Digital revolution
Transforming the post office into a vehicle for delivering ICT services to people

Post offices, more than any other institutions, are in effect the outposts of government in rural and remote areas. In most countries, however, the traditional mail business of the public postal operators is under pressure, buffeted both by competition from private operators and by alternative and faster means of communications. Postal operators are consequently searching for new business opportunities, particularly in finance and logistics. Product and service diversification is the key to their future, and information and communication technologies (ICT) play an important role in this process.

A new book entitled “ICTs, New Services and the Transformation of the Post”, launched by ITU and the Universal Postal Union (UPU) during the World Telecommunication Development Conference (WTDC-10) in Hyderabad, India, presents the experience of seven postal enterprises in adopting ICT. The studies were carried out in countries at various stages of economic development. And the projects implemented vary considerably in the technology used and the services offered. The projects include:

- using post offices to deliver integrated communication services in rural areas in Bhutan and Botswana;

This article is based on the book “ICTs, New Services and Transformation of the Post”, prepared by the Telecommunication Network Development Division of ITU’s Telecommunication Development Bureau and the UPU-International Bureau’s Executive Office. The book was released at the World Telecommunication Development Conference 2010 (WTDC-10) in Hyderabad, India.
ICT Success stories

What is more, the impact of ICT use by Posts is not confined to the postal sector but has a cascading effect on societies and the economy. Besides contributing to more inclusive economic growth and more responsive governance, the projects have also encouraged the growth of e-commerce and mobile commerce, as highlighted in the examples below.

Bhutan

ITU, the Universal Postal Union (UPU) and the Government of India initiated a project with the Royal Government of Bhutan, Bhutan Telecom and Bhutan Post as in-country partners to connect isolated communities. As part of the project, 38 telekiosks were set up in post offices throughout Bhutan to provide access to information and communication facilities, particularly for hitherto deprived communities in rural and remote areas. Six of the telekiosk locations had no telecommunication connections or even electricity before the project. Telecommunication connectivity was provided by solar-powered very small aperture terminal (VSAT) stations linked to India’s communications satellite, INSAT.

The villages near the six remote VSAT locations had previously been isolated from other parts of the country. Mail took five to seven days to reach residents, and the nearest telephone connection was two to seven days away on foot. Thanks to the project, the villages now have access to telephones, fax, Internet and e-post. Their lives have changed dramatically. In the other 32 locations, the telekiosks gave people Internet access and services for the first time (see article on pages 22–25).

- innovative mobile banking and commerce by Italy’s PosteMobile;
- basic banking services provided through Brazil Post’s retail network;
- Saudi Arabia’s delivery service, making use of an innovative electronic address system;
- Internet-based e-post office shopping in the Republic of Korea;
- ICT-based postal services as part of a multi-sector plan to usher in the information society in the Russian Federation.

UPU has always maintained that the convergence of the Post’s physical, electronic and financial network would give the postal sector a competitive edge. The book supports this claim. The case studies reveal that, while success is rooted in the inherent strengths of the postal enterprises, ICT-based projects have, in turn, enriched these enterprises, enabling them to improve the quality of their services and introduce new value-added services.
Botswana

In the urban areas of Botswana, access to ICT for people without computers or Internet connections at home is provided mainly by privately operated Internet cafés. Rural and remote areas have generally lacked such access because of private operators’ concerns about financial viability.

Botswana has one of the lowest population densities in the world. Delivering any type of universal service to such a sparse and widespread population presents enormous challenges to the government. And delivering ICT services where electricity and Internet connectivity are intermittent is even more challenging.

Vision 2016

In 2016, Botswana will celebrate its 50th anniversary of independence. The Botswana Vision 2016 is the government’s strategy to transform the country into a competitive and prosperous nation. The strategy is based on seven pillars, as shown in the diagram below.

Kitsong centres

Kitsong (knowledge) centres, offering access to information and communication facilities, are the means by which the Government of Botswana is narrowing the digital divide between urban and rural communities. Botswana Post, with its country-wide network of 192 postal facilities, was the natural choice to provide such centres. The government and Botswana Post have already installed 49 Kitsong centres, with five more to open in 2010.

Besides Internet access, Kitsong centres offer fax, photocopying, desktop publishing, printing and digital photography services. They also provide local content, such as agricultural information.

The number of people using Kitsong centres is growing, and the income of post offices with Kitsong facilities has increased by an average of 25 per cent, reflecting the use of the new services. Clearly, if the number of customers is growing, there must be a perceived benefit to each individual using the centre. This may be for business reasons in obtaining information about markets, it may be for educational reasons with e-learning programmes, or it may simply be for social reasons, such as chatting or gaming.

The project has also led to greater computer literacy because these centres also provide training in the use of computers. The government is pleased with the results achieved so far, seeing these centres as helping to meet its national objectives and its commitment to the United Nations Millennium Development Goals.

Botswana Post has also benefited from hosting the Kitsong centres. Besides contributing to increased revenue, Kitsong facilities have “revitalized Botswana Post by providing an injection of new technology-based services”.

Brazil

The Banco Postal project of Empresa Brasileira de Correios e Telégrafos (ECT) uses its retail network to provide basic banking services to people without access to any formal financial institution. The project has shown that ICT and posts can be successfully combined to provide “win-win” scenarios, including improved efficiency, competitiveness and profitability (for posts), and increased utilization of and access to ICT.

Now, ECT maintains an interactive website that offers information and enables postal and financial transactions. ICT also allow ECT to provide e-commerce and e-government services. As one user put it, the integration of the physical, electronic and financial networks “has significantly enhanced the numerous nationwide services that are distributed through the ECT network”.

Serving the “unbanked”

When the Banco Postal project was launched in 2002, it was estimated that over 45 million adults in Brazil were “unbanked”. These individuals, together with many small and medium-sized enterprises, had limited access to credit. By 2009, the situation had improved significantly, with 6021 Banco Postal branches serving 8.8 million “unbanked” individuals. Over 1.2 million Banco Postal transactions are now made daily. More than 700 000 loans have been disbursed since 2002, and Banco Postal has become an important player in the microcredit market.

The incorporation of ICT and the establishment of the Banco Postal have enabled ECT to maintain profitability and strengthen its universal service. Some post offices that were losing money and in danger of being closed now continue to operate because they have become profitable with income earned from Banco Postal services. In some post offices, Banco Postal revenues exceed postal revenues.

With individuals, municipalities and businesses now keeping their money at the local Banco Postal branch, the bank is able to extend credit to local businesses and farmers, helping them to expand their activities and increase employment. There are still communities without financial institutions, but the Banco Postal project has made people’s lives easier and the future more promising.

Italy

Poste Italiane launched PosteMobile to offer basic mobile services such as voice, text messages (SMS), multimedia messages, video calls, 3G data connections, as well as standard value-added services including browsing, news, entertainment, music and games, along with mobile banking, mobile commerce, mobile payment and mobile postal services (for example, bills and telegrams).
How PosteMobile works

As a virtual mobile network provider, PosteMobile has no proprietary network, but relies on the infrastructure of one of the mobile phone operators. There are four licensed operators in Italy. There are also other virtual providers competing with PosteMobile. Like all virtual providers, PosteMobile has negotiated a roaming agreement with a host network provider. This agreement means that Poste Italiane can avoid expensive network investment.

PosteMobile was launched in November 2007 and by the end of 2009 had 1.2 million customers. Over EUR 8 million are transferred via PosteMobile each month. The unique nature of the PosteMobile model lies in its “capability to provide distinctive value-added mobile services”, such as bank transfers from one BancoPosta account to another or any other bank account, or the purchase of products and services by BancoPosta account or via the PostePay prepaid card.

Investment in innovation

Investments by Poste Italiane in technological innovation have allowed the company to guarantee its customers cutting-edge services, and have made it an important factor in Italy’s general economic growth and modernization. Financial services promoted by Poste Italiane also played a leading role in the gradual integration of the new immigrant population. PosteMobile services are expected to strengthen this integration by offering attractive prepaid call packages.

PosteMobile is also helping Poste Italiane to “innovate and improve performance”. It has designed and developed a new system infrastructure with a Windows mobile client application, allowing postal employees to transfer, track and trace information about mail delivery by mobile phone. The aim of this particular application is to improve the management of the postal mobile workforce, and in particular to optimize delivery processes.

PosteMobile has helped to expand mobile banking and mobile commerce in Italy. During 2007 and 2008, over EUR 35 million was invested in PosteMobile, and during its first 14 months of operation, the company generated close to EUR 40 million in revenues. Although still a loss-making business, it is anticipated that the break-even point will be reached during 2010.

Republic of Korea

For Korea Post, the desire to transform its traditional home shopping service into an e-commerce venture (ePOST) was an important reason for the development of its information systems. Korea Post’s e-commerce portal was launched in 1999 for the post office shopping mall. By the end of 2000, it had been expanded and transformed into the so-called Internet post office. Customers could use ePOST to...
access postal services in addition to the shopping option. The portal enabled producers throughout the country to sell local specialties direct to consumers online and gave customers the opportunity to purchase products in a secure environment.

A shopping portal

Korea Post has played an important role in the growth of e-commerce in the country. The operator has established a platform where as many e-commerce businesses as possible could appear directly or be linked to the e-commerce system of the post office and has served as “a shopping portal through linkages with several shopping malls and major retailers”. The government has used Korea Post’s e-commerce venture as a test bed for developing sound e-commerce practices, such as quality guarantee, certification and refund systems.

Post office shopping was launched in 1986, primarily to sell the farming and fishing products of rural communities and to increase their income by eliminating the intermediary between the buyer and the seller. It has now become the country’s premier specialty shopping mall for agricultural and marine produce. Beginning with only eight products in 1986, the shopping mall now offers more than 7200 items and has an annual turnover of USD 135 million.

Korea Post has also computerized the entire mail handling process, from acceptance to delivery, and has set up a web-based postal logistics system for seamless tracking and tracing.

The use of ICT by Korea Post has led to more efficient mail, banking and insurance services, and has contributed greatly to the country’s e-commerce growth and economic development, particularly in the farming and fishing communities.

The Russian Federation

The origins of the Russian Post date back many centuries, but its role as a network binding the nation developed during the Soviet era. The transformation since the early 1990s towards a market economy brought changes and challenges in terms of the legal and institutional framework, management, services and products, and the business model for logistics, distribution and ICT.

A new concept of postal service development was adopted in 2001 by the government. Another important milestone was the government’s approval in 2002 of e-Russia (2002–2010), a multi-sectoral plan to advance and coordinate the development of the information society.

Cyber Money

Within the framework of e-Russia and postal development, Russian Post has implemented several important cyber projects, including the Cyber Money...
The Wasel project requires each location to be assigned a proper address. The new addressing system is driven by satellite technology and has resulted in the "integration of the Post’s electronic and physical platforms". Wasel service is currently available in 25 cities, serving two million locations and 58 per cent of the Saudi population. Saudi Post plans to gradually extend it throughout the country. Delivery service is now 99.99 per cent accurate and, although 45 per cent of the Kingdom’s population moves every year, the new system makes it possible to directly forward mail items to the new address.

Customer database

The availability of a customer database, a key outcome of the addressing system, has enabled Saudi Post to develop many e-services, including the e-mall and a postal e-mail service. The e-mall, which is similar to amazon.com, has become the largest of its kind in the country, allowing customers to buy a wide variety of products online and have them delivered to their homes the next day. People without Internet access can go to the nearest post office to place their orders. The prices offered by vendors in the e-mall are competitive.

Cyber Money replaces the old paper-based postal money order, and attracts customers who prefer the reliability, convenience and proximity of the postal network. Volumes and value have sky-rocketed, with nearly 200 million transactions in 2009 to a value of USD 15 billion. Competition with banks and agents is fierce, and ICT evolution continues, facilitating money transfers via Internet or mobile phone (GSM) technology. Anticipating that development, the Russian Post has secured partnerships with GSM operators throughout the Russian Federation, so as to be ready for the next generation of ICT-based transfers.

Saudi Arabia

Saudi Post launched the Wasel service project in 2005 to establish an automated mail processing system from reception to delivery. The overall aim of the project is to improve the quality of mail processing and the speed of delivery to residential addresses, but the project has also instigated e-commerce and e-government initiatives in Saudi Arabia.

The provision of postal money transfer services is socially important, especially for users in rural areas who may not have easy access to banks. To enhance the competitiveness of Cyber Money, modern ICT have been introduced to implement high-speed transfers. This has required large capital inputs.

Some banks make transfers between legal entities and individuals without bank accounts, but most provide such services through agreements with specialized money transfer operators.

Cyber Money provides millions of Russians with a way of rapidly and securely transferring money from one place to another. In the past five years, the Cyber Money service has expanded to neighbouring countries, under UPU agreements.

Cyber Money replaces the old paper-based postal money order, and attracts customers who prefer the reliability, convenience and proximity of the postal network. Volumes and value have sky-rocketed, with nearly 200 million transactions in 2009 to a value of USD 15 billion. Competition with banks and agents is fierce, and ICT evolution continues, facilitating money transfers via Internet or mobile phone (GSM) technology. Anticipating that development, the Russian Post has secured partnerships with GSM operators throughout the Russian Federation, so as to be ready for the next generation of ICT-based transfers.
ICT Success stories

Digital revolution

Postal enterprises are diversifying into banking. The Brazil study demonstrates how the rural economy was stimulated by providing financial services to the “unbanked”. It also shows that financial inclusion can emerge as a profitable business by leveraging technology to lower costs and increase the range of services. Installing cash dispensers in rural branches, along with automated processing for small loans, lowered the cost of Banco Postal’s operations.

Postal enterprises are keen to enter the arena of e-commerce and Internet shopping because they already have the strong distribution and delivery network that is critical to the success of an e-commerce venture.

A proper address is needed for efficient distribution. Many developing countries lack a proper addressing system, but need such a system as a basis for e-commerce. Case studies from Saudi Arabia, the Republic of Korea and Italy show that such ventures can be highly successful.

The case studies hold important pointers, particularly for developing countries where postal operators need to modernize in order to fulfil the potential offered by their physical presence in remote areas. By transforming themselves, Posts could become vehicles of social and economic change in the societies they serve.

Lessons learned

Each of these initiatives has not only transformed the postal enterprise, but also had far-reaching effects on the society at large.

In developing countries, the post with its vast network of outlets is usually seen as the natural partner for delivering e-government and a host of other Internet-based services in rural locations. The Bhutan and Botswana studies show how the post office network and ICT can be combined to benefit both the Post and disadvantaged communities in rural and remote areas.

Residents also benefit from the new system. They can find the address of any individual, organization or facility, be it a private home or hospital.

The availability of a residential database has also contributed to better governance of the country, helping the government to provide many of its services online. The social security agency uses the information to deliver welfare benefits to beneficiaries anywhere in the Kingdom and to provide emergency services.

Businesses can access the address list on payment of a fee.

Residents also benefit from the new system. They can find the address of any individual, organization or facility, be it a private home or hospital.

The social security agency uses the information to deliver welfare benefits to beneficiaries anywhere in the Kingdom and to provide emergency services.

Each of these initiatives has not only transformed the postal enterprise, but also had far-reaching effects on the society at large.

In developing countries, the post with its vast network of outlets is usually seen as the natural partner for delivering e-government and a host of other Internet-based services in rural locations. The Bhutan and Botswana studies show how the post office network and ICT can be combined to benefit both the Post and disadvantaged communities in rural and remote areas.

Postal enterprises are diversifying into banking. The Brazil study demonstrates how the rural economy was stimulated by providing financial services to the “unbanked”. It also shows that financial inclusion can emerge as a profitable business by leveraging technology to lower costs and increase the range of services. Installing cash dispensers in rural branches, along with automated processing for small loans, lowered the cost of Banco Postal’s operations.

Postal enterprises are keen to enter the arena of e-commerce and Internet shopping because they already have the strong distribution and delivery network that is critical to the success of an e-commerce venture.

A proper address is needed for efficient distribution. Many developing countries lack a proper addressing system, but need such a system as a basis for e-commerce. Case studies from Saudi Arabia, the Republic of Korea and Italy show that such ventures can be highly successful.

The case studies hold important pointers, particularly for developing countries where postal operators need to modernize in order to fulfill the potential offered by their physical presence in remote areas. By transforming themselves, Posts could become vehicles of social and economic change in the societies they serve.