

"Our Mission is to achieve excellence in the formulation and implementation of Customs, Central Excise and Service Tax laws and procedures aimed at:

- realizing the revenues in a fair, equitable, transparent and efficient manner
- administering the Government's economic, taxation and trade policies in a pragmatic manner
- facilitating trade and industry by streamlining and simplifying Customs,
  Central Excise and Service Tax processes and helping Indian business to
  enhance its competitiveness ensuring control on cross border movement of
  goods, services and intellectual property
- creating a climate for <u>voluntary compliance</u> by providing information and guidance
- combating revenue evasion, commercial frauds and social menace
- supplementing the efforts to ensure national security."

Thereafter, service delivery standards have been specified for the tax administration to adhere scrupulously.

- 1.8 The Result Framework Document Program (RFD)<sup>5</sup> has further laid down the time frames for different service to be rendered to the clients. It is a programme by Performance Management Division (PMD) of the Cabinet Secretariat of India. The RFD is an understanding between the Minister and the Secretary to the Department as to what are its key objectives for the next year, the actions that are proposed to achieve the objectives and the success indicators that are set to measure the progress.
- 1.9 Moreover, the flagship programme of the Government of India 'SEVOTTAM' mandates time bound response of the various formations from the Ministry to the cutting edge level tax administration.
- 1.10 The ensuing Goods and Services Tax (GST) presupposes a strong reliance on voluntary tax compliance, and thus also requires a robust digital backbone for tax

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<sup>&</sup>lt;sup>5</sup> http://dgicce.nic.in/dgicceRFD.html

administration and delivery of services to the clients, whose number is going to increase exponentially. The Customs administration is already functional with Electronic Data Inter-change (EDI) with several digital service delivery modules. This becomes more relevant for reduction in transaction cost envisioned in Bali Agreement of WTO for trade facilitation.

to rapid coverage of voice and data communication and web network and the importance of Digital India initiatives and programs, it would be essential to further improve the delivery mechanisms and to integrate the digital platforms involving Government to Business [G to B], Business to Business [B to B], Government to Consumers [G to C] and Business to Consumers [B to C] linkages, not only to improve service delivery mechanism but also to make the tax system efficient and effective. Our posterity who will be living in mega cities, *smart cities* and digitally connected rural areas would expect to conduct government business and process online and therefore, a robust infrastructure for 'secured' networking and delivery of services in the digital ecosystem will have to be conceived, designed, and implemented in the next few years, preferably within the mission target year 2019 set for Digital India program.

### Indian Context – tracing the foot prints

2.1 The essence of digitization and adaptation to the changing mode of communication and network was understood long ago and over a period of time, the Central Excise processes have been re-engineered to simplify them with an objective to boost voluntary tax compliance. It had a positive spin off in the form of IT solutions to various processes, allowing people the web-based access to tax payer services. However, the current level of digital delivery of services is wanting on adequacy standards. The Tax Administrative Reforms Commission [TARC] points out that there is a significant gap between tax payers' expectations and the reality of the current ICT implementation. Broadly, the tax payer's expectation from an ICT perspective is a single point web interface which (i) provides information and knowledge about law, procedures,

clarifications and organization; (ii) furnishes a step-by-step guide on procedures, help and guidance on tax compliance, which includes determination of tax liability, exemption benefits available, if any, and matters related to dispute resolution; (iii) facilitates automation of tax operations such as registration, filing of returns, payments and refunds, tracking the status of assessments, disputes, documents submitted and discharge of tax liability, arrears etc.; and (iv) offers integrated services across multiple regulatory authorities. Nonetheless, it cannot be ruled out that an attempt in the directions to bridge the gap has been made in both Central Excise & Service Tax Administration and Customs Tax Administration, though more is required to be done.

- 2.2 The TARC has recognized that there exist taxpayer services which are delivered by providing information (passive service) and through interactive services (active service). Channels for providing information are:
  - i. Websites
  - ii. Call Centers
  - iii. Publications
  - iv. Public circulars issued by the departments
  - v. Advertisements
  - vi. Interactive Voice Response System (IVRS)
  - vii. Outreach programmes
- Currently there are several IT based processes under central excise and service tax 2.3 such as:
  - o Registration
  - Self-assessment and e-payment of duty & online status checking
  - o Filing of Return online
  - o Filing of refund/rebate claims online
  - o Payment of refund/rebate online

- Issue of show cause notice, hearing notices and adjudication (not fully operational) and online replies
- o Electronic filing of claims, permissions, intimations and processing thereof
- Instant e-acknowledgement of documents with document identification number
- Viewing, filing and tracking the status of documents online
- o Online filing of application for provisional assessment

These services are delivered through IT Modules such as ACES (Automated Central Excise and Service Tax System), EASIEST etc.

- 2.4 Similarly, the Customs processes involving interactions with clients were brought onto IT platforms called ICEGATE and ICES, namely, -
  - Filing of Manifest (Import/Export)
  - Filing of Bill of Entry/ Shipping Bill- ICEGATE
  - System based assessment (RMS based) Best e-governance award of Prime Minister
  - Centralized bond management system, enabling traders to file a bond at one location and effect clearance of import/export goods through another
  - License verification on line
  - E-Payment of duty
  - o Payment of Drawback online
  - o AEO Scheme
  - o Round the clock helpdesk with toll-free number
  - Automated recording and targeting system (ARTS) for protection of intellectual property rights (IPR)
  - Accredited clients programme (ACP) under which trusted importers are extended the facility of fast track custom clearance
- 2.5 Besides, there are other digital initiatives for providing services to the clients and others, namely, a fully operational website of CBEC www.cbec.gov.in having information on all important Statutes, Rules and Regulations, Instructions etc. It also provides links to

e-auction platform, RTI, CPGRAM, ICEGATE, ACES etc. In February, 2015, the Central Board of Excise & Customs has published *Data Sharing Policy*, which is another milestone in the delivery of service through digital plaform. The data available with the government is delivered to any person for research and commercial purposes. The policy lays down the conditions for sharing and nature of data/information that can be shared, taking into account the security and privacy factors.

- There is, however, very limited 'interactive' component of taxpayer services. It is noticed that the CBEC launched an *e-helpline* facility from October 1, 2012, at Zonal level for clarifying the doubts of trade and industry, to provide help to taxpayers on issues relating procedural delays and in addressing system related problems, including in the ACES and ICES. However, there is no feedback on its efficacy and impact on taxpayers. The TARC, in its First Report has comprehensively covered different taxpayer services after examining the global best practices, this group has focused primarily on the delivery of taxpayer's services through digital media. The Group, therefore, focused on the following <u>research questions</u> framed by it to have an incisive view of the various global practices which were expected to be discussed during the international training module:
  - The use of digital delivery of service types and extent
  - Areas and extent of digitization of their business processes
  - Data warehousing and retrieval for delivery of service
  - IT Infrastructure
  - Human resources and capacity building
  - Readiness of stake holders/clients to use services
  - Extent of outsourcing
  - Any Pilot Project

# International Perspective and Best Practices [Experience in USA and Canada] and Lessons learnt

3.1 Dr Ignes Mergel of Maxwell School provided an insight to the e-governance and e-government in USA and the 'Open Government Initiatives' at the behest of the Mr. Barack

Obama, President of USA who stated "I want us to ask ourselves every day, how are we using technology to make a real difference in people's lives". To achieve this, the government attracted best talents to form a kind of SWAT Teams to provide best digital platform. These talented people, earning heftily in private sector, were hired on short term contracts, who agreed to work on moderate remuneration as they were driven by the pride of 'doing something for the nation'. There was also crowd sourcing which uses 'distributed intelligence' for open innovation for using technology for different purposes, including delivery of services. The work not only involved creating digital structure, but also focused on content, data use, and most importantly, preparing people to use the information and data. The restructuring history of Internal Revenue Service in USA in 1994 underscored 'client service and satisfaction' to encourage voluntary tax compliance and improving the image of IRS.

3.2 Social network media is a potent tool for using distributed intelligence even to redesign the service delivery platforms and processes in a new paradigm which is driven bottom-upward unlike the present designs which are based on top-down policies framed by a few, often riddled with irritants. Government being the sole service provider in the tax administration field, suffers for a typical monopoly syndrome of 'take-it-or-leave it', which does not really promote a 'service with high degree of satisfaction', a syndrome from which the present tax administrations trying to extricate itself. Conceptually, 'distributed intelligence' comprises of integration of individual creativity with social creativity. An individual creativity cannot be isolated from the social milieu of an individual. Gerhad Fischer, in is paper<sup>7</sup> 'Creativity and Distributed Intelligence' has emphasized that "distances and diversity should not be considered as constraints to deal with but as opportunity to generate new ideas, new insights, and new environments [National-Research-Council, 2003]. The challenge is often not to reduce heterogeneity and specialization, but to support it, manage it, and integrate it by finding ways to build bridges between local knowledge sources and by exploiting conceptual collisions and breakdowns as sources for innovation. Social creativity can be distributed (1) spatially (across physical distance), (2) temporally (across time), and (3) conceptually (across

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<sup>&</sup>lt;sup>7</sup> NSF Workshop Report Creativity Support Tools available at http://www.cs.umd.edu/hcil/CST

different communities), and (4) technologically (between persons and artifacts) [Fischer, 2005]. This distributed fabric of interactions can be supported by integrating diversity, making all voices heard, increasing the back-talk of the situation, and providing systems that are open and transparent, so that people can be aware of and access each other's work, relate it to their own work, transcend the information given, and contribute the results back to the community (as illustrated by the "collect / relate / create / donate" model [Shneiderman, 2002])." This brings us to the framework of creativity, of which meta-design is important for our understanding of the use of social media in designing policy for service delivery system by indirect tax administration. Gerhad explains that meta-design<sup>8</sup> [Fischer et al., 2004] characterizes objectives, techniques, and processes to allow users to act as designers and be creative. The need for meta-design is founded on the observation that creativity requires open systems that users can modify and evolve. Because problems cannot be completely anticipated at design time when a system is developed, users at use time will discover mismatches between their problems and the support that a system provides. These mismatches (perceived as breakdowns and conceptual collisions) serve as potential sources for new insights, new knowledge, and new understanding. Meta-design advocates a shift in focus from finished products or complete solutions to conditions, contexts, and tools for users that allow them to be creative in further evolving artifacts and organizations [Hippel, 2005]. Meta-design supports informed participation in which participants from all walks of life (not just skilled computer professionals) transcend beyond the information given to incrementally acquire ownership in problems and to contribute actively to their solutions. It addresses the challenges associated with open-ended and multidisciplinary problems. Meta-design requires active contributors (people acting as designers in personally meaningful activities), not just consumers<sup>10</sup> [Fischer, 2002]. Creativity needs the "synergy of many", and this kind of synergy is facilitated by meta-design. However, a tension exists between creativity and organization. A defining characteristic of social creativity is that it transcends individual creativity and thus requires some form of organization; but

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<sup>&</sup>lt;sup>8</sup> Fischer, G., Giaccardi, E., Ye, Y., Sutcliffe, A. G., & Mehandjiev, N. (2004) "Meta-Design: A Manifesto for End-User Development," Communications of the ACM, 47(9), pp. 33-37.

<sup>&</sup>lt;sup>9</sup> Hippel, E. v. (2005) Democratizing Innovation, MIT Press, Cambridge, MA.

<sup>&</sup>lt;sup>10</sup> Fischer, G. (2002) Beyond 'Couch Potatoes': From Consumers to Designers and Active Contributors, in FirstMonday (Peer-Reviewed Journal on the Internet), Available at http://firstmonday.org/issues/issue7 12/fischer/.

elements of organization can and frequently do stifle creativity<sup>11</sup> [Florida, 2002]. With this insight into the power and positive aspects of social network media, which is creating a new paradigm in the digital India, it is relevant to explore whether other countries are harnessing this new opportunity, how are they doing it, to what extent they are using it, and with what precautions?

- 3.3 A significant international practice observed by the Group is leveraging social media for digital delivery of services by public authorities, which can also be effectively used in indirect tax administration. It was explained to us that Government employment of social media offers several key opportunities for the technology (Bertot, Jaeger, Munson, & Glaisyer, 2010<sup>12</sup>):
  - Democratic participation and engagement, using social media technologies to engage the public in government fostering participatory dialogue and providing a voice in discussions of policy development and implementation.
  - Co-production, in which governments and the public jointly develop, design, and deliver government services to improve service quality, delivery, and responsiveness.
  - Crowd-sourcing solutions and innovations, seeking innovation through public knowledge and talent to develop innovative solutions to large-scale societal issues. To facilitate crowd-sourcing, the government shares data and other inputs so that the public has a foundational base on which to innovate.
- 3.4 The use of social media was also a subject of discussion by TARC in India, where they have pointed out international practices about its use by government. In its first report, TARC has observed: "Among the more advanced tax administration, the UK HRMC, for example, engages online with stakeholders on a continuous basis, and seeks feedback on its services. HMRC communications are multi-lingual, direct and clear and use social media technology (SMT) through channels such as YouTube, Twitter, etc. It has already moved to 'tax apps' in sync with the latest technology trend of SMAC (social

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<sup>&</sup>lt;sup>11</sup> Florida, R. (2002) The Rise of the Creative Class and How It's Transforming Work, Leisure, Community and Everyday Life, Basic Books, New York, NY.

<sup>&</sup>lt;sup>12</sup> John Carlo Bertot, Paul T. Jaeger, Sean Munson, Tom Glaisyer, "Social Media Technology and Government Transparency", Computer, vol.43, no. 11, pp. 53-59, November 2010.

media, mobiles, applications and cloud). UK HMRC also handles 70 million calls annually in its call centres. ATO (Australian Tax Office) also often uses social media such as Twitter, Facebook, and YouTube to provide information about tax, respond to enquiries and direct people to relevant information on the website. Australia is also considering the implementation of universal routing, click to call, web chat, VOIP, screen capture, etc. Universal routing would enable the delivery of taxpayer initiated inbound activities, regardless of the channel. ATO has put in place a seamless 'one-stop-shop' of digital services in alignment with the whole-of-government approach to allow taxpayers access to government services and to receive secure electronic communications from multiple agencies in one place. ATO has also developed a small business interactive tool to provide simple online access to information and short videos especially for small business operators."<sup>13</sup>

3.5 Ignes Mergel at Maxwell School discussed and elaborated her Working Paper "Advancing Open Government with New Technologies: Leveraging Social Media and Government Websites for the IRS" and highlighted that social media applications have become newest wave of e-government and are making government websites more interactive and engaging. Tools such as Facebook, Twitter, blogs, and photo-sharing and video-sharing sites have become accepted communication channels in the public sector. 14 We came to know that by adding sharing button to the official websites, the government is allowing two-way interaction on real time basis, which appears a useful tool for improving voluntary tax compliance. There has been, however, no specific instance of successful use of this tool for digital service delivery by any specific state of Federal tax authorities, though its extensive use by other public authorities as a new form of communication between government and the people has been noticed. The use is, however, required to be governed by a strong policy guidelines and constant adjustments in a reactive mode on account of delicate privacy and security issues and also the fact that the private social networking sites rapidly change their technological features. Use of social media is in its early stages. The following basic questions need to

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<sup>&</sup>lt;sup>13</sup> TARC First Report, Page 395

<sup>&</sup>lt;sup>14</sup> Ignes "Designing a Social Media Strategy to Fulfill Your Agency;s Mission' published in www.thepublicmanager.org.

be answered before adopting social media as delivery mode for taxpayer services (Ignes, 2013):

- (i) Why should an agency use social media outside its existing IT infrastructure?
- (ii) Who is local or global audience?
- (iii) How does use of social media support the agency's mission?
- (iv) Who should be responsible to provide and verify content on a daily basis?
- (v) What are the policies and rules that guide the agency's online interaction?
- (vi) What is acceptable citizen's behavior on government run social media account?
- (vii) Who is responsible for content accuracy and corrections when invoking public discussion online?
- (viii) How can agency measure the impact of their online engagement and justify the resources needed to support social media activities with constricting budgets?
- 3.6 The fact is that many public agencies in USA are using online social networking services for service delivery and to achieve other objectives of their mission. However, best practices of use of online social networking in tax administration in not available. Apparently, the tax administration is on upward the learning curve for efficacious use of this potent tool to improve the service delivery mechanism. The Group strongly recommends that its feasibility with suitable policy driven parameters and standard operating procedures should be explored.
- 3.7 Another best practice identified by the Group relates to use of Artificial Intelligence for enabling clients (the people) who require to know correct HS classification of goods for correct payment of duties and taxes. The article of Holm Kappler<sup>15</sup> gives the case study of Zambia Revenue Agency [ZRA] for which classification tool based on AI was developed by a Canadain company 3CE. This is different from key word search method, often adopted by various digital solutions. The keyword-based search tool function indiscriminately for exact or partial term matches without regards for context or hierarchical structure, and normally presents a long list of potential, mostly

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<sup>&</sup>lt;sup>15</sup>Holm Kapler, Reversing the Trend: Low Cost and Low Risk Methods for Assuring Proper Duty Payment, World Customs Journal, Volume 5, Number 2

irrelevant and often erroneous HS classification candidates.<sup>16</sup> Such searches also do not apply the Interpretative Rules of Classification. The 3CE Solution with Artificial Intelligence, surmounts these deficiencies and give 90% accurate HS classification based on complete description of the goods. It is noticed that while government's risk assessment module (Risk Management System of Indian Customs) may flag a classification issue, it cannot determine classification based on description because it does not use Artificial Intelligence. Moreover, it is not readily available to the people to whom the onus of 'self-assessment' has been fastened. The facility for classification (HS Code) using digital platform created by the government is a new area where the indirect tax administration can render service to improve voluntary tax compliance and generate revenue (reduce the tax gap).

- The study and interaction with academicians and tax-officials in USA and Canada revealed that they are extensively using other digital taxpayer services like online registration, refunds, dissemination of information, document filing etc. As explained earlier, Indirect Tax Administration has developed a robust digital network and service delivery platforms to allow the assesses and people at large to use the facilities for tax compliance purposes and also to gather information. However, the Group feels that the quality of service can be improved by close interaction with the users through feedback mechanism. Further, there can be improvement in dissemination of information by adopting alternative methods. Hence, the Group considered it relevant to focus on the aforesaid two major possible initiatives, which may have significant impact on improving the digital delivery of services by the Indian indirect tax administration.
- 3.9 Another relevant point is that there has been a shift in focus from 'customer service' to 'customer satisfaction'. This means that there is extensive use of the digital (ICT) media to receive feedback on specified areas so as to bring about qualitative changes in the administration to enhance customer satisfaction on the lines private sector institutions operate. Certain services are subjected to public discussion on the social media sites to elicit true reactions, which gives a genuine feedback to the

<sup>&</sup>lt;sup>16</sup> Holms Kapler, (Page 115)

administration to know the efficacy of their service delivery and to take any corrective measures if any anomaly or difficulties are noticed which are indicative of lower customer satisfaction. The objective of customer satisfaction can be achieved by harnessing and synergizing 'distributed intelligence', local and global, and improving the tax related service delivery by leveraging social networking media. This two way flow of information also leads to 'co-operative compliance', a new variant of voluntary compliance, where the tax administration pro-actively associates with the assesses, with bouquet of services to offer, to assist them to comply with tax laws and processes. Thus, unintended non-compliance and litigation can be avoided.

#### Recommendations

- (1) The entire package of 'delivery of service' by Indian indirect tax administration requires revamping considering rapid enhancement of digital access and the ever increasing 'digital needs' of the people of India, which is imminent on account of Digital India initiative.
- (2) We should leverage various popular private social media like Facebook, Twitter and other India based social media sites to educate people on tax matters and engage them in 'issue-based' discussions so as to harness 'distributed intelligence'.
- (3) A new organization be created within Central Board of Excise & Customs dedicated to 'Delivery of Service' to people, and within this organization, a dedicated sub-institution be created dedicated to 'digital delivery of services and use of social media' to achieve 'cooperative compliance'.
- (4) Formulate and announce a Mission Statement for use of social media specifying the scope and objectives may be issued.
- (5) Formulate and notify a Policy regarding use of Digital Media be formulated which should cover various pertinent aspects be covered: especially, defining and classifying the users, specifying organization/officers responsible to provide and verify content on a daily basis and to ensure accuracy, the policies and rules to guide the officers on online interaction, lay down the acceptable citizen's behavior on government run social media account, specifying a set-up responsible

for content accuracy and corrections when invoking public discussion online, system of measuring the impact of online engagement on various issues and justify the resources needed to support social media activities with constricting budgets.

- (6) We may also explore the possibility of a interactive digital media platform driven by 'Apps' of the Indirect Tax Administration to generate public discussion on policy and processes, elicit people's responses and feedbacks on schemes, feedback of functions of any formation etc.
- (7) Prepare special interactive programs for Small & Medium Sector to guide them through various processes, enable them to meet their obligations and improve voluntary compliance;
- (8) The CBEC website should be completely re-designed with 'human touch' on the front screen instead of a information-laden Home screen making it more welcoming and interactive. There should be enhanced use of 'SHARE' buttons to guide users to social media site and interactive information pages. The website should also have interactive 'data-mining' and 'information-sharing' facilities, subject to the 'Information Sharing Policy', to encourage tax related research and meaningful intellectual contribution of the public at large.
- (9) We must ensure development of 'HS Classification Tool' using artificial intelligence and make it available to public for free, and integration of this tool with compliance verification mechanism used by the officers so as to ensure uniformity.

# **Implementation & Challenges**

5.1 The Central Board of Excise and Customs may bring out a white paper and invite suggestions for drafting Social Media Interactive Usage Policy incorporating all the points referred to in Para 3.5 above suggested by Ignes Mergel and any other point as may be relevant, keeping in mind a flip side of social media usage, such as deviated discussions, unintended interpretations of any comments from government etc. The most important challenge would be having a website with passive information (to educate and inform people) and active information (share buttons leading to interactive sites), a robust data-

warehouse with strong data mining tools, maintaining accuracy of information of interactive websites, capacity building of the officers who will be interacting with people, crisis management in case of any spin off on account of social network reactions, content planning to elicit public response, education contents to assist people to use other 'service delivery' platforms, digital or otherwise etc.

- For artificial intelligence (AI) based HS Classification Software, a comprehensive 5.2 research and project will have to be launched by attracting best talents in the country to develop algorithms based on rules of classification and a detailed data base for use by the said software, including web-search engines of various products to fetch product information for the relevant industry, technical literature, scientific dictionaries and knowledge banks, encyclopedias etc. It would also be fruitful to assess the performance of 3CE Software developed for Zambian Revenue Authority. Even if software of 3CE is copyrighted, the Indian Customs can always develop its completely own software without using any platform or algorithm of 3CE. The in-house expertise can be used for technical inputs and talents having expertise in AI from private sector can be used to develop the software. Attracting such talent would be a major challenge. The project would also entail heavy development cost and hardware to host complex software, which would have to be assessed and necessary budget will have to be provided. The entire project would be very challenging but worth doing it so as to give fillip to voluntary tax compliance through this digital service by the government. This can be a flagship project for the world from 'Digital India'.
- 5.3 The Group recommends that the aforesaid recommendations must be developed further and be incorporated in the 'Digital India' initiative so as to integrate such service delivery platforms with other departments and agencies.

#### Conclusion

The 'Digital India' project of the government of India is creating a new paradigm, under which more innovative ways of delivery of services in digital environment is conceived, focused not only delivery of service but 'customer satisfaction'. The social network media

can be effectively used not only for delivery of service but to garner feedbacks to generate synergy, improving service delivery to achieve 'high level of satisfaction'. The same platform can also be used for 'crowd-sourcing' of innovative ideas. The use of 'artificial intelligence' to offer a new service on classification in customs and central excise would make a huge positive impact on augmenting voluntary compliance by the assesses. It would also remove uncertainty for the business, and thus ameliorating 'ease of doing businesses' in India.

## Bibliography

Berot, J.C. Jaeger, P.T. & Hansen, D. (2011). The impact of policies on government social media usage Issues, challenges, and recommendations: Government Information Quarterly.

Citizens' Charter: http://www.cbec.gov.in/whoweare/ctzen-chtre.pdf

Christensen, C.M. & Overdorf, M. (2000). Meeting the challenge of disruptive change

Fischer, G., Giaccardi, E., Ye, Y., Sutcliffe, A. G., & Mehandjiev, N. (2004) "Meta-Design: A Manifesto for End-User Development," Communications of the ACM, 47(9), pp. 33-37.

Fischer, G. (2002) Beyond 'Couch Potatoes': From Consumers to Designers and Active Contributors, in FirstMonday (Peer-Reviewed Journal on the Internet), available at http://firstmonday.org/issues/issue7 12/fischer/.

Fischer, Gerhard, NSF Workshop Report Creativity Support Tools available at http://www.cs.umd.edu/hcil/CST

Hippel, E. v. (2005) Democratizing Innovation, MIT Press, Cambridge, MA.

Holm Kapler, Reversing the Trend: Low Cost and Low Risk Methods for Assuring Proper Duty Payment, World Customs Journal, Volume 5, Number 2

Ignes "Designing a Social Media Strategy to Fulfill Your Agency;s Mission' published in www.thepublicmanager.org

John Carlo Bertot, Paul T. Jaeger, Sean Munson, Tom Glaisyer, "Social Media Technology and Government Transparency", Computer, vol.43, no. 11, pp. 53-59, November 2010.

J.E. Relly and M. Sabharwal, "Perceptions of Transparency of Government Policymaking: A Cross-National Study," Government Information Quarterly, vol. 26, no. 2, 2009, pp. 148-157.

Result Framework Document Program of CBEC: http://dgicce.nic.in/dgicceRFD.html

Tax Administration Reform in India- Spirit, Purpose and Empowerment (First report) by Tax Administration Reform Commission (2014)