



### Policy and regulatory cluster of challenges

- Absence of Interoperability in International services As compared to Couriers and Global Integrators.
- Universal service obligation
- Regulatory restrictions to introduce new services (e.g., postal banking, postal insurance, international commerce, foreign exchange, and mobile banking).
- Lack of coordination among policy makers and regulators Concerning postal services (e.g., postal, banking, Commerce, finance, transport, IT & Telecom).

A set of challenges more close to my heart is that of the IT infrastructure in place in most Asian posts:

### Postal IT network cluster challenges

- Outdated equipment and databases
- Lack of integration of IT Infrastructure in posts
- Lack of data analytics, systems, and procedures
- Lack of IT security policy- proliferation of frauds
- Absence of inter-operability between Domestic and International (UPU) software
- Poor broadband connectivity in remote areas
- Broadband infrastructure connecting postal system
- Lack of modern devices at point of sale/last mile.

## Keeping Up with Technology!



There are also a number of financial and investment-related challenges, certain constraints in the brand image and marketing approach of the posts, issues in the management of infrastructure, decision-making, and supply chain management within the posts. Last, the wider environmental challenges and competition that the posts face.

And of course, there's always the rapid digitization of communications and the related fundamental change in customer behavior on the one hand and the growing competition in all markets including nontraditional competitors (e.g., crowd source delivery, UBER style delivery, using click and collect solutions at their outlets). Oh dear! The Horizons look quite dark don't they? Well, all these challenges have been with us for decades and the posts have adapted and coped (suffering in the process) but the fact remains that this time round, technology selection, and focusing on the strengths can and will make the job of meeting the challenges a little more organized, if not easier.

Posts need to look at each challenge and see to what extent that challenge actually impedes the achievement of the stated goal so for example to what extent, if any, does low level of customer orientation or IT skills impact enhanced revenue growth or high-quality service? Once this kind of mapping is done, one can identify the most critical challenges. The next step is to see how technological intervention can help in mitigating the impact of the challenge or removing the challenge so that the goals can be achieved.

### E-services success stories

The posts worldwide have made significant progress in inducting technology and introducing e-services to improve their performance and strengthen their position. The success or failure of these initiatives has depended on a mix of factors ranging from planning, budgeting, marketing, piloting, implementation, technology selection and good

fortune. In most cases, success has occurred only when all the aspects were properly attended to within a reasonable timeframe.

Over the past 2 decades, the posts in Asia Pacific have successfully rolled out the following services:

- Track and trace services for mail products
- Websites with information of services and tariffs
- Online customer service and grievance redressal
- Hybrid mail
- Online bill payment
- Electronic money orders
- Online Philately and postal products shoppes [1].



A large number of these services have also been made available through mobile APPs. Most of the services were designed around core existing services of the posts and have been very successful.

### Not-so-successful stories

A number of well-meaning innovations in e-services could not catch the public eye or were not suited to the times in the Asian region. These were:

- Digital postage
- Electronic mail box (Macau China is an exception)
- Online shopping portal (starts with a bang and then goes kaput!)
- Digital certification authority
- E-cards
- E-health
- E-administration

### FUTURE DIGITAL LANDSCAPE

#### Big data and the posts

We are increasingly aware of the importance of data mining and data analytics for businesses for predicting trends and business scenarios. The posts are very large sources of data either directly or indirectly. Capturing meta data from postal transactions, complaints, social media, and online shopping can greatly enhance the customer profiling that is done by the posts. This is a necessary tool for marketing and customer care and overall improvement of quality and efficiency. Wow! Sounds so promising! The post should have actually entered data warehousing long ago in a big way. Anyway as of now, the steps which can be taken now are (a) invest in a suitable data infrastructure technology, (b) data base management itself requires the data which needs to be captured which hitherto was ignored, (c) fraud detection and smuggling and illegal activity detection solutions must form part of the data infrastructure. New algorithms can greatly enhance the fraud detection capabilities of the posts, who are important financial institutions.

An offshoot from the area of big data is the internet of postal things where the posts, through its wide infrastructure can be a source of important data for climate sciences, city planners, and predictive modeling for a number of government agencies [6].

#### LTE (A) to 5G telecom evolution

The international telecommunications union's study report on access technology for broadband telecommunications (2014) has projected that by 2020 the Speed of Gigabits per second will allow smart Homes, offices, and indeed cities to work in a very connected "Internet of Everything"

model. The post office infrastructure and working style will have to prepare for this scenario. Some physical and human infrastructure are always required for e-health and e-governance activities and this can be offered by the post office in Urban and rural areas.

#### Logistics rests on an IT backbone

Dr. Christoph Beumer, chairman and CEO of the Beumer Group, in his article on "Intra logistics" in Postal Technology International (June 2016 edition) has summarized beautifully the basic pre-requisites for logistics providers in the near future, he simply says "We must plan processes with the future in mind and devise safe and reliable technical systems. This will mean more and more processors, user controls, software, and control units. "All of these elements must be integrated into a harmonious, ergonomic, efficient and user-friendly system that can handle the gigantic quantities of data [5]."

#### Postal E-services that have a potential for success

My studies have shown that the following e-services do have a substantial potential for adoption by customers.

- (i) Parcel lockers which are smart enough to communicate with customers and the post office network, either self-owned or shared
- (ii) Integrated logistics solution - either self-owned or shared with other service providers
- (iii) Online shipping and mailing tools for at home preparation of printed stickers and posting or collection by the post office staff
- (iv) Prepaid card service that is multipurpose for all transactions and is a certificate of identity
- (v) Online customs declaration for business and retail mailers
- (vi) Integration of postal web services with e-commerce merchant websites
- (vii) Online management of mail item delivery options for customers
- (viii) Online money remittance services for cash payment to the payee
- (ix) Mobile-based packet and document pick-up service
- (x) Performance reports and analytics for business customers especially e-commerce vendors.

In terms of priorities - Modernizing the postal infrastructure and putting in place a next generation IT system which will have centralized or cloud-based processing environment are the most significant pre-requisites for all posts. What constitutes a "next generation IT infrastructure" requires some crystal ball gazing, with a set of consultants and experts who are free from conflict of interest. Basically, all technology should have scope for building up and out as and when required. E-services technology should be selected on the basis of whether it can bring about a desirable outcome. There are some basic questions we have to answer in the selection of a service or technology.

#### CONCLUSIVE FINDINGS - KEY QUESTIONS BEFORE SELECTING TECHNOLOGY OR SERVICE OFFERING

1. Can the service or technology bring about significant improvement in access and outreach of Postal Services? Only a solution which allows services to be universally accessible, i.e., 99% of the country's population
2. Enhanced partnerships: Improved interoperability through the technology among national and international stakeholders and partners
3. Can our posts offer new and innovative services including e-government services through the postal network utilizing this technology? Of course in this case, our solution will have to integrate with the e-government solution fully
4. Is our solution going to bring better access to real-time information for decision-making including monitoring and evaluation?
5. 360° view-is the technology solution giving us an improved transparency accountability and security?
6. Is the solution or service resulting in reduced cost of operations and streamlined processes to reduce operation time? (can be measurable)
7. Does the ICT intervention bring improved work environment, enhanced human capability, and staff satisfaction level?
8. Can the ICT give us enhanced access to markets?

#### CONCLUSION

Selection of appropriate technologies also needs to consider the changing digital landscape, which is witnessing some major transformation that will shape how organizations function in the coming years.

Asian posts are increasingly accounting for greater share in the global postal business. The next generation technologies will help introduce e-services in a cost-effective manner and may help improve the competitive advantage for posts who are quick to adopt them. Serious thought is being given to this subject by the posts in the region. The results will surely be noteworthy!

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