THE POSTAL SECTOR'S ROLE IN THE DIGITAL ECONOMY AND DIGITAL SOCIETY

A global panorama

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Disclaimer

This report contains numerous case studies of digital services provided by designated postal operators which have been sourced from social media, news articles, and publications. However, their inclusion does not imply official endorsement by the UPU or national governments. The views in this report reflect the opinions of the author alone, and do not necessarily reflect those of the Universal Postal Union or its development partners. While the International Bureau has endeavoured to provide detailed and accurate information on these services, the main goal is to reveal the broad variety of digital services delivered by Posts. Readers are therefore encouraged to approach Posts directly for more information about specific digital services. In addition, this report does not claim to be an exhaustive analysis or define best practice.

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EXECUTIVE SUMMARY

Today, nearly 2.6 billion people remain offline, and many more lack meaningful connectivity owing to issues such as inadequate devices, limited digital skills, insufficient data, poor coverage, or slow speeds. Unsurprisingly, the same groups historically excluded from full economic and social participation – rural populations; women; people living in poverty; racial, ethnic, and religious minorities; micro, small and medium enterprises (MSMEs); and micro-entrepreneurs – are also more likely to be digitally under-connected.

With over 650,000 post offices – most located in rural areas – the global postal network is the world's most geographically extensive system of physical service contact points. It is also the world's most inclusive communications network, mandated to serve all citizens within the borders of its 192 United Nations (UN) member states through the universal provision of basic postal services. Underserved communities form a core part of the postal sector's customer base and often visit post offices more frequently than more privileged segments of the population. Posts are also disproportionately accessed by elderly individuals, who face elevated risks of digital exclusion. Digitally upgrading postal networks and transforming Posts into one-stop shops for a broad range of digital services – including e-commerce, digital financial services, e-government, e-health, and digital connectivity – holds immense potential to enable inclusive digital transformations, contribute to bridging the digital divide at scale, and foster inclusion of marginalized populations and MSMEs that have historically lacked access to resources.

Posts are already leveraging their physical and digital infrastructure to promote economic, social, financial, and digital participation through digital services. However, the sector's potential remains underutilized. Realizing its full contribution requires universal internet connectivity across all post offices so that they can fully leverage their trusted presence and reach to serve as gateways to the digital world for less connected communities. The urgency of realizing the postal sector's full potential is heightened by the fact that every sector of the economy and society is undergoing a digital transformation, reshaping how citizens and businesses interact with essential services, markets, and one another.

This report takes stock of the current role the sector is playing in enabling inclusive digital transformation and provides recommendations on how to further scale its contribution.

Many Posts are already delivering inclusive, digitally enabled services

Findings from this report – based on a survey of 153 designated postal operators[1] – show that many Posts are already leveraging their infrastructure to promote digital inclusion across multiple service domains:

71% consider themselves providers of e-commerce services, supporting MSME participation in the digital economy through logistics, warehousing, payment solutions, and operational tools tailored to their needs.

Over 70% offer at least one digital connectivity service, helping communities get online by improving internet access, supporting expansion of infrastructure, and enhancing digital skills.

58% consider themselves providers of digital financial services, helping promote financial inclusion by equipping marginalized groups and MSMEs with tools to transact and engage in the digital economy.

1 Designated postal operators refer to national postal operators tasked by their government to fulfil the government's obligations under UPU treaties, such as the universal service obligation (USO).

51% consider themselves providers of e-government services, helping bring citizens closer to the state and promoting social inclusion, ensuring that even citizens in remote areas can engage with public administrations seamlessly.

11% consider themselves providers of digital health services, contributing to addressing universal health coverage gaps, an area that Posts are less active in but one that is worth monitoring.

74% consider themselves providers of digital postal services, making postal services more customer centric and competitive.

Notably, **34% of Posts show signs of evolving into one-stop shops for digital inclusion** by offering a combination of e-commerce, digital financial services, and e-government services under the same roof. This model enables underserved citizens – especially in rural and remote areas – to access multiple essential services conveniently and affordably in one location. By doing so, these Posts reduce the time and cost burden for less connected populations, bring governments closer to the people, offer in-person alternatives for those without meaningful connectivity, and expand citizen choice in how they interact with service providers and public institutions.

Inclusive by design, multi-channel service delivery

"Digital by default," "digital first," and "digital by design" strategies are often promoted as best practice – but they risk overlooking the needs and realities of less connected groups, resulting in their exclusion. To avoid this, governments and service providers must adopt an **"inclusion by design"** approach: **intentionally designing digital transformation strategies that prioritize the needs of least connected individuals and underserved communities from the outset.** Lessons from past international development efforts show that without explicit inclusion measures, broad-based strategies often disproportionately benefit easier-to-reach populations, inadvertently deepening inequalities. Integrating the unique physical footprint of postal networks into an inclusion-by-design, **multi-channel service delivery model** can help ensure that digital services are not only accessible to the majority, but also deliberately **designed to reach those currently left behind.**

Without explicit inclusion measures, broad-based strategies often disproportionately benefit easier-to-reach populations, inadvertently deepening inequalities.

Posts are actively advancing digitally enabled multi-channel service delivery by combining online and in person options for accessing the same services – effectively promoting inclusion. Their extensive physical reach helps fill a critical gap faced by many service providers, whose limited presence often confines physical access points to urban or densely populated areas, leaving rural, low-income, and underserved communities excluded or inadequately served. Transforming post offices into digital service hubs and partnering with Posts to deliver essential services dramatically expands access for these populations. In addition, leveraging appropriately trained delivery staff allows Posts to extend services directly to individuals with mobility constraints or those living in the most isolated regions – further amplifying the sector's inclusive impact.

The post office counter is the most widely used channel for delivering non-postal digitally enabled services, making them immediately more accessible to less connected groups with support from postal staff. Among Posts offering **digital financial and government services, 89% and 87%, respectively,** provide these services at the counter. Many Posts also offer **hybrid service models,** combining online platforms (e.g., websites or apps) with in-person access: **55% of Posts offering digital financial services and 42% offering digital government services** provide them both online and over the counter. Some Posts are leveraging delivery staff to bring services directly to citizens' doorsteps, while others are deploying self-service electronic kiosks and advanced ATMs – further expanding user choice and convenience. However, these figures likely underestimate the full extent of the sector's contribution to multi-channel service delivery, as many Posts also enable other actors to reach underserved communities via their infrastructure through strategic partnerships.

These findings should sound the alarm and serve as a **call to action** for countries where designated postal operators and regulators are closing post offices in an effort to cut costs and improve balance sheets. Such measures risk

undermining governments' efforts towards inclusive digital service delivery, which could be effectively facilitated by postal infrastructure. The reduction of national post office networks is neither inevitable for Posts undergoing digital transformations nor a universal trend. In fact, some countries leading in postal digitalization efforts – such as Poste Italiane and India Post – have not only modernized their networks and leveraged them to expand inclusive digital services (see boxes 2 and 13, respectively), but have also expanded their retail presence, including in rural areas, to advance both inclusivity and revenue generation. Maximizing the postal sector's contribution to inclusive digital transformation through multi-channel service delivery depends on maintaining an extensive post office network; replacing physical post offices with purely digital channels will inevitably diminish the inclusionary potential of postal sector digital transformations.

Partnering with Posts extends the reach of digital services through physical channels

Posts do not need to offer both digital and physical delivery channels themselves to contribute meaningfully to multi-channel service delivery. In many cases, **essential service providers with existing digital offerings partner with Posts** to expand their reach into underserved areas – particularly where their own physical infrastructure is limited or non-existent. This model is being deployed across both developed and developing countries, and across diverse regions.

For example, **Pos Indonesia** partners with banks and other financial institutions to extend banking services into rural areas where branches are scarce. In **Zambia**, the government has supported the upgrading of all of ZamPost's offices into digital transformation centres where citizens can access the internet and a full range of e-government services available on the ZamPortal platform with the aid of postal staff. In **France**, La Poste hosts a portion of the government's France Services centres, mainly in rural areas, extending access to services from 12 public institutions. In **Egypt, Italy (Polis project), and Czechia (Czech POINTS),** Posts are delivering a curated set of essential and frequently accessed digital government services, leveraging their widespread presence to bring governments closer to citizens. These are just a few of the many case studies featured in this report that illustrate how Posts contribute to economic, social, financial, and digital inclusion by serving as a physical bridge for multi-channel service delivery.

Sector demand and effectiveness of digital services

The report reveals strong demand among Posts – particularly in developing countries – to scale up their role in inclusive digital transformation and diversify further with digital services. Moreover, **retention rates ("stickiness") for digital services** (digital postal services, e-commerce services, digital financial services, and digital government services) exceed 92%, underscoring their lasting value. Expanding these services not only strengthens the strategic positioning of Posts but also generates sustained economic, financial, social, and digital inclusion benefits for marginalized and remote communities.

Limitations and barriers

Despite its significant potential, the postal sector faces several key limitations that constrain its ability to deliver greater impact:

Connectivity gaps persist. Around **100,000 post offices – nearly one in six worldwide – remain unconnected to the internet,** particularly in rural and developing regions where digital services could have the greatest impact. Closing this gap and achieving universal internet access across all post offices must be a top priority.

Regional disparities are also pronounced. Posts in developing regions – especially in **Africa, Latin America and the Caribbean, and Asia-Pacific** – often lag behind in offering digitally enabled services, limiting their capacity to drive inclusive digital transformation. Targeted investment and policy support are needed to close these gaps and unlock the full potential of the network.

Service variety remains limited. While many Posts have entered multiple digital service domains, the breadth of offerings within each sector is often narrow. For example, meaningful financial inclusion requires more than enabling basic digital

transactions – it demands access to a full suite of services, such as secure accounts, digital payments, credit, investments, and insurance. Expanding this diversity is essential to fully leverage postal infrastructure for inclusive digital transformation. Posts in developing countries are especially likely to offer a limited range of services, even when they provide digital services, further constraining their potential impact.

In addition to the limitations above, Posts face several systemic barriers to introducing and scaling digital services. The most pressing challenge is insufficient investment resources, cited by 61% of Posts. Overcoming this will require coordinated support from governments, donors, and other partners. Other frequently cited barriers include:

- **Digital infrastructure deficits** (37%)
- **Restrictive regulatory frameworks** (33%)
- **Inadequate enabling environments** (33%)
- **Competition from private-sector providers** (38%)
- **Uncertainty around sustainable business models** (37%)
- **Lack of clear guidance or best practices** (34%)

Regional strengths and challenges

Regional disparities strongly influence whether – and to what extent – Posts offer digital services, shaping their contributions to national development goals. **Industrialized countries,** as well as those in **Europe and CIS** (Commonwealth of Independent States) and the **Arab region,** tend to show high levels of digital service provision and diversification. Many have successfully implemented integrated, multi channel service delivery models. In contrast, Posts from **Latin America and the Caribbean** consistently lag behind other regions, hindered by challenges such as **limited investment, digital infrastructure gaps,** and **weak governmental and private-sector buy-in.** Meanwhile, Posts in **Africa and in Asia-Pacific** show encouraging progress but still face critical barriers – including **inadequate connectivity** and **restrictive regulatory environments** – that limit their ability to expand and diversify services comprehensively.

Overcoming these regional constraints through **targeted policies, investments, and international cooperation** will be essential to fully unlock the postal sector's potential as a driver of inclusive and sustainable digital development. Given the variation in these challenges across regions, **tailored, context-specific solutions** will be essential to build momentum and scale inclusive digital services effectively.

Recognition and integration of postal networks as foundational Digital Public Infrastructure

Despite the substantial contributions and untapped potential highlighted throughout this report, the postal sector remains largely overlooked by the international community and other stakeholders working to advance inclusive digital development. A striking example of this oversight is its omission from Objective 1 of the Global Digital Compact, which commits to "map and connect all schools and hospitals to the Internet" by 2030 but makes no mention of the potential of post offices with regard to digital inclusion. This likely reflects limited awareness and insufficient evidence regarding the sector's capacity in this domain. **This report directly addresses that gap by providing new evidence and analysis to inform the recognition and integration of postal infrastructure in digital development strategies.**

Explicitly **recognizing postal infrastructure as foundational Digital Public Infrastructure (DPI)** could significantly elevate its strategic role in both global and national digital agendas. DPI is composed of modular and interoperable digital building blocks that enable the delivery of essential services. However, **current DPI approaches lack mechanisms to ensure the inclusion** of individuals who face significant barriers to digital access or use. As argued in this report, postal networks can fill this critical gap by serving as an inclusive layer of DPI, enabling both **inclusion by design** and **multi-channel service delivery** at scale. Their existing infrastructure and operational capacity make them especially well-suited to deliver additional essential digitally enabled services with minimal adaptation once formally integrated as a core component of DPI and equipped with DPI building blocks.

Initiatives such as the Universal Postal Union's Connect.post, aiming to connect all post offices by 2030, exemplify the strategic direction required. **The Universal Postal Union (UPU) plays a central role in helping countries unlock the postal sector's potential as inclusive digital infrastructure.** As the UN specialized agency for the postal sector, the UPU supports governments and designated postal operators through a broad range of efforts. These include technical assistance to strengthen infrastructure, capacity building and training for postal staff and policymakers, and policy advocacy to create enabling environments for innovation and digital inclusion. The UPU also fosters cross-sectoral partnerships and promotes the integration of postal networks into national and global digital development agendas. Through flagship initiatives such as Connect.post, TradePost, and the Financial Inclusion Technical Assistance Facility (FITAF), the UPU advances its vision of a postal sector that actively contributes to social, economic, financial, and digital inclusion worldwide. The UPU welcomes collaboration with all stakeholders committed to ensuring that no one is left behind in the digital age.

Policy recommendations

Unlocking the postal sector's full potential as a driver of inclusive digital transformation requires **coordinated, cross-sectoral action** – no single organization or stakeholder can achieve this alone. Efforts must be **locally tailored,** reflecting diverse contexts, priorities, capacities, and constraints. This report outlines **targeted recommendations for key stakeholder groups,** summarized below for brevity. Further details are provided in the conclusion.

National governments

- Embed **inclusion** by design in national digital strategies, policies, and agendas to ensure services reach marginalized and underserved communities.
- Fully leverage national postal networks for inclusive digital service provision, recognizing their unparalleled rural presence.
- Recognize postal networks as a potential inclusivity layer for digital public infrastructure.
- Prioritize internet connectivity for all post offices, especially in underserved areas.
- Safeguard and strategically expand national post office networks – particularly in rural and underserved areas – to maximize their potential for inclusive digital service delivery.
- Avoid cost-cutting measures that reduce the physical postal footprint in ways that undermine multi-channel and inclusion-by-design strategies.
- Establish enabling policies and regulations to support designated operators' diversification into e-government, e-commerce, digital financial services, and connectivity services.
- Facilitate cross-sector partnerships between Posts, ministries, information and communication technology (ICT) agencies, and the private sector.
- Explicitly integrate postal networks into national digital transformation strategies and national development agendas.

Postal regulators

- Enable Posts to expand into digital services through supportive regulatory frameworks.
- Facilitate the Post's eligibility for Universal Service and Access Funds (USAFs/USFs).
- Mandate inclusive, multi-channel service delivery in universal service obligations.
- Promote innovation and reduce regulatory barriers to public–private collaboration.

Telecom regulators (where separate)

- Collaborate with postal regulators to grant Posts access to USAFs/USFs.
- Incentivize telecom–postal partnerships to expand rural connectivity.

Designated postal operators

- Work with governments and donors to connect unconnected post offices.
- Diversify into digital financial services, e-government, e-commerce, health, and connectivity and/or deepen offerings in each domain.
- Leverage the physical postal network for multi-channel service delivery.
- Maintain and strategically expand the physical network – including in rural areas – based on social and economic value, pairing locations with locally relevant digital services to advance inclusivity and revenue generation.
- Invest in staff training to ensure high-quality service delivery across channels.
- Participate in global cooperation, peer learning, and capacity-building initiatives.

International donors and development partners

- Recognize digital services offered by Posts as key enablers of the Sustainable Development Goals and digital inclusion.
- Support DPI-aligned integration of Posts into digital policy frameworks.
- Fund connectivity upgrades and pilot programmes for Posts, especially in low-income and rural areas through national initiatives and global ones like Connect.post.
- Encourage public–private partnerships and knowledge exchange.
- Integrate Posts into broader digital development programmes and support research efforts.
- Support data collection, mapping, and research initiatives documenting the postal sector's contributions to digital inclusion and identifying opportunities and challenges.

Universal Postal Union

- Support governments in creating an enabling environment through forward-looking policies, investment in digital infrastructure, and the fostering of public–private partnerships to drive innovation.
- Provide digital transformation technical assistance to governments and designated operators to help them increase their contribution towards socio-economic development.

- Raise awareness, through advocacy and expert policy briefing and reporting, of the role of the postal sector in achieving national, regional and global digital transformation goals.
- Collaborate with other United Nations entities and development partners to mobilize resources and foster synergies for delivering essential digital services via the connected postal network.
- Deliver capacity building and training activities to postal staff, regulators and policymakers on issues relating to digital transformation through the postal sector.

International organizations and UN agencies

- Advocate for the inclusion of Posts in global digital agendas (e.g., Global Digital Compact).
- Invest in strengthening Posts' digital capacity, especially in developing countries.

Private sector

- Partner with Posts to co-develop and scale digital services in underserved markets.
- Utilize Posts' infrastructure to extend market reach and build inclusive delivery models for essential services.
- Identify and leverage complementary strengths between the private sector and Posts to develop mutually beneficial business models.
- Pilot and document innovative collaborations with Posts.

Civil society and community-based organizations

- Collaborate with Posts on digital skills, outreach, and needs-based service design.
- Advocate for the inclusion of postal networks in digital development efforts.
- Monitor and provide feedback on service inclusivity and accessibility.

Academia and research institutions

- Conduct impact evaluations and data mapping to quantify the postal sector's role in digital inclusion and inform future action.
- Partner with Posts to inform evidence-based policy and share successful models.
- – Facilitate knowledge exchange and dissemination of research findings.

Methodological note: *The analysis presented in this report is informed by self-reported survey data from 153 designated postal operators. While offering valuable insights, these findings should be interpreted in the light of the methodological considerations outlined in the full report.*

Posts already promote inclusion through digital services

70% OF POSTS PROMOTE DIGITAL INCLUSION THROUGH PROVISION OF AT LEAST 1 **DIGITAL CONNECTIVITY** SERVICE OR SOLUTION.

71% OF POSTS PROMOTE ECONOMIC INCLUSION THROUGH **E-COMMERCE** SERVICES

51% OF POSTS PROMOTE SOCIAL INCLUSION THROUGH **E-GOVERNMENT** SERVICES.

58% OF POSTS PROMOTE FINANCIAL INCLUSION THROUGH **DIGITAL FINANCIAL** SERVICES.

11% OF POSTS PROMOTE UNIVERSAL HEALTH COVERAGE THROUGH **DIGITAL HEALTH** SERVICES.

SECTION 1

INTRODUCTION

Across every sector, digital transformations are reshaping how we work, learn, interact, and access essential services – a trend accelerated by the COVID-19 pandemic and continuing to gain momentum today (UNCTAD, 2023). In our increasingly digital world, access to digital services and opportunities like e-commerce, e-government, digital financial services, and remote work and education are no longer a luxury. Digital engagement is becoming essential for full participation in society and the economy. Citizens and businesses are increasingly expected to engage with service providers and access opportunities online, making digital inclusion more critical than ever. When managed with the needs and realities of less connected groups in mind, digital transformations can extend the reach of services and opportunities to historically underserved groups while reducing costs and improving efficiency for governments and essential service providers.

Despite these possibilities, persistent digital divides between and within countries often result in the benefits of digital transformations not being shared equally. In 2024, 2.6 billion people did not use the internet at least once every three months, with individuals in low- and middle-income countries, rural and remote areas, women, the elderly, and other marginalized groups disproportionately unconnected (ITU, 2024). Moreover, even when marginalized groups have some access to the internet, they are less likely to be meaningfully connected in a way that enables access to essential digital services and opportunities because they often access the internet too infrequently or lack internet-enabled devices, sufficient data, reliable high-speed connections, economic resources, or the digital skills necessary for a "safe, satisfying, enriching, and productive online experience at an affordable cost" (A4AI, 2022; United Nations Office of the Secretary-General's Envoy on Technology and ITU, 2021, p. 2). If left unaddressed, these disparities risk undermining progress towards the Sustainable Development Goals (SDGs), particularly efforts aimed at reducing inequalities and ensuring that no one is left behind.

Given the unequal spread of digital technology adoption and meaningful connectivity, unfettered or poorly managed digitalization will not result in greater inclusion or access to digital services. Innovative approaches are needed to ensure that digital divides do not lead to deepening existing inequalities and excluding less connected individuals and micro, small and medium enterprises (MSMEs) when sectors and countries undergo digital transformations. Digital transformation strategies must move beyond simply digitalizing services or distributing technology; instead, they should explicitly address the unique barriers faced by underserved groups, ensuring meaningful and inclusive participation in the digital economy and society.

Past experiences show that development strategies employing aggregate targets risk inadvertently overlooking marginalized communities, since such targets often incentivize reaching the easiest to serve populations first, thereby neglecting harder to reach groups (UNICEF, 2015). Similarly, digital transformation approaches like "digital by default", "digital first", or "digital only" risk deepening exclusion and inequalities if they prioritize convenience and efficiency for the majority without intentionally addressing the needs of underserved populations (Alston, 2019; Hernandez et al., 2024; Peixoto and Cordova, 2019). Recognizing these pitfalls, experts increasingly advocate for – and this report explicitly promotes – "inclusion by design" and "inclusion first" strategies, intentionally placing marginalized and less digitally connected communities at the centre of digital service planning (Peixoto and Cordova, 2019; UN DESA, 2024, 2022). This approach ensures that services are accessible not only online but also through alternative digitally enabled channels that do not require individuals with limited connectivity or digital skills to directly engage with technology (Hernandez et al., 2024).

Recognizing these pitfalls, experts increasingly advocate for – and this report explicitly promotes – "inclusion by design" and "inclusion first" strategies, intentionally placing marginalized and less digitally connected communities at the centre of digital service planning.

Figure 1: **Percentage of individuals using the internet in rural and urban areas by region (ITU, 2024)**

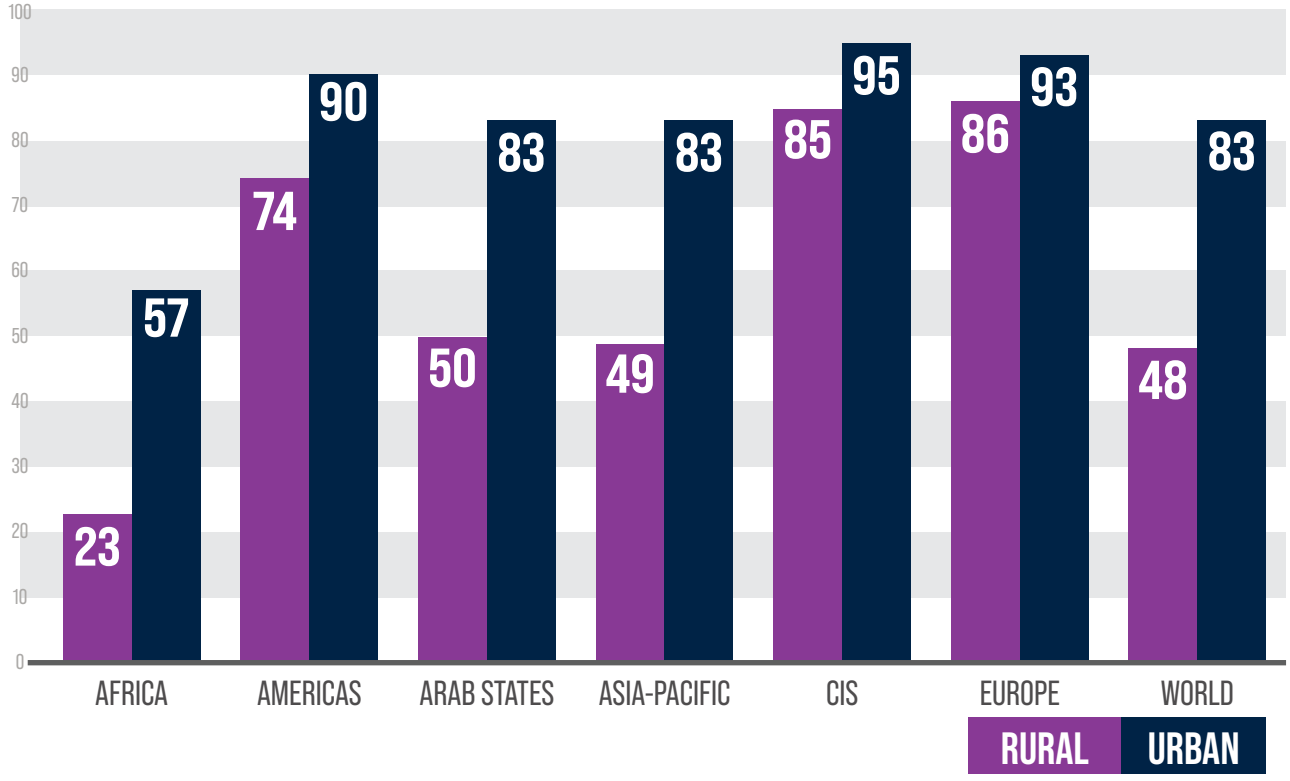
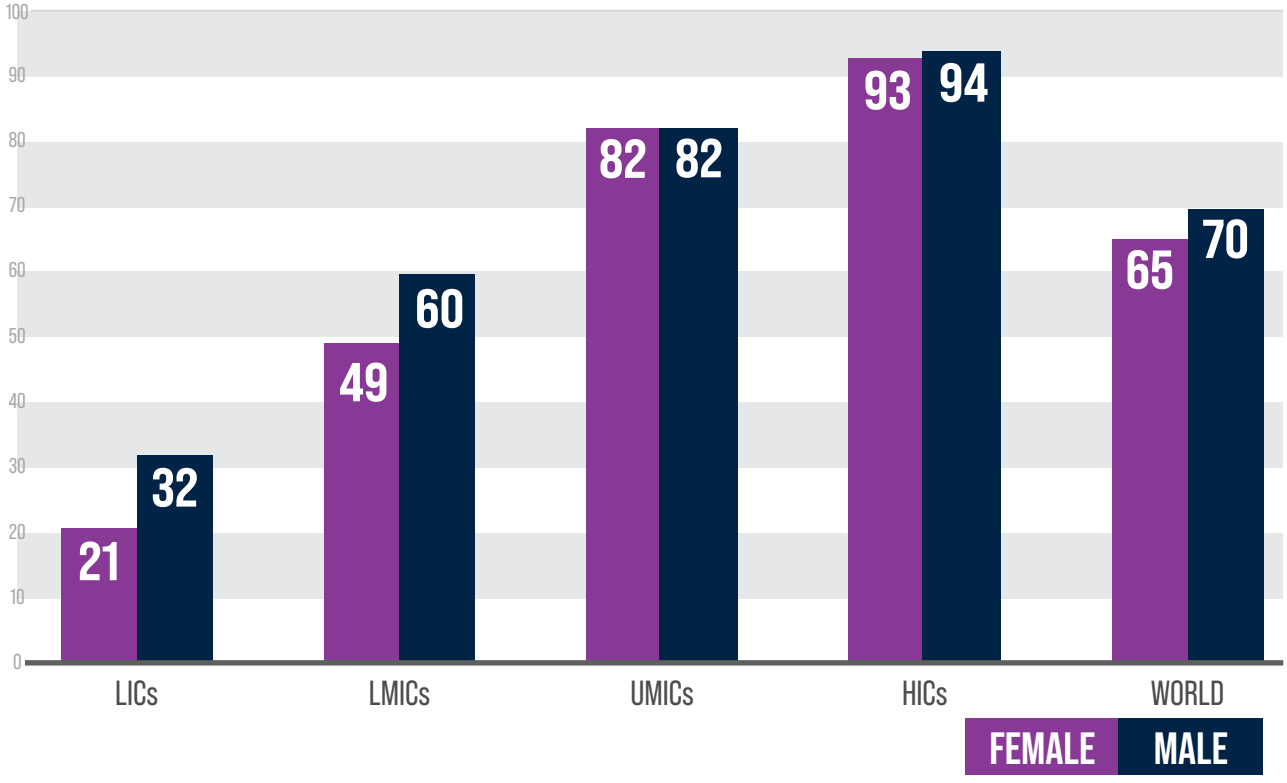


Figure 2: **Percentage of individuals using the internet across country income levels by sex (ITU, 2024)**



However, governments and other essential service providers face significant challenges in expanding digitally enabled, in-person service delivery to rural and remote areas. Building new, modern facilities in these regions involves high costs that many organizations find prohibitive (World Bank, 2017a). While modernizing existing infrastructure is feasible, few service providers possess networks with the necessary geographic reach to comprehensively cover every corner of their respective countries. Given the urgent need for inclusive, multi-channel approaches, existing infrastructure that can effectively support these efforts at scale must be identified.

The global postal network, with over 650,000 post offices predominantly situated in rural areas, is uniquely positioned to support an "inclusion by design" approach to national digital transformations. The postal network is the world's most extensive retail service network, reaching rural and remote areas where other service providers often struggle to maintain a presence or choose not to operate. In many remote villages, the post office is the only government-affiliated service access point and serves as a key centre for social interaction, and in some cases is the only formal service provider around of any kind. Moreover, designated operators (DOs) often rank among the most trusted government-affiliated institutions, enabling them to effectively deliver critical services even in communities typically sceptical of digital or financial service providers. Furthermore, the postal network's customer base includes many of the groups that are less likely to be online (sometimes disproportionately) – such as women, the elderly, and others who depend on it for a diverse array of services, including financial services. By offering digital services – or better yet, transforming post offices into one-stop digital service hubs or citizen service centres – DOs can significantly enhance digital, social, and economic inclusion while also improving their competitiveness through service portfolio and revenue stream diversification.

Thanks largely to their universal service obligation, DOs are legally required to provide affordable postal services to all citizens and businesses within their national territories. This obligation incentivizes – and often requires – DOs to maintain post offices in locations underserved by profit-driven service providers. Moreover, the global postal workforce includes nearly five million employees, the majority of whom serve in delivery roles (Anson, 2023). These delivery staff can further expand digitally enabled service delivery, providing millions of additional face-to-face contact points at the doorsteps of citizens living in remote or difficult to reach areas.

Given the urgent need for inclusive, multi-channel approaches, existing infrastructure that can effectively support these efforts at scale must be identified.

Research from the Universal Postal Union (UPU) demonstrates that DOs can leverage their trusted community presence to enhance citizen uptake of essential services, including financial and government services (UPU, 2019). For these reasons, DOs are strategically positioned to extend essential digital services to underserved communities and geographies. Digitally upgrading postal infrastructure and providing targeted digital training for postal staff could further enhance the postal sector's capacity to lead inclusive digital transformations. This report argues that national postal networks are uniquely placed to enable social, economic, financial, and digital inclusion at scale.

For these reasons, the global postal network is also uniquely positioned not only as existing physical infrastructure but also as foundational Digital Public Infrastructure (DPI) – shared digital infrastructure enabling the effective provision of essential services in both the public and private sectors. Current DPI initiatives – and DPI as a concept – lack explicit mechanisms to mitigate the exclusion of individuals who face barriers in accessing or using digital technology. Leveraging the postal network as a form of "phygital" infrastructure (UPU, 2024) – integrating physical and digital service delivery – can fill this critical gap by serving as the inclusive layer of DPI. Digitally upgrading postal infrastructure thus provides a scalable solution for governments and service providers to ensure equitable access to essential digital services, especially for underserved populations and remote communities.

For the global postal network is also uniquely positioned not only as existing physical infrastructure but also as foundational Digital Public Infrastructure (DPI).

Different segments of the population may have differing levels of connectivity affecting their ability to access digital services or may prefer to engage with essential service providers differently.

Defining digital services and digitally enabled services

In this report, **digital services** refer to any services that leverage digital technologies at any stage of their delivery or use – whether accessed fully online or facilitated in person through digitally enabled tools, infrastructure, or staff (e.g., postal employees using connected devices). These services are designed to enhance access, efficiency, and user experience, and may be accessed directly by the end user or delivered through intermediaries (e.g., postal staff). Rather than limiting the definition to services available exclusively through digital channels, this report adopts a broader scope that includes **digitally enabled services:** a subset of digital services delivered in person but dependent on digital technologies to function – such as transactions or service interactions at internet-connected counters or via postal delivery staff equipped with smartphones or personal digital assistants (PDAs) at the service recipient's doorstep.

Digitally enabled services play a critical role in supporting "multi-channel" or "hybrid" service delivery models, enabling systems where digital and physical components reinforce one another to expand reach and impact. This approach acknowledges that different segments of the population may have differing levels of connectivity affecting their ability to access digital services or may prefer to engage with essential service providers differently. Providing multiple digitally enabled options, including ones available in person, is particularly important for fostering inclusion, as it ensures access to services for individuals who may not be able to engage directly with purely digital channels.

This framing reflects recent trends emphasizing the need for hybrid, multi-channel, and omnichannel approaches as essential strategies for inclusive digital transformation as promoted by the two most recent United Nations e-government survey reports, the 2023 United Nations World Public Sector Report, and the Organisation for Economic Co-operation and Development (OECD) Digital Government Policy Framework, among others (OECD, 2020a, 2020b; Peixoto and Cordova, 2019; UN DESA, 2024, 2023, 2022; World Bank, 2017a). Accordingly, digitally upgrading postal infrastructure – especially by ensuring internet connectivity at post offices and for postal staff – is crucial to unlocking the sector's full potential in delivering digital services, and especially digitally enabled services, at scale. Throughout this report, the terms digital services and digitally enabled services are used interchangeably, consistent with this inclusive definition.

DOs are already contributing to inclusive digital transformations

Evidence from the survey underpinning this report demonstrates that many DOs are already leveraging their infrastructure to offer digitally enabled services across various domains – including e-commerce, financial services, e-government, connectivity, health, and postal services – thus promoting economic, financial, social, and digital inclusion in the communities they serve. Specifically:

Many DOs are already leveraging their infrastructure to offer digitally enabled services across various domains.

71% of DOs consider themselves providers of e-commerce services, fostering economic growth and MSME participation in the digital economy by providing tailored delivery, warehousing, payment solutions, and operational tools for MSMEs.

70% offer at least one digital connectivity service or solution, directly helping communities engage digitally by improving internet access, enhancing digital skills, and helping expand connectivity infrastructure.[2]

58% consider themselves providers of digital financial services, helping promote financial inclusion and providing the financial tools marginalized groups and MSMEs need to transact and engage in the digital economy.

51% consider themselves providers of e-government services, helping bring citizens closer to the state and promoting social inclusion, ensuring that even citizens in remote areas can engage with public administrations seamlessly.

11% consider themselves providers of digital health services, contributing to universal health coverage, an area that DOs are less active in but one that is worth monitoring.

74% consider themselves providers of digital postal services, making postal services more customer centric and competitive.

Despite significant global potential, the extent to which DOs currently leverage their networks to deliver inclusive digital services varies considerably across regions. DOs in industrialized countries, Europe and CIS, and the Arab region generally lead in the provision of multiple digital service categories, demonstrating higher diversification and innovation. In contrast, DOs in Latin America and the Caribbean consistently lag in both the provision and diversification of digital services. DOs in Africa and in Asia and Pacific occupy a middle ground, showing considerable progress but still facing substantial gaps. These regional differences reflect varying economic conditions, infrastructure capacities, regulatory frameworks, and investment environments, underscoring the importance of tailored policy interventions and investments to maximize the postal sector's potential in driving inclusive digital transformation.

Many DOs integrate multiple service categories under a single roof, effectively creating a "one-stop shop" for essential service needs. This integrated approach significantly enhances convenience and inclusivity, saving individuals time and money they would otherwise spend travelling to multiple service providers or government offices. Notably, **34%** of DOs already combine e-commerce, digital financial, and e-government services, simultaneously advancing economic, financial, and social inclusion through a single, convenient access point.

Moreover, many DOs are actively supporting digitally enabled multi-channel service delivery, providing less connected populations with additional options to access digital services. This multi-channel approach takes many forms depending on the context and can involve DOs providing digital services through multiple channels they fully control or using their extensive physical networks to serve as physical extensions of their partner organizations' digital services. This approach takes advantage of the benefits of digitalization while also helping ensure the

Transforming all post offices into digital service hubs expands the coverage of citizen service centre networks to rural and remote communities, ensuring broader access to essential digital services.

2 This figure differs from other digital service types owing to a variation in measurement methodology. While other categories were assessed based on DOs' self-identification as providers of the specific digital service type, signaling strategic intent, the digital connectivity figure encompasses all DOs offering any related services. This broader approach was required given the absence of a specific survey question asking DOs if they were providers of digital connectivity services, similar to those used for other categories.

inclusivity of less connected groups. Moreover, the extensive postal network helps fill a significant gap that often limits the effectiveness of the physical portion of multi-channel service delivery initiatives. In many countries, existing physical citizen service centres are limited to cities and densely populated areas, meaning that less connected rural residents are unable to access physical locations offering digitally enabled services or digital support in person without having to travel long distances (Hernandez et al., 2024). Transforming all post offices into digital service hubs expands the coverage of citizen service centre networks to rural and remote communities, ensuring broader access to essential digital services. Additionally, our survey found that many DOs further enhance service delivery by leveraging their delivery staff, extending digitally enabled services directly to individuals with mobility constraints or those living in areas far from physical post offices.

Several trends limit the postal sector's contribution to inclusive digital transformations

While many players in the postal sector already contribute to inclusive digital transformations through digitally enabled, multi-channel service delivery and transforming post offices into one-stop shops, several key limitations currently restrict the potential for greater impact. Effectively addressing these limitations could significantly mitigate barriers faced by underserved populations and reduce digital exclusion. Leveraging the postal infrastructure represents a practical, scalable, and underutilized pathway toward achieving greater digital inclusion, particularly for marginalized groups and remote communities that risk falling further behind. Key limitations include the following:

Firstly, approximately 100,000 post offices – almost one in six worldwide – remain unconnected to the internet. Unfortunately, post offices located in rural areas and developing countries, precisely where digitally enabled services offered in person could deliver the most transformative benefits, are least likely to be connected. Unconnected post offices are unable to serve their communities digitally, underscoring the urgent need for comprehensive efforts to ensure universal internet connectivity for all post offices, prioritizing rural and developing regions.

Secondly, there are regional disparities in DO likelihood to provide digitally enabled services. DOs in developing countries, especially those in Africa and in Latin America and the Caribbean, are least likely to offer digitally enabled services, limiting the potential impact on inclusion for the communities they serve.

Lastly, although many DOs now offer multiple categories of digital services, diversification within these categories often remains limited. Each service type (e-commerce, digital financial services, digital government services, connectivity services, etc.) encompasses a variety of complementary services essential for achieving comprehensive inclusion. For example, full financial inclusion requires access to secure financial accounts, digital payment instruments, credit, investment opportunities, and insurance products (Afonso et al., 2024). While DOs in industrialized regions often provide a broader range of e-commerce and digital financial services, most DOs globally offer only a narrow subset of available services. Expanding the range of services within each digital category is crucial for fully leveraging postal infrastructure to advance inclusive economic, financial, social, and digital development.

High demand for DOs to further diversify into digital services, and signs of effectiveness

There is substantial demand among DOs to expand their role in facilitating inclusive national-level digital transformations and to diversify their revenue streams through additional digital services, with DOs from developing regions showing the highest levels of demand to introduce new digital services. Furthermore, the provision of digital services appears highly beneficial for DOs, as evidenced by their strong tendency to retain these services once introduced. Specifically, digital postal services, e commerce services, digital financial services, and digital government services all exhibit retention rates ("stickiness") exceeding 92%, underscoring the enduring value these offerings deliver to both DOs and the communities they serve. Digitally upgrading and empowering the postal sector in developing regions to provide digitally enabled services must be prioritized to ensure that the global postal network is fully leveraged to support inclusive digital transformation to its full potential.

Barriers to introducing digital services

However, DOs face significant barriers in providing and introducing digital services. Among these, insufficient investment resources stands out as the most pressing challenge, cited by 61% of DOs as a substantial obstacle. Addressing this financing gap will require coordinated support from national governments, international donors, and other stakeholders to fully unlock the inclusive development potential of digital services through the postal sector. Additionally, substantial upgrades are needed to digital infrastructure (37%), particularly in developing countries, to enable DOs to leverage their postal networks effectively as inclusive digital transformation platforms. In many contexts, governments (37%) and other potential partners (31%) still need convincing of the strategic value of delivering non-postal digital services via postal networks. Similarly, restrictive regulatory environments (33%) and inadequate enabling policy environments (32%) represent critical hurdles. DOs also frequently face competition from private-sector companies and start-ups (38%), and difficulties in identifying sustainable business models for digital services (37%). Lastly, clearer guidance materials and established best practices (34%) are essential to help DOs effectively navigate opportunities and overcome challenges associated with implementing digital services. The severity and prevalence of these barriers vary significantly across and within regions, underscoring the need for context-specific solutions.

The postal sector's potential contribution to inclusive digital transformation is largely overlooked

In addition to the challenges highlighted above, the postal sector's current and potential contributions to inclusive digital transformation remain significantly overlooked by the international community and other stakeholders committed to fostering inclusive national digital development. A clear illustration of this oversight is the omission of the postal sector from Objective 1 of the Global Digital Compact, which commits to "map and connect all schools and hospitals to the Internet" by 2030 but makes no mention of post offices (United Nations, 2024, p. 3). This omission likely results from a general lack of awareness and concrete evidence demonstrating the postal sector's substantial capacity to promote digital inclusion. This report addresses this critical gap by providing tangible evidence of how DOs are already making meaningful contributions toward inclusive digital transformation globally.

The postal sector's current and potential contributions to inclusive digital transformation remain significantly overlooked by the international community and other stakeholders committed to fostering inclusive national digital development.

About the report

This report is the fourth edition of the UPU's flagship Digital Economy and Postal Activities report series. It adopts a different approach from previous editions, shifting its focus from assessing the overall state of postal-sector digitalization to highlighting the critical role the postal sector can – and already does – play in fostering inclusive digital societies and economies, as reflected in the report's title. Additionally, this edition deliberately moves away from rankings, as these have limited practical value and tend to illustrate predictable correlations between DOs' digitalization performance, their scores on the Integrated Index for Postal Development (2IPD), and their respective countries' development levels. Instead, this edition of the report prioritizes enabling evidence-based policy and decision making for a wide range of actors, including, but not limited to, the following:

Governments can leverage the insights provided to develop informed policies that fully utilize national postal infrastructures for inclusive digital transformations and to achieve national public policy objectives.

Supra-national organizations, bilateral donors, and multilateral donors can use this report to help identify potential opportunities to leverage the postal sector to its fullest potential in achieving the SDGs.

DOs can draw upon the report's findings (including those in the appendix) to guide investments and refine diversification strategies.

Private-sector actors and other independent essential service providers can use the report to identify opportunities for strategic digital-service partnerships with DOs.

Civil society and academic actors can use the report to strengthen advocacy efforts related to digital inclusion, including the promotion of one-stop citizen service centres and multi-channel service delivery models.

This edition of the report prioritizes enabling evidence-based policy and decision making for a wide range of actors.

1.1 METHODOLOGY

The findings presented in this report are based on a survey conducted from 10 September 2024 to 13 December 2024. A total of 153 DOs fully responded to the survey, representing the largest sample size since the inception of this report series. The regional distribution of responding DOs is summarized in table 1 below.

Table 1: **Regional breakdown of DOs that fully responded to the survey**

REGION	NUMBER OF DOS
Africa	33
Arab region	18
Asia and Pacific	28
Europe and CIS	26
Industrialized countries	13
Latin America and Caribbean	35
Total	**153**

Survey approach and scope

DOs were surveyed regarding their current implementation status across 90 digital services spanning six distinct digital service categories:

- Digital postal services (10 services)
- E-commerce (17)
- Digital financial services (14)
- Digital government services (23)
- Digital health services (11)
- Digital connectivity services and solutions (15)

Rather than simply assessing service availability, the survey adopted a more detailed approach. DOs were asked first to indicate whether they consider themselves providers of five categories of digital services (digital postal services, e-commerce, digital financial services, digital government services, and digital health services). They were then asked to specify their exact stage of implementation for each of the 90 individual digital services. Specifically, for each service, DOs reported whether it was:

- currently offered;
- currently under development;
- being considered;
- previously considered but disregarded;
- previously offered but discontinued;
- never considered.

Additionally, DOs provided information about the channels used for delivering four categories of digital services: digital postal services, digital financial services, digital government services, and digital health services. For these four service categories, DOs were asked whether the overall group of services was delivered:

- in person at post office counters
- online through a mobile app or website
- at the service recipient's doorstep through delivery staff
- through an electronic kiosk or advanced ATM-like machine made available for public use

This comprehensive survey approach enabled the report not only to identify which digital services DOs currently provide but also to offer deeper insights into:

Demand: which digital services are actively being considered or developed by DOs

Effectiveness and value: which digital services demonstrate sustained adoption or "stickiness"

The sector's contribution to inclusive multi-channel delivery: the extent to which digital services across various sectors are provided inclusively through postal infrastructure, using both in-person and digitally enabled delivery channels

Limitations of survey methodology

This report is subject to several limitations. Firstly, although it captures the current implementation status of digital services offered by DOs, the report does not assess the quality of services offered. Additionally, it does not evaluate the extent to which digital services are consistently available across all post offices or geographical areas served by a given DO. Consequently, the report may overestimate the actual inclusivity of digitally enabled services delivered through postal infrastructures – particularly if a significant number of rural post offices operated by DOs offering digital services remain unconnected to the internet, or if services are available only at selected locations. Currently, no comprehensive data exists to accurately determine which post offices have internet connectivity or which digital services are offered at individual locations. Addressing this critical knowledge gap will require the creation of a global map providing the geolocation of each post office and its level of connectivity.

There are also limitations related to some of the terminology used in the survey questionnaire informing this report. Specifically, DOs that are not currently implementing a given digital service were given the option to indicate if they were "considering" it. However, the term "considering" is inherently vague, as it could encompass a wide range of scenarios – from DOs that are actively planning implementation to those that may have simply mentioned or briefly discussed the service in internal meetings. This ambiguity makes it challenging to accurately gauge the true level of commitment or intent among DOs reporting consideration of specific digital services. Thus, we may be overestimating levels of demand for digital services.

This version of the survey was conducted for the first time, and the research team aimed to identify cases where a digital service was previously offered by a DO but later discontinued. Consequently, an explicit option to indicate discontinued services was included. However, there is a potential risk of recall bias, as respondents may forget services that their organization discontinued or decided against, especially if these decisions occurred in the distant past. As a result, the survey findings may underestimate the true number of DOs who have discontinued digital services or decided against their implementation after initial consideration. Likewise, the survey could overestimate the number of DOs that have never considered specific digital services. To address this bias in future iterations, subsequent versions of the survey will include previously completed responses for each organization, helping respondents more easily recall past decisions more accurately.

Although this survey sought to capture the extent to which DOs provide multi-channel delivery of digital services, it likely underestimates the postal sector's actual role, especially for services offered on behalf of external entities (e.g., government and private financial institutions). In practice, DOs may only be responsible for delivering digitally enabled services through specific channels rather than all channels. Additionally, some digital service delivery channels, such as call centres, have been unintentionally excluded from the survey because they were identified too late. Future iterations of the survey will aim to address these limitations, providing a more comprehensive assessment.

The digital service categories and specific services covered in this survey are illustrative rather than exhaustive. While postal networks have traditionally focused on letters and parcels, their infrastructure is inherently adaptable and can support a diverse array of services. Consequently, DOs may currently offer digital services not captured by this report. Moving forward, the research team will proactively identify additional existing or promising digital services that may be offered via the postal infrastructure, continuously updating and refining the list to better reflect emerging trends and innovations in subsequent reports. For example, the research team has identified digital environmental services and solutions as a key service category that should be included in the next iteration of the survey.

Structure of the report

This report consists of 10 main sections. This introduction is followed by an overview providing general insights from the survey and framing national postal networks as an underutilized and overlooked resource for facilitating inclusive digital transformations. Sections 3 through 8 focus on categories of digital services (e-commerce, digital financial services, digital government services, digital connectivity services, digital health services and digital postal services, respectively), including their potential impacts and how the postal sector can contribute to economic, social, financial and digital inclusion through the provision of these services. Most importantly, these sections also provide an overview of the current state of provision of these digital services by DOs across the world. Section 9 provides a non-exhaustive overview of the support the UPU provides governments, DOs, and other actors in leveraging postal infrastructure for inclusive digital transformations. The final section concludes the report and provides recommendations to a wide range of stakeholders.

The main body of the report is followed by an appendix that contains additional analyses and supporting material that were not included in the main sections in order to maintain narrative flow and readability. The appendix begins with a detailed regional breakdown of DO service provision across the six main digital service categories covered in the report – e-commerce, digital financial services, digital government services, digital connectivity services and solutions, digital health services, and digital postal services – as well as across all 90 individual services included in the survey. The second section of the appendix highlights 49 digital services identified as particularly promising, based on both moderate or high adoption levels and strong retention rates among DOs currently offering them. The final section of the appendix, entitled "technology radar", provides a glimpse of DO interest in emerging technologies.

SECTION 2

OVERVIEW

2.1 PROMOTING INCLUSIVE DIGITAL TRANSFORMATIONS THROUGH DIGITAL SERVICES OFFERED BY POSTS

Promoting digital, social, and economic inclusion through the postal sector

Across every sector of the economy and society, digital transformation is reshaping how we work, learn, interact, and access essential services – a trend accelerated by the COVID-19 pandemic and still gaining momentum today (UNCTAD, 2023a). In our increasingly digital world, access to digital services and opportunities like e-commerce, e-government, digital financial services, and remote work and education are no longer a luxury. Digital engagement is becoming essential for full participation in society and the economy. Citizens are increasingly expected to engage with service providers and access opportunities online, making digital inclusion more critical than ever. When managed with the needs and realities of less connected groups in mind, digital transformations can extend the reach of services and opportunities to historically underserved groups while reducing costs and improving efficiency for governments and essential service providers.

Persistent digital divides limit inclusivity

Despite these possibilities, persistent digital divides between and within countries often result in the benefits of digital transformations not being shared equally. In 2024, 2.6 billion people did not use the internet at least once every three months, with individuals in low- and middle-income countries, rural and remote areas, women, the elderly, and other marginalized groups disproportionately unconnected (ITU, 2024). Moreover, even when marginalized groups have some access to the internet, they are less likely to be meaningfully connected in a way that enables access to essential digital services and opportunities because they often access the internet too infrequently or lack internet-enabled devices, sufficient data, reliable high-speed connections, economic resources, or the digital skills necessary for a "safe, satisfying, enriching, and productive online experience at an affordable cost" (A4AI, 2022; United Nations Office of the Secretary-General's Envoy on Technology and ITU, 2021, p. 2).

Leveraging the postal network as digital public infrastructure for inclusive digital services

Posts are well positioned to boost inclusion for less connected groups in the digital economy and society. The postal network is the world's most extensive retail service network, reaching rural and remote areas where other service providers often struggle to maintain a presence or choose not to operate. In many remote villages, the post office is the only government-affiliated service access point and serves as a key centre for social interaction. Moreover, designated operators (DOs) often rank among the most trusted government-affiliated institutions in many countries, enabling them to effectively deliver critical services even in communities typically sceptical of digital or financial service providers. Furthermore, the postal network's customer base includes many of the marginalized groups that are less likely to be online – such as women, the elderly, and others

who depend on it for a diverse array of services, including financial services. By offering digital services – or better yet, transforming post offices into one-stop digital service hubs or citizen service centres – DOs can significantly enhance digital, social, and economic inclusion while also improving their competitiveness through service portfolio and revenue stream diversification. This report argues that national postal networks are uniquely placed to enable social, economic, financial, and digital inclusion at scale.

The global postal network is uniquely positioned not only as existing physical infrastructure but also as foundational Digital Public Infrastructure (DPI) – shared digital infrastructure enabling the effective provision of essential services in both the public and private sectors. DPI is composed of modular and interoperable digital building blocks designed to streamline service delivery, reduce duplication, and enhance interoperability across sectors (Digital Public Goods Alliance, 2022). However, current DPI initiatives lack explicit mechanisms to mitigate the exclusion of individuals who face barriers in accessing or using digital technology. Leveraging the postal network as a form of "phygital" infrastructure (UPU, 2024) – integrating physical and digital service delivery – can fill this critical gap by serving as the inclusive layer of DPI. Digitally upgrading postal infrastructure thus provides a scalable solution for governments and service providers to ensure equitable access to essential digital services, especially for underserved populations and remote communities. The Posts' longstanding function as trusted retail service outlets – the majority of which are located in rural areas – makes them ideal for expanding the reach of digital services to underserved communities. Their existing infrastructure and operational capacity make them especially well-suited to deliver additional essential digitally enabled services with minimal adaptation once connected and equipped with DPI building blocks.

Current DO contributions to inclusive digital transformations

This report finds that DOs are already leveraging their extensive networks and trusted positions in their communities to promote economic, social, financial and digital inclusion through digital services. **Indeed, 71% of DOs offer e-commerce services** that foster the inclusion of micro, small and medium enterprises (MSMEs) in e-commerce value chains. These services support the growth of e-commerce in their respective countries and promote the inclusion of MSMEs by removing barriers to entry and friction to selling more online. E-commerce services offered by DOs enhance convenience and build trust for both e-commerce merchants and buyers. Many DOs offer delivery options that cater to customers' evolving online shopping needs and busy lifestyles, including pick-up and drop-off (PUDO) points, parcel lockers, returns solutions, and on-demand delivery. Some DOs also help MSMEs reduce warehousing challenges and costs by bringing them closer to their end customers through e-commerce fulfilment and on-demand warehousing. Additionally, some DOs have begun offering financing solutions – such as payment-on-delivery and escrow services – that help mitigate risks for buyers and sellers. Some DOs now support MSMEs with actionable insights through intelligence tools like performance reports and inventory forecasting, allowing them to make evidence-based decisions.

In all, 58% of DOs offer digital financial services that promote the financial inclusion of marginalized groups and MSMEs, enabling them to transact in the digital economy and expanding access to credit and insurance. Financial accounts offered by DOs are allowing their customers to make payments and manage their postal banking accounts online. Many DOs offer secure third-party online bill payment services, allowing customers living in rural areas to pay their bills without having to incur travel fees. Many DOs facilitate electronic remittances, thus contributing to

More than half of DOs now offer digital government services that help bridge the gap between citizens and government, ensuring that less connected groups can access public services that have been digitalized.

economic growth and the flow of capital to less developed countries and rural areas. Additionally, many DOs offer essential digital payment instruments, such as debit cards, credit cards, and ATMs. Posts are also offering digital financial services that help protect the well-being and livelihoods of marginalized and vulnerable groups. Some DOs enhance access to social protection disbursements by enabling direct deposits of social protection payments into customer accounts, while some also help shield customers from external economic shocks through digital insurance products.

More than half of DOs now offer digital government services that help bridge the gap between citizens and government, ensuring that less connected groups can access public services that have been digitalized. In many countries, citizens can use the postal network to make digital payments to government agencies and utility companies. Some DOs also provide nationally recognized identity services that facilitate engagement across sectors – such as opening bank accounts, registering SIM cards, and accessing government benefits. Additionally, some DOs offer services that enable citizens to obtain vital official certificates (e.g., birth, marriage, death, or change of address certificates) as well as applications for international travel documents like visas and passports. A few DOs even support domestic mobility by facilitating driver's licence applications and motor vehicle registration. Some further promote the growth of MSMEs by assisting with business registration, licensing, and e procurement processes.

Many DOs are also playing a direct role in expanding the availability and uptake of digital technologies in the communities they serve through the provision of connectivity services and solutions. Indeed, **70% of DOs are offering at least one of the digital connectivity services or solutions** captured by the survey.[3] Some DOs are promoting the functioning and reach of digital infrastructure in underserved areas through services provided to telecommunications companies, like co-location of telecommunications infrastructure and spectrum monitoring. Many DOs are directly helping their customers and surrounding communities get online through the provision of internet inside and outside of post offices. Some DOs are providing digital equipment – both for public use and through direct sales – that enables customers and communities to access the internet. A small number of DOs are providing digital skills training to citizens and businesses. A few DOs are even setting up or operating their own digital connectivity infrastructure and acting as internet service providers. There are also signs that DOs are supporting community networks in remote and low-income areas where traditional internet provision is less profitable.

Key limitations hindering the postal sector from more fully contributing to inclusive digital transformations

While the high percentages of DOs reporting being providers of digital services across e-commerce, financial inclusion, e-government, and digital connectivity might seem promising, these figures conceal three significant limitations. Firstly, most DOs are not providing a broad range of digital services within each category. For instance, although 71% of DOs see themselves as providers of e-commerce services, only one out of 17 specific e-commerce services – online customs declarations – is provided by more than half of DOs, and only three services are available from at least 40%. Similarly, even though 58% of DOs see themselves as providers of financial services, only three of the 14 digital financial services are offered by over 40% of DOs. The trend continues in digital government services, where, despite more than half of DOs seeing themselves as providers of such services overall, only two out of 23 individual services are available from more than 20% of DOs. In the case of connectivity solutions, even though 71% of DOs provide at least one service, only four of the 15 surveyed digital services are offered by more than 20% of DOs. As a result, while the broad category coverage appears high, the limited range of offerings within digital service categories restricts the potential impact of DOs on economic, social, financial, and digital inclusion. **Unless DOs begin to offer a wider range of digital services within these categories, the sector's overall contribution to such inclusion will remain limited.**

Secondly, regional disparities remain evident in the range and depth of digital services provided by DOs, with countries in the regions where citizens could benefit most from the postal network's inclusive infrastructure – areas marked by lower levels of e-commerce, financial inclusion, e-government development, and digital connectivity – being the very places where these digital services are most scarce. DOs from the Arab, Asia and Pacific, Africa, and Latin America and Caribbean regions are least likely to offer e-commerce services. DOs from the Latin America and Caribbean and the Asia and Pacific regions are least likely to offer digital financial services. Similarly, DOs from the Latin America and Caribbean, Africa, and Asia Pacific regions lag behind in regards to e-government service provision. Simultaneously, DOs from developing regions that offer digital services also tend to offer a narrower range of e-commerce services, digital financial services,

3 This percentage differs from other digital service types owing to a variation in measurement methodology. While other categories were assessed based on DOs' self-identification as strategic service providers, the digital connectivity figure encompasses all DOs offering any related services, regardless of strategic intent. This broader approach was necessitated by the absence of a specific survey question asking DOs if they considered themselves providers of digital connectivity services, similar to those used for other categories.

BOX 1

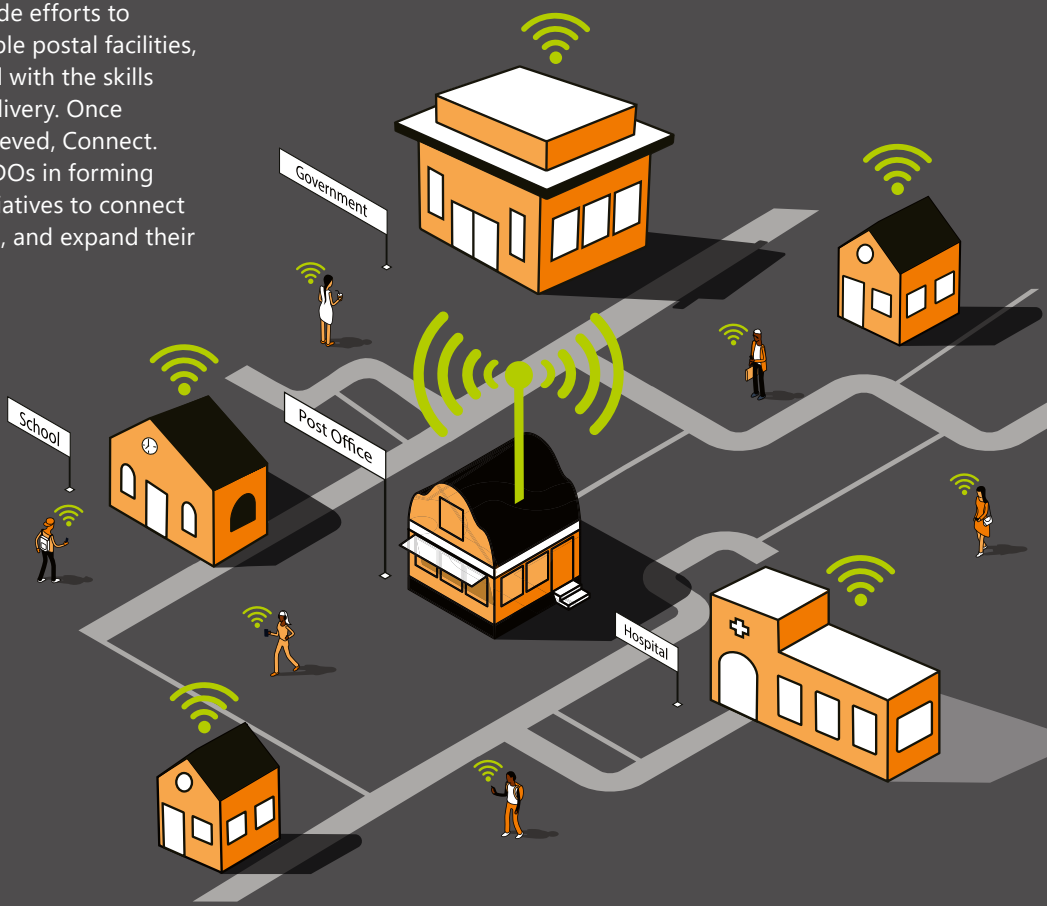
Connect.post – Advancing inclusive digital transformation through the postal network

Connect.post is the UPU's flagship initiative to ensure that the postal network plays a central role in advancing inclusive and sustainable digital transformation. The programme's core mission is to connect every post office to the internet by 2030 – and to leverage this connectivity to deliver digitally enabled services that empower underserved and under-connected communities. By transforming connected post offices into local one-stop-shop citizen service centres for digital inclusion, Connect.post aims to bridge digital divides while expanding public access to digital government services, e-commerce, and financial inclusion opportunities while helping governments and development actors achieve public policy objectives.

The project's implementation strategy follows a multi-phase approach. In its current phase, Connect.post is mapping post office locations and internet connectivity levels, developing country-specific assessments, and gathering evidence on where and how postal networks are already contributing to inclusive digital development. These insights will guide efforts to upgrade infrastructure, digitally enable postal facilities, and ensure postal staff are equipped with the skills needed to support digital service delivery. Once foundational digital readiness is achieved, Connect.post will support governments and DOs in forming partnerships and launching pilot initiatives to connect post offices, diversify digital services, and expand their reach through the postal network.

More than just a digital infrastructure project, Connect.post is also a public policy platform for inclusive digital transformation. It seeks to help governments – especially in low- and middle-income countries – fully leverage their existing postal networks to deliver digital services in ways that are equitable, green, and sustainable. The initiative is currently mobilizing resources, promoting cross-sector partnerships, and building a global coalition of stakeholders committed to ensuring that digital transformation leaves no one behind.

For more information, please contact **connect.post@upu.int** or visit **www.connect.post**.



e-government services, and connectivity solutions. This suggests that DOs from developing regions are making smaller contributions to the economic, financial, social, and digital inclusion of their countries through their digital service portfolios. **Unless these regional disparities are reversed, the inclusivity contributions of the postal sector will remain unequal and the sector will not be leveraged to its full potential.**

Thirdly, there are likely to be significant disparities in digital service provision within countries, resulting in some DOs not being able to offer all of their digitally enabled services across their entire networks to all customers. Recent UPU estimates suggest that around 100,000 post offices (nearly 1 in 6) are not connected to the internet, a necessary – but in itself insufficient – condition to providing digital services at post office counters to the communities they serve. Unfortunately, post offices are less likely to be connected in low- and middle-income countries, where offering digital services would have the most transformative inclusion impacts. Moreover, in countries where a portion of the post offices are connected and others are not, the parts of the country where digitally enabled services via the Post would have the most transformative potential (rural, remote, and underdeveloped areas) are also less likely to benefit from connected post offices. To fully realize the sector's potential for advancing economic, financial, social, and digital inclusion, it is essential to prioritize connecting all post offices, especially those in low- and middle-income regions and rural areas.

An overlooked opportunity

Nonetheless, there is great potential for the sector to make greater contributions to economic, financial, social, and digital inclusion. However, the sector's potential is being grossly overlooked by the international community and other stakeholders who share a vision of fostering inclusive national digital transformations. Perhaps the most illustrative example is the sector's omission from the Global Digital Compact's Objective 1, which relates to closing digital divides and accelerating progress across the SDGs and which commits to "map and connect all schools and hospitals to the Internet" by 2030 but makes no mention of post offices (United Nations, 2024, p. 3). Moreover, the sector's potential role in advancing inclusive access to services in individual sectors is also largely overlooked. For example, the 2024 United Nations E-Government Survey report, which provides insights on the provision of e-government across the world and trends in e-government service delivery, is 204 pages long and does not mention the sector despite the report calling for "a hybrid digital society where electronic technologies and human interactions coexist and should be complementary", and its assertion that "digital services should complement rather than replace human interaction" (UN DESA, 2024, p. 127), areas in which the Post can contribute as the data and many examples in this report highlight. The previous edition of the e-government survey mentioned the Post as one of several in-person alternatives to accessing digital services, including kiosks, community centres and libraries, but did not provide any examples or details about the potential role of the Post (UN DESA, 2022). The postal sector's omission from the latest e-government survey is surprising given that our survey found that more than half of DOs consider themselves providers of e-government services on behalf of their national governments. This report helps fill this gap by highlighting how Posts are already playing this inclusivity role across multiple sectors. Moreover, the report argues that there is an opportunity to further amplify this role by recognizing the postal infrastructure as a potential inclusivity layer for digital public infrastructure.

2.1.1 INCLUSION BY DESIGN TO LEAVE NO ONE BEHIND

Decades of development practice and research illustrate that it is possible to improve development outcomes for the majority while excluding – thus leaving behind – marginalized groups and increasing inequality. For example, the global community made significant strides toward achieving the Millennium Development Goals (MDGs) between 2000 and 2015. During this period, we successfully halved the proportion of people living in extreme poverty and significantly reduced child mortality rates. Considerable progress was also achieved in reducing maternal mortality, combating infectious diseases, and improving access to safe drinking water, among other targets. However, from an inclusion perspective, the MDGs contained a critical flaw. Aggregate targets, such as halving extreme poverty, created incentives for governments and development organizations to focus on reaching populations that were easiest to help – those closest to the poverty line or already within easier reach for essential service providers (Stuart and Samman, 2017; UNICEF, 2015). Consequently, the needs of the most marginalized and hardest to reach groups were frequently inadvertently neglected. This approach enabled targets to be met at the cost of widening inequalities between the poorest, most vulnerable segments of society and the rest of the population. Recognizing this shortcoming, the Sustainable Development Goals (SDGs) explicitly incorporate the principle of "Leaving No One Behind," prioritizing efforts to first reach those who are most marginalized or the hardest to reach. As global efforts increasingly leverage digital tools, lessons from past initiatives can inform more inclusive digital strategies that explicitly address digital divides and exclusion, and barriers faced by marginalized groups.

Although digital access has expanded globally, the adoption of digital devices and internet services remains uneven – disproportionately benefiting populations that are already better connected, more resourced, and easier to reach. Consequently, initiatives relying exclusively on digital technologies to expand services and opportunities risk disproportionately benefiting the "low-hanging fruit," rather than prioritizing underserved communities (Hernandez and Roberts, 2018). In other words, although digital only service delivery can enable service providers to reach more people efficiently and cost effectively, it does not inherently guarantee inclusivity, particularly for marginalized groups who need essential services most but typically have less access to essential technology infrastructure, connectivity, devices, or digital skills.

After decades of evidence demonstrating that approaches prioritizing digital channels tend to exclude marginalized populations, the 2022 E-Government Survey report called for a fundamental shift in how digital government services are designed. The report argued that widely adopted design principles – such as "digital by default", "digital first", and "digital only" – often overlook issues of accessibility and usability among user groups with diverse needs, especially marginalized, rural, and remote communities. Instead, the report recommended adopting principles of "inclusion by design, "inclusion by default", and "inclusion first" (UN DESA, 2022). Such approaches focus on meeting the diverse needs of all citizens, particularly underserved, marginalized, and vulnerable groups. This requires an acknowledgement that digital exclusion exists and using this realization as an opportunity to innovate and place diverse human needs – including those of the least connected – at the centre of service design.

Effectively implementing inclusion by design principles therefore requires careful consideration of service delivery models. Multi-channel and hybrid approaches have emerged as best practices to operationalize these principles and ensure universal accessibility (UN DESA, 2022, 2023, 2024).

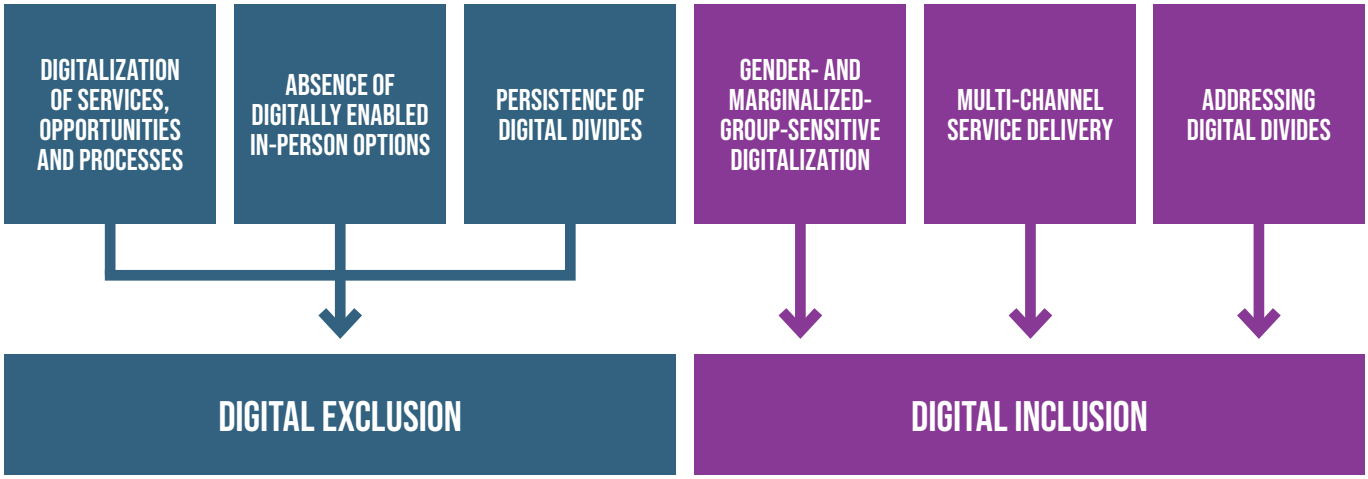
Digital exclusion emerges when existing digital divides are compounded by digitalization strategies that fail to address the specific circumstances and requirements of less connected populations

Understanding digital exclusion

While ongoing digital transformation holds significant potential in expanding digital services, there is broad consensus that rapid digitalization, when paired with persistent digital divides, risks deepening inequalities and further marginalizing vulnerable groups (A4AI, 2022; ITU, 2022; UN DESA, 2024; UNDP, 2019; World Bank, 2016). To fully operationalize inclusion by design, it is essential to clearly understand the mechanisms and drivers behind digital exclusion. Although the terms digital divide and digital inclusion/exclusion are often used interchangeably, they represent distinct yet interrelated concepts. The **digital divide** specifically refers to gaps in access to and ownership of digital technologies, as well as disparities in digital skills. In contrast, **digital in/exclusion** encompasses the broader issue of whether individuals can effectively participate in society and the economy as services, interactions, and processes become increasingly digitalized (Helsper, 2012; Hernandez et al., 2024; Martin et al., 2016; Schejter et al., 2015; Warren, 2007).

As highlighted by a report from the Food and Agriculture Organization (FAO), the mere presence of digi-talization and digital divides does not inherently exclude marginalized groups. Rather, digital exclusion emerges when existing digital divides are compounded by digitalization strategies that fail to address the specific circumstances and requirements of less connected populations (e.g., their current levels of technology access and skills), combined with the absence of digitally enabled in-person options to access services and opportunities that have been digitalized (Hernandez et al., 2024). Providing hybrid or multi-channel service delivery, whereby less digitally connected individuals can access digital processes, opportunities, and services in physical spaces, significantly reduces the risk of exclusion. In practical terms, digitally enabled in-person options – such as making digital services available at post office counters – facilitate the ongoing participation of individuals lacking digital technology or skills, thereby mitigating their exclusion from the digital economy and broader society. The following figure from the aforementioned FAO report illustrates the core drivers of digital exclusion and effective strategies for fostering digital inclusion.

Figure 3: **The three factors that lead to digital exclusion when combined and how to promote digital inclusion (Hernandez et al., 2024)**



The need for multi-channel service delivery

Unfortunately, as noted by Philip Alston, former United Nations Special Rapporteur on extreme poverty and human rights (2014–2020), multi-channel service delivery remains the exception rather than the norm. Despite good intentions, many governments and service providers have historically adopted "digital by default" or "digital first" strategies, frequently evolving into "digital only" approaches that disproportionately exclude marginalized groups (Alston, 2019). This has led inclusion-conscious digital transformation experts to advocate for a "multi-channel by default" approach, which combines online service options with digitally enabled physical alternatives – such as in-person service centres and phone-based support – that do not require recipients to directly engage with digital technology, thereby fostering greater inclusivity (Peixoto and Cordova, 2019; UN DESA, 2022, 2023). Many service providers aiming to achieve universal service provision have learned this lesson the hard way. The 2023 United Nations World Public Sector Report found that many governments have begun shifting to "inclusion by design" strategies after having recognized the limitations of their previous "digital only" and "digital by default" approaches. The report concluded that "A just and inclusive digital transformation that leaves no one behind includes hybrid models of service delivery. Blended or multi-channel service delivery that coordinates and integrates online and offline options allows [service providers] to provide a seamless experience for all users, including those in underserviced areas and vulnerable groups" (UN DESA, 2023, p. 134). As evidenced in the example from Italy in the box below and many others across this report, Posts are well placed to play a central role in facilitating inclusivity through multi-channel service delivery.

"Multi-channel by default" approach, which combines online service options with digitally enabled physical alternatives – such as in-person service centres and phone-based support – that do not require recipients to directly engage with digital technology, thereby fostering greater inclusivity

BOX 2

Poste Italiane's Polis project – a government-mandated driver of inclusive digital transformation

Italy's Polis project, launched by Poste Italiane in 2023, exemplifies how a national designated postal operator can be strategically leveraged to advance inclusive digital transformation. Introduced as part of Italy's COVID-19 recovery and resilience plan, the project aims to overcome urban–rural disparities by transforming approximately 7,000 rural post offices into one-stop-shop service centres for government services (known as Sportello Unico) and co-locating them with green infrastructure. Through the project, Poste Italiane enables multi-channel access to digital public services – including through post office counters, electronic kiosks, ATMs with advanced functionality, mobile apps, and a call centre – ensuring that residents can interact with essential services regardless of digital access or skills.

The project is backed by a legal obligation under Italy's "Programme Agreement 2020–2024," which mandates Poste Italiane to promote digital inclusion, particularly in underserved areas. This agreement recognizes the postal network's "capillarity" – its vast and equitable reach across the country – as a national asset for bridging the digital divide. Through Polis, Poste Italiane delivers digital government services such as passport applications, social security documentation, digital ID, and vital records issuance. As of early 2024, over 1,190 post offices had already been upgraded to deliver these services.

Polis is also contributing to Italy's green and digital "twin transition" by integrating solar panels, smart building systems, and EV charging stations into its post office upgrades. The initiative is projected to reach 15 million residents, including 6 million elderly citizens, and generate over €1 billion in GDP by 2031. Additionally, the project includes the creation of 250 co-working and digital training spaces (Spazi per l'Italia), many of them co-located within upgraded post offices. These spaces are especially beneficial for MSMEs in rural areas, where high-speed internet and shared work environments are often lacking. By combining digital government service delivery with e commerce, financial services, and local innovation spaces, Poste Italiane showcases how a trusted postal operator can act as a public platform for digital inclusion, sustainability, and territorial cohesion.

Citizen service centres: a model for inclusive service delivery

In-person digital service points, commonly referred to as "citizen service centres", "one-stop shops", or "multi-function service centres", where service recipients can access digital services from multiple service providers with the help of trained staff, are often key components of multi-channel service delivery models (OECD, 2020b; World Bank, 2017a). There is no one-size-fits-all model to service centre network design and composition. While some governments and essential service providers have introduced entirely new networks of digital service centres consisting of new buildings and infrastructure, others have leveraged existing physical networks, including community centres, post offices, libraries, or other public spaces, or combined new with existing infrastructure (OECD, 2020b; UN DESA, 2022). When well implemented, these in-person options enable service providers to enhance service delivery, improve efficiency, reduce costs, and curtail petty corruption. For citizens, one-stop shops make essential services more accessible, convenient, and affordable, significantly reducing both monetary and time-related costs previously incurred when making many trips to the offices of multiple essential service providers.

Leveraging postal networks for multi-channel service delivery

As the above examples from Italy, Kenya and Czechia highlight, post office networks provide a promising existing platform on which to establish or expand the reach of citizen service centre networks and help overcome a major issue that governments and service providers encounter when setting up physical one-stop shop networks. Non-postal citizen service centres tend to be concentrated in urban or densely populated areas and within communities with high purchasing power, leaving rural communities and marginalized groups underserved with no in-person digitally enabled service access points within their immediate vicinity (Hernandez et al., 2024). Extending these facilities to underserved regions and groups remains a challenge owing to high costs and limited financial returns on investment, especially when one-stop shop networks require the construction of many new buildings. The global postal network, with its over 650,000 post offices buildings – the majority of which are located in rural areas – and millions of postal delivery staff and vehicles, is well placed to enable cost-effective national digital transformations that are inclusionary by design. Our analysis finds that DOs are already playing a crucial role in supporting national-level citizen participation in the digital economy and society by providing multiple access points for digitally enabled services. Multi-channel approaches implemented and supported by DOs include, but are not limited to:

- access to digital services at post office counters with assistance from postal staff
- digital equipment installed in post offices like advanced ATMs or electronic kiosks that customers can use to access services on their own
- online services through websites and/or apps
- digital services provided at customers' doorsteps through delivery staff

HOW CITIZENS ACCESS DIGITAL SERVICES VIA POSTAL INFRASTRUCTURE

Post office counter

Delivery Staff

Electronic kiosk or advanced ATM

Website or Mobile App

BOX 3

Kenya's Huduma centres – Leveraging postal infrastructure for inclusive service delivery

Kenya's Huduma centres were introduced by the government in 2013 to improve citizens' access to public services by consolidating multiple government services under one roof. These centres are designed to serve all Kenyan citizens in a responsive and people-centric manner, particularly benefiting rural populations and underserved communities previously facing significant barriers to accessing essential services. Huduma centres offer 73 critical digital government services from up to 55 government agencies, including national identification, business registration, health insurance, social security, and various licences and permits, aiming to enhance efficiency, reduce bureaucracy, and significantly improve citizen satisfaction.

Rather than building entirely new facilities, the Kenyan government strategically leveraged existing postal infrastructure by digitally upgrading selected post offices into Huduma centres. Utilizing these pre existing locations, buildings, and Posta Kenya's payment systems considerably reduced costs and expedited the initiative's nationwide rollout. Although Huduma centres are not exclusively located within postal facilities, the incorporation of postal infrastructure has been strategic for extending geographic reach, particularly into remote and rural areas. Huduma centres are complemented by and integrated with "eCitizen", an online platform where people can access services and pay for public services.

Leveraging postal infrastructure has provided additional benefits beyond cost savings, including capitalizing on the postal network's familiarity and community trust, utilizing existing customer-service-trained postal personnel, and making use of already established financial transaction systems. Thus, by digitally upgrading and repurposing existing postal assets, the Huduma Centre initiative has significantly improved government service accessibility and convenience, demonstrating an inclusive, efficient, and cost-effective approach to digital public service delivery.

Czech POINT – Leveraging postal infrastructure to extend in-person e-government services

Czech POINT (Czech Submission Verification Information National Terminal) is a national e-government initiative launched in 2007 to streamline and centralize access to a wide range of public administration services. It provides citizens and businesses with a single, convenient point of contact for obtaining official documents, verifying identities, and submitting applications – reducing bureaucratic complexity and enhancing administrative efficiency. Services available at Czech POINTs include access to official records (such as criminal or land registry extracts), conversion of documents into certified digital or printed formats, and assistance with using secure government communication tools.

To maximize reach and accessibility, Czech POINT services are embedded into a wide array of existing infrastructures, including municipal government offices, registry offices, Czech embassies for citizens living abroad, and notably, Czech Post offices. The initiative boasts more than 7,000 contact points across the country and abroad. While recent figures are limited, by 2017, 980 Czech Post branches were already hosting Czech POINT services – making the postal network the second largest host after local government offices. This strategic use of post offices has been especially valuable in ensuring geographic equity, bringing services closer to citizens in areas where municipal buildings may be scarce or far away.

The government's partnership with Czech Post leverages the postal network's trusted status, nationwide coverage, existing infrastructure, and trained staff to extend the reach of e-government. This model illustrates how integrating traditional public service infrastructure into digital transformation strategies can improve accessibility, reduce costs, and strengthen inclusive service delivery.

The triple-win potential of postal-based multi-channel service delivery

Hosting one-stop-shop service centres at post offices represents a potential triple-win situation for governments, citizens, and DOs. In many countries, post offices are the most extensive and far-reaching physical retail network, often maintaining a presence in underserved and remote areas where communities are less likely to be online. Leveraging this extensive postal infrastructure for the multi channel delivery of digitally enabled essential services can:

- ensure that people on the wrong side of the digital divide are not excluded from accessing essential services as societies and economies undergo digital transformations, by providing less connected groups with a physical place where they can receive assistance in accessing digital services
- provide citizens with greater choice and flexibility regarding how they engage with essential service providers, including for well-connected citizens who may prefer face to face interaction
- reduce costs related to constructing, establishing, and maintaining physical one-stop shops for governments and essential service providers interested in geographically and socially inclusive digital service provision
- help governments and service providers reach segments of the population already served by postal networks that may otherwise be difficult to reach
- help DOs remain competitive by diversifying their revenue streams, thus reducing their reliance on government subsidies

Leveraging the Post for multi-channel service delivery is especially promising for reaching marginalized groups that have traditionally had less access to digital technologies and digital services. This includes rural areas, where DOs have a strong footprint and residents are less likely to be online. It is also beneficial for elderly populations, a group that tends to lack access to digital technology, is hindered by low levels of digital skills, disproportionately visits post offices, and may prefer in-person assistance when accessing digital services. This approach is also beneficial for women in lower middle income countries (LMICs), especially in countries with restrictive social norms. For example, research shows that women in many LMICs are more likely to access digital services and digital literacy training when they are located near where they live – a major barrier for women living in rural areas – or at places where women already routinely visit (FAO, 2018), like post offices. Moreover, groups experiencing unique mobility constraints, such as those living with disabilities or who live in the most remote areas where not even post offices are accessible, can benefit from digital services offered through delivery staff.

2.1.2 THE POST AS A BUILDING BLOCK FOR DIGITAL PUBLIC INFRASTRUCTURE

Digitalization has the potential to accelerate synergistic development both within and across sectors, if managed effectively. However, it often occurs in silos, with separate organizations – and sometimes even departments within the same organization – developing their own systems independently. This fragmented approach leads to duplicated efforts, wasted resources, and systems that are unable to interoperate or integrate with one another. These inefficiencies often end up requiring additional – and costly – efforts when governments aim to establish cross-government digital portals or when organizations, both public and private, seek to collaborate and share data about customers, stakeholders, or beneficiaries. To overcome these challenges, many stakeholders now advocate for the development of Digital Public Infrastructure (DPI).

DPI refers to "solutions and systems that enable the effective provision of essential society-wide functions and services in the public and private sectors" (Digital Public Goods Alliance, 2022, p. 1). In practice, DPI consists of shared digital infrastructure that is accessible to all sectors of society. By leveraging common foundational components, organizations can develop digital tools more quickly and efficiently, and ensure greater interoperability, scalability, and collaboration.

At the core of DPI are generic, interoperable, digital building blocks – modular solutions designed to deliver services at scale and be reused across multiple use cases and sectors (Digital Public Goods Alliance, 2022, p. 2). These foundational components support cross-sector functions such as registration, identification, payments, data sharing, and notifications. Each serves a broadly applicable purpose required by most systems deployed across sectors and organizations. For example:

Registration enables the onboarding of new service recipients.

Identification systems help service providers verify that resources are reaching the intended individuals and that their internal systems are only accessed by authorized individuals.

Payment systems facilitate the secure transfer of funds.

Data sharing ensures records remain accurate and up to date across systems.

Notifications keep relevant stakeholders informed in real time.

While these building blocks support core digital functionality, there is currently no standard DPI building block designed to ensure the inclusion of individuals who lack access to digital technology or who might not feel comfortable making use of it. This represents a critical gap in the digital ecosystem.

The global postal network – given its widespread physical presence, longstanding public trust, and existent infrastructure (e.g., payment systems, retail service outlets, delivery vehicles, etc.) – is well positioned to serve as the inclusion layer of DPI, or what a recently published UPU report called "phygital public infrastructure" (UPU, 2024).

DOs have a mandate to fulfil the universal service obligation, which ensures a presence in under resourced and remote areas, precisely where digital exclusion tends to be most acute. Like other digital building blocks, postal infrastructure – once digitally upgraded and embedded with the other digital building blocks mentioned above – can be leveraged across multiple organizations to help solve cross-sector challenges, particularly by enabling the equitable reach of digital services in rural and underserved geographies. In this way, postal networks can intentionally function as a public-good platform that reinforces the inclusivity of digital transformation efforts through partnerships with other service providers. Moreover, given the modular nature of DPI, empowering national postal networks to become DPI building blocks would allow multiple public and private service providers to easily integrate their services into the postal network in the future to reach more people within countries.

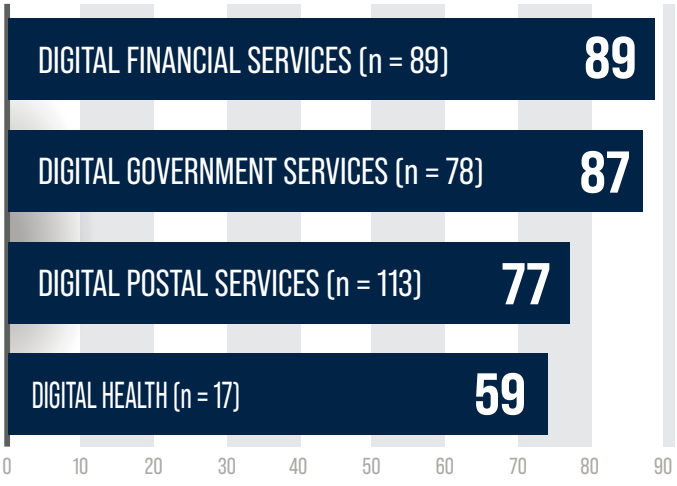
There is currently no standard DPI building block designed to ensure the inclusion of individuals who lack access to digital technology or who might not feel comfortable making use of it. The global postal network is well positioned to serve as the inclusion layer of DPI.

2.1.3 DIGITALLY ENABLED SERVICE PROVISION AT POST OFFICE COUNTERS[4]

The survey results revealed that the post office counter is the most widely offered service delivery channel for all digital service types, with the exception of digital postal services. This finding highlights the inclusive and empowering role DOs are playing in the digital economies and digital societies of their respective countries through non-postal digital services. By offering digitally enabled financial, government, and health services at post office counters, DOs ensure that less connected groups have in person access to essential digital services they might otherwise be unable to benefit from. Additionally, this approach provides citizens with greater flexibility and choice in how they engage with essential service providers.

Although common across the world, there is some regional variation with regard to services offered by DOs over the counter. In Africa, DOs are particularly likely to make use of their postal counters for the provision of digital financial services and digital government services, with all DOs in the region that offer these services doing so over the counter. DOs from industrialized countries also exhibit high rates of counter-based provision of digital financial and government services, while being the least likely to deliver digital postal services over the counter. In contrast, DOs in the Asia and Pacific region, as well as those in the Arab region, are the most likely to offer digital postal services at post office counters. By comparison, DOs in Latin America and the Caribbean are found to be the least likely to deliver digital services through their counters across all digital service types, one of the many missed opportunities in the region.

Figure 4: **Percentage of DOs offering digital services at post office counters by service type**



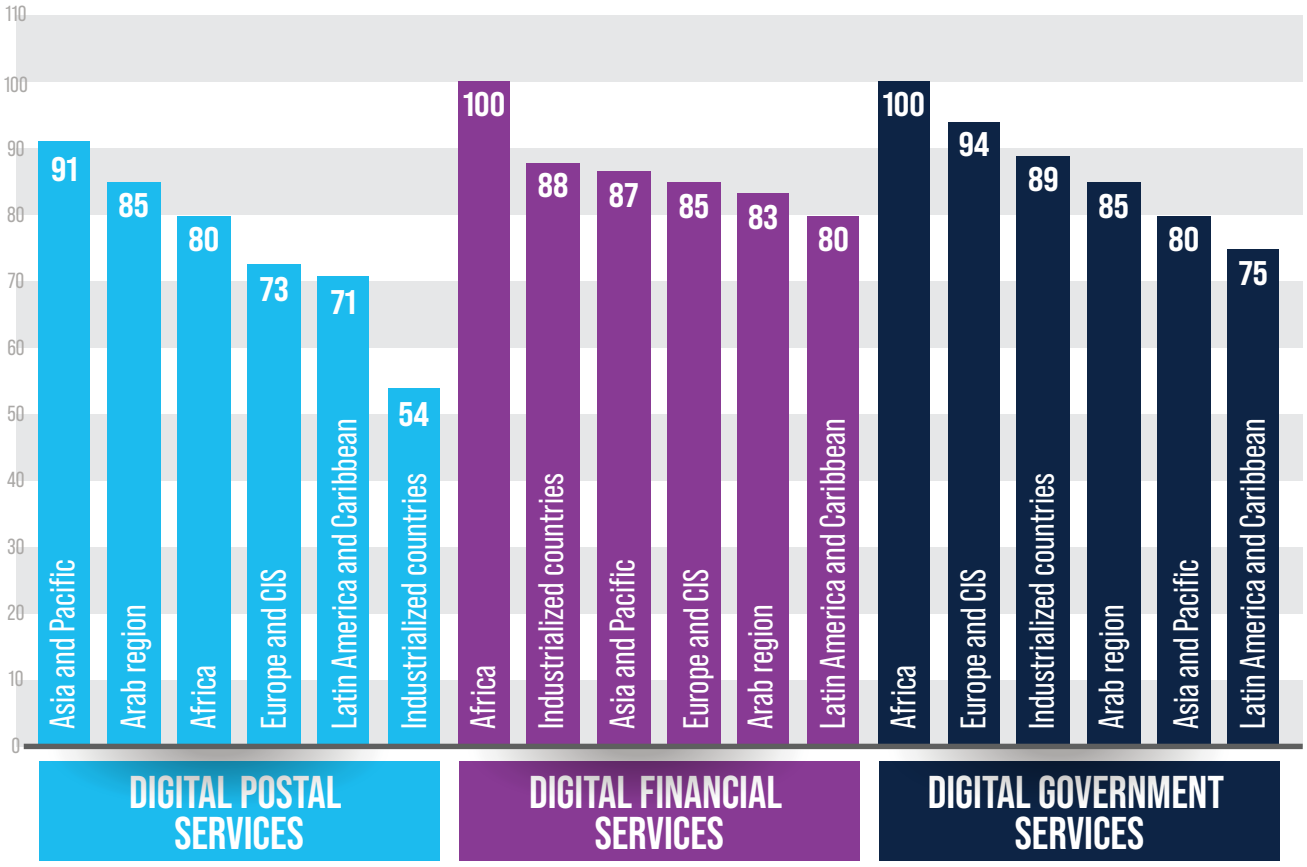
DOs are most likely to deliver non-postal digitally enabled services – such as e-government, digital financial, and digital health services – over the counter rather than through digital apps or websites. This highlights their emphasis on physical proximity and network effects as a key competitive advantage in providing underserved communities with services outside their traditional service portfolio. This also suggests that rather than creating new digital services from scratch and offering all digital services on their own websites or apps, some DOs are leveraging their existing infrastructure to act as physical extensions for the digital service offerings of their partners. For example, national and local governments may provide in-person services via the postal network to reach populations with limited internet access or digital skills, while collaborations with financial institutions extend financial services to rural areas where bank branches are scarce. In this way, DOs contribute to multi-channel service delivery not only by offering their own services but also by providing post office visitors with access to the digital offerings of partner service providers in person.

2.1.4 DIGITAL SERVICE PROVISION ON DO WEBSITES AND MOBILE APPS

Digitalization provides DOs with the opportunity to extend parts of their physical services online and offer new services that may not have been previously economically or technically feasible. DOs are taking advantage of these new possibilities. The survey results showed that websites and apps are the second most commonly used digitally enabled service delivery channel for all digital service types, except for digital postal services, which are the only service category most likely to be offered through websites and apps. This demonstrates how digitalization is helping DOs expand the reach of their postal services, allowing them to access new customers while improving convenience for existing customers who may no longer need to visit post offices for all of their postal needs. At the same time, many DOs seem to be bundling their diversified service offerings into their digital apps and websites, providing their customers with an online experience that resembles a digital one-stop shop.

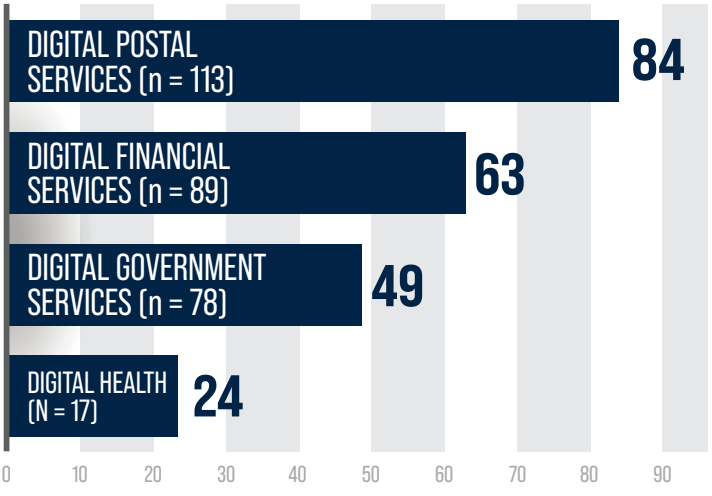
4 Throughout this report, "digital services" includes both fully online services and digitally enabled in-person services leveraging digital technology. This broader usage explicitly recognizes hybrid, multi-channel approaches as critical for inclusive service delivery, particularly in reaching underserved and less digitally connected communities.

Figure 5: **Percentage of DOs offering digital service types over the counter by region**



DOs from industrialized countries demonstrate a high propensity for offering digital postal and financial services online, with 100% of them doing so. However, DOs from industrialized countries are also least likely to provide digital government services through their online platforms. The latter is not surprising, given that industrialized countries tend to already have relatively well-established e-government service portals. In such cases, governments likely see the value in collaborating with DOs to serve as their physical extension to their portals and/or existing citizen service centre networks. This approach likely explains why digital government services are less frequently offered online by DOs in general compared to digital postal and financial services across regions. On the other hand, digital postal services are typically exclusive to DOs, while many digital financial services offered by DOs are a natural extension of their existing financial services offerings, making it more practical and worthwhile from a customer acquisition and retention standpoint to provide customers with entirely new digital product offerings.

Figure 6: **Percentage of DOs offering digital services on their app or website by service type**



5 Digital health services are not included in the graph owing to the low sample size of DOs offering such services globally (n = 16). The survey did not include any questions on the service delivery channels used for e-commerce and digital connectivity services.

BOX 5

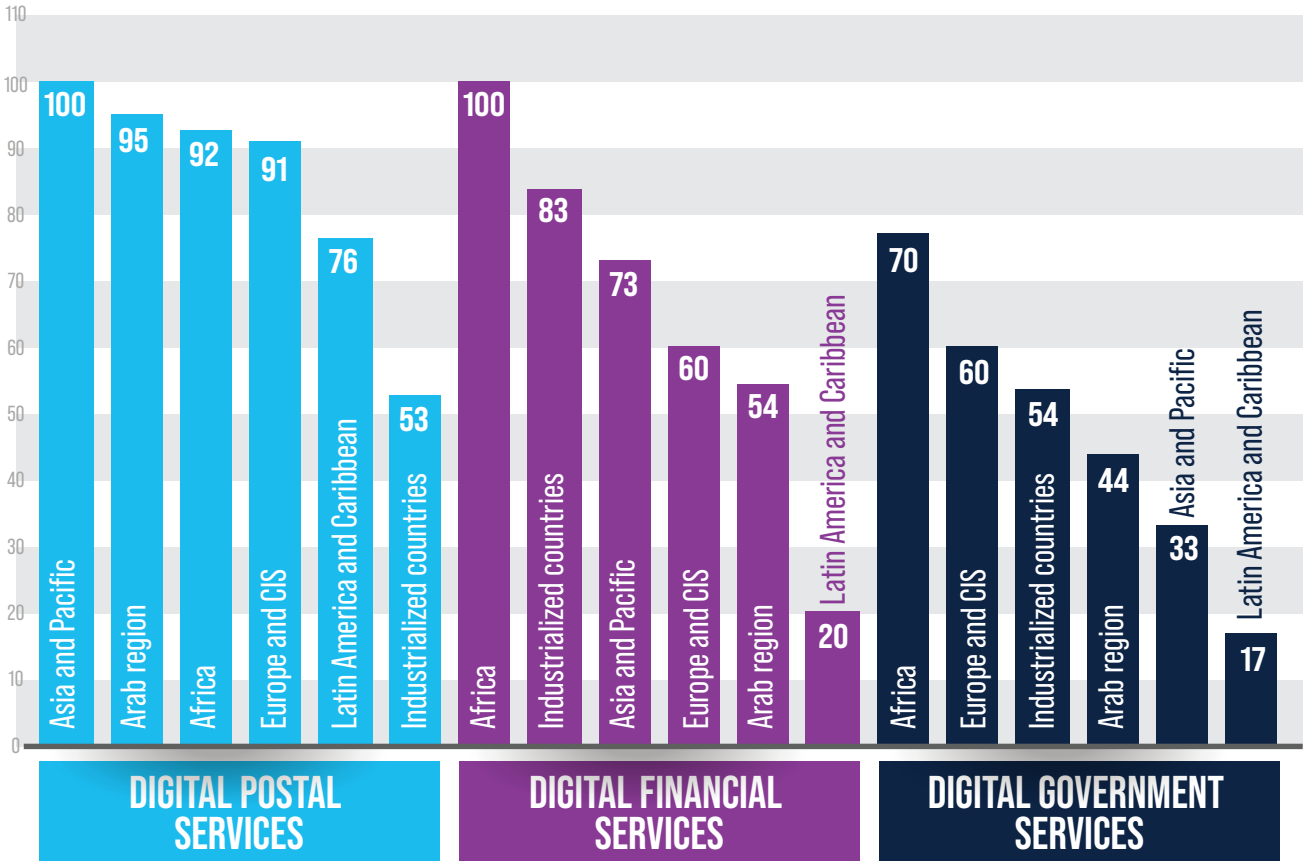
Correo Uruguayo – Centros de Cercanía (proximity centres)

In many rural corners of Uruguay, accessing essential services once meant long, costly trips to distant urban centres. For residents of small villages, where populations might number only in the hundreds and the nearest town can be over 40 kilometres away, such journeys posed a major barrier to accessing essential services without incurring considerable time and financial burdens. Recognizing this challenge, Correos Uruguayo equipped its extensive network of 117 post offices, most of which are located in rural towns, with a multifunction software capable of delivering nearly 100 essential digital services in person, and later extended this capability even further to the most remote parts of the country.

After successfully rolling out the software at its own locations, Correos Uruguayo partnered with departmental governments and municipalities to deploy the same software to small local government buildings and offices in communities lacking a post office. By leveraging existing infrastructure and personnel – often just a single staff member – these "Centros de Cercanía" dramatically expanded access to services in places where no such support previously existed. Today, 64 of these proximity centres are operating across the country, enabling rural residents to carry out a wide array of transactions, such as paying government and utility fees, transferring money, receiving government subsidies, applying for vital certificates (birth, marriage, IDs, passports), and even obtaining livestock vaccination tags.

The initiative has proven successful partly owing to direct local involvement, as residents frequently request proximity centres after learning about their benefits through word of mouth from neighbouring communities. This grassroots, demand-driven approach, coupled with a robust partnership involving departmental governments and municipalities, has been key to the initiative's reach and effectiveness. By substantially reducing travel costs and time, the Centros de Cercanía initiative fosters equitable access to services, effectively providing rural communities with opportunities comparable to those available in urban areas.

Figure 7: **Percentage of DOs offering digital service types online by region**



2.1.5 DIGITALLY ENABLED SERVICE PROVISION THROUGH DELIVERY STAFF

A smaller but significant portion of DOs are extending digitally enabled services directly to their customers' doorsteps through delivery staff. This approach is particularly beneficial for less connected individuals and communities who are located far from post offices and other service providers, individuals who are infirm or live with disabilities that make mobility difficult, and those constrained by restrictive social norms that limit their ability to travel. One-third of DOs providing digital postal services and approximately one-quarter of those offering digital financial and government services also leverage their delivery staff to provide these services to their customers. More than half of DOs offering digital health services report offering them through their delivery staff. However, it is important to note that the provision of digital health services by DOs remains limited, and these offerings often include home testing kits and last-mile vaccine delivery, which naturally require interaction with delivery staff.

This approach is particularly beneficial for less connected individuals and communities who are located far from post offices and other service providers, individuals who are infirm or live with disabilities that make mobility difficult, and those constrained by restrictive social norms that limit their ability to travel.

DOs from developing regions are more likely to leverage their delivery staff for digitally enabled service provision compared to those in industrialized countries, with the exception of Latin America and the Caribbean, where DOs are the least likely to offer any type of digital service via delivery staff. DOs in Africa, Asia and Pacific, and the Arab region deliver digital postal services through their delivery staff at rates higher than the global average. When it comes to digital financial services, usage of delivery staff is close to the global average of 25% across all regions, except for Latin America and the Caribbean, where none of the 35 DOs report utilizing delivery staff for this purpose. For digital government services, DOs in the Arab region are the most likely to involve delivery staff, while other regions hover near the global average – with the exception of DOs from Latin America and the Caribbean, who lag significantly.

Figure 8: **Percentage of DOs offering digital services through delivery staff by service type**

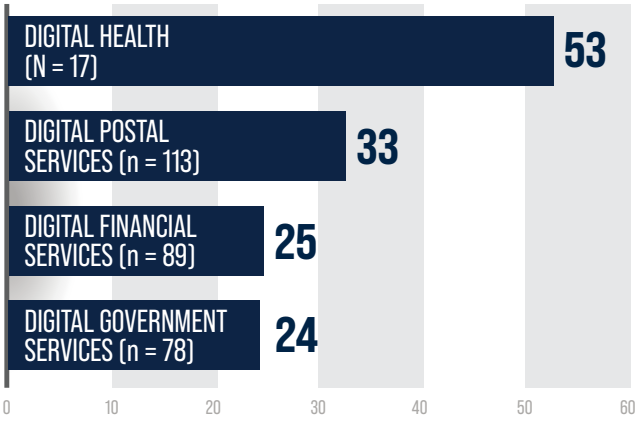
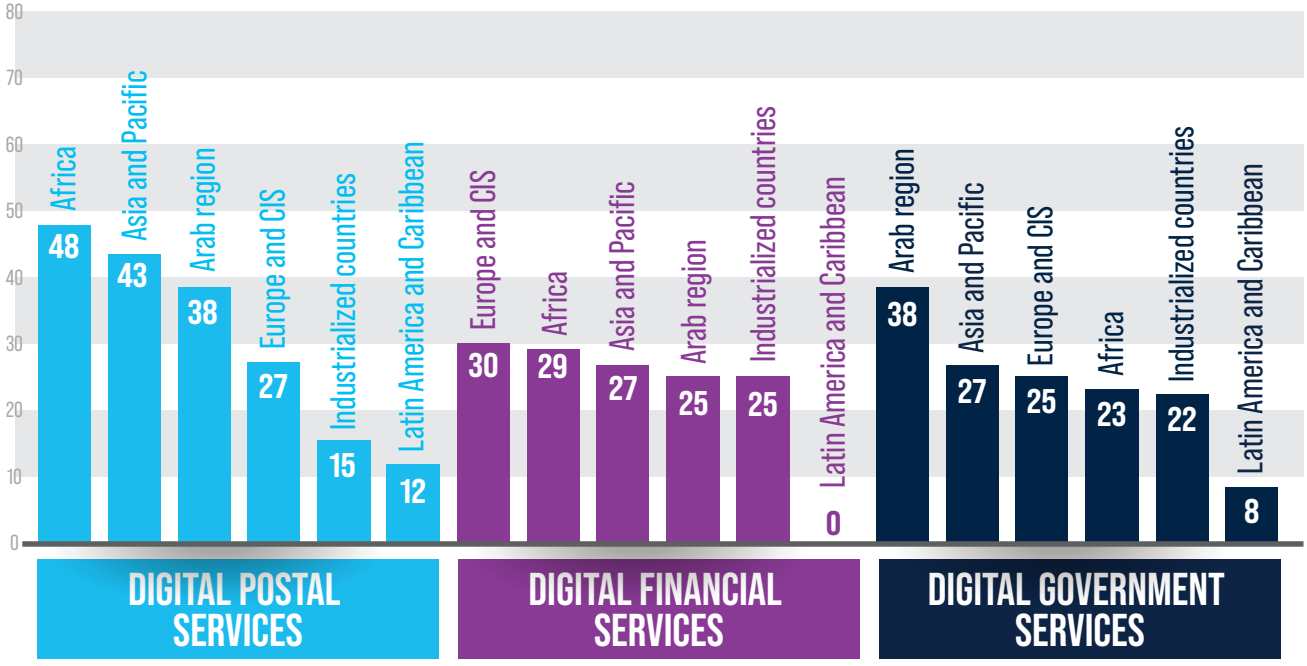


Figure 9: **Percentage of DOs offering digital service types through delivery staff by region**



2.1.6 DIGITAL SERVICE PROVISION THROUGH ELECTRONIC KIOSKS AND ATM-LIKE MACHINES

Some DOs are utilizing electronic kiosks or ATM-like machines to deliver digital services, potentially providing customers with 24/7 access, including outside regular operating hours.[6] These self-service machines offer customers greater convenience by enabling quicker access to services and reducing time spent in queues and can provide alternative digital service access points for people who lack access to an internet-enabled device or an internet connection at home. Unsurprisingly, digital financial services are the most commonly offered through this channel, with 30% of DOs providing these services through electronic kiosks or ATMs with advanced functionality. Notably, over one in five DOs offering digital postal services also utilize this delivery channel. Adoption has been slower for digital government services, with only 17% of DOs offering digital government services using this channel.

The use of advanced ATMs or automated kiosks for digital service delivery is most prevalent among DOs in industrialized countries and the Arab region. Digital financial services remain the most commonly offered service type through this channel across regions, followed by digital postal services and digital government services, with industrialized countries being most likely to offer this service delivery channel across all digital service types (see figure below).

Figure 10: **Percentage of DOs offering digital services at electronic kiosks or advanced ATMs by service type**

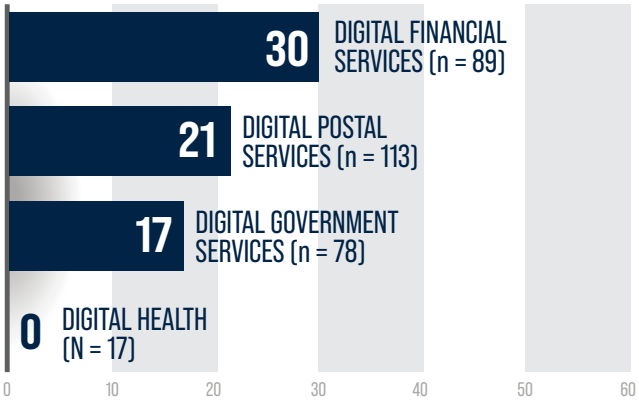
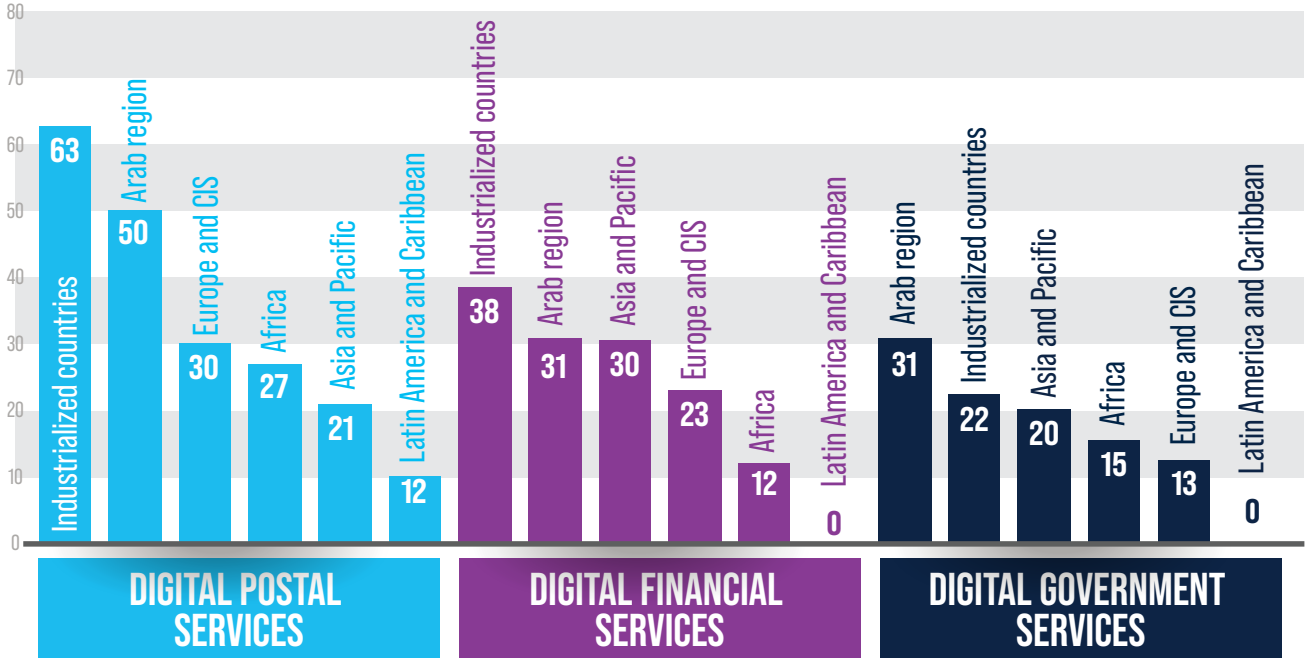


Figure 11: **Percentage of DOs offering digital service types at ATMs or automated kiosks by region**



6 Although electronic kiosks and ATMs can make services available outside normal working hours, the machines themselves may not always be made available outside working hours, especially in cases where the machines are located inside the lobby or other parts of the post office that are closed to the public when the post office is shut.

BOX 6

Pos Indonesia – Serving as a physical extension for partners' digital financial products

Pos Indonesia has strategically transformed its expansive network of over 4,300 post offices, recently digitally upgraded and connected to the internet, into an effective physical front-end for digital financial services offered by its banking and non-banking financial partners. This model enables partner institutions to reach a broader customer base, particularly in rural and remote areas, where traditional financial service providers have limited or no presence. This approach significantly enhances financial inclusion, allowing customers to conveniently access payment, banking, insurance, and investment products through Pos Indonesia's trusted network.

The partnership model is particularly valuable for Pos Indonesia because of regulatory limitations that restrict the organization from independently offering certain financial services. By serving as the physical extension for financial institutions, Pos Indonesia effectively bridges this regulatory gap, providing its customers with seamless access to diverse financial products. As a result, Pos Indonesia has expanded financial services to over 6 million individuals through physical points of service and a digital app, demonstrating the immense potential and importance of digitally enabled postal networks in supporting inclusive digital financial ecosystems.

Source: Interview with Pos Indonesia staff

2.1.7 HYBRID (IN-PERSON + ONLINE) SERVICE DELIVERY

Instead of limiting customers to accessing digital services through a single channel, many DOs are integrating digital and in-person delivery methods to offer greater choice and convenience while promoting social, economic, and digital inclusion. In doing so, DOs are accommodating diverse customer needs and realities. On the one hand, digital channels allow DOs to connect with customers who may not live within physical proximity of the postal network or who may prefer the ease and convenience of remote access. At the same time, combining digital service delivery with in-person options ensures that individuals without access to digital technology can still interact with essential services at post offices, including with the assistance of trained postal staff, which can be especially beneficial for people with low levels of digital skills, while giving everyone more choice on how to engage with service providers.

At the global level, digital postal services are the service type most likely to be offered via a hybrid approach. This is not surprising given that this is the service type that DOs are most likely to be fully or primarily responsible for delivering. Similarly, more than half of DOs that provide digital financial services employ a hybrid delivery model, which is also unsurprising considering the postal sector's longstanding role in offering financial products – a role that digitalization has now expanded to include digital financial services. While not as widespread, a significant portion of DOs offering digital government services also blend in-person and online service delivery.

Many DOs are integrating digital and in-person delivery methods to offer greater choice and convenience while promoting social, economic, and digital inclusion.

7 Digital health services were not included owing to the small number of DOs offering the service (n = 17).

Regional analyses reveal varying patterns in the adoption of hybrid service delivery across different digital service types. In terms of digital financial services, DOs from industrialized countries show the highest likelihood of hybrid delivery, closely followed by those in the Arab and the Asia and Pacific regions, also surpassing the global average. For digital government services, DOs from the Arab, African, and Asia and Pacific regions are at the forefront of hybrid service delivery. Interestingly, DOs from Europe and CIS and industrialized countries lag in this aspect. However, this may be due to these regions having well-developed, pre-existing e-government portals that DOs can simply connect or interoperate with, rather than needing to develop digital systems from scratch. For digital postal services, DOs from developing regions (except Latin America and the Caribbean) are leading the way. Those in the Asia and Pacific, Arab, and Europe and CIS regions are more likely than the global average to offer these services through hybrid channels. Notably, DOs from Latin America and the Caribbean consistently show the lowest likelihood of offering digital services through hybrid channels across all service types, indicating a significant missed opportunity for service expansion to underserved groups and digital inclusion in the region.

Figure 12: **Percentage of DO service providers who offer blended/hybrid digital service delivery (post office counter + online)[7]**

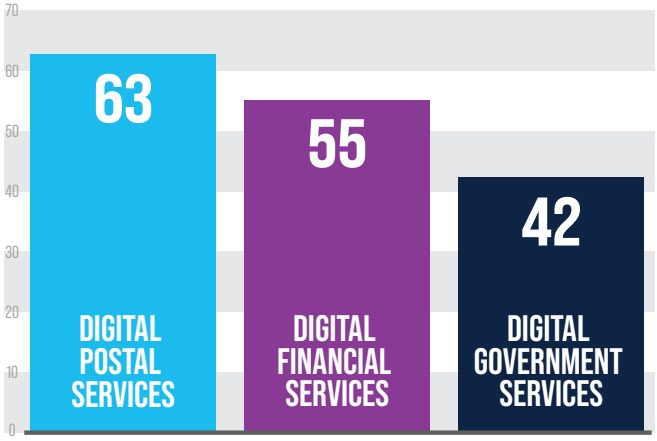
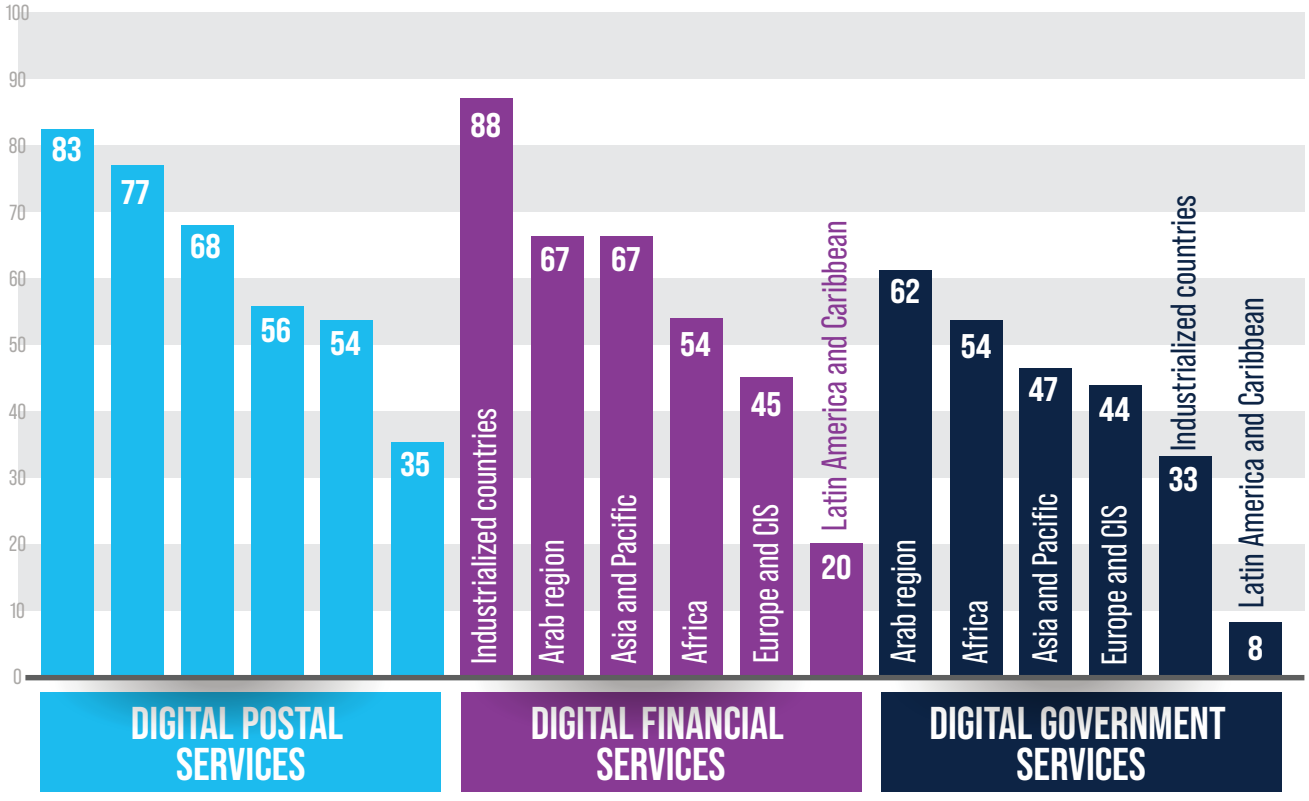


Figure 13: **Percentage of DO service providers who offer blended/hybrid digital service delivery (post office counter + online) by region**



2.2 TYPES OF SERVICES OFFERED

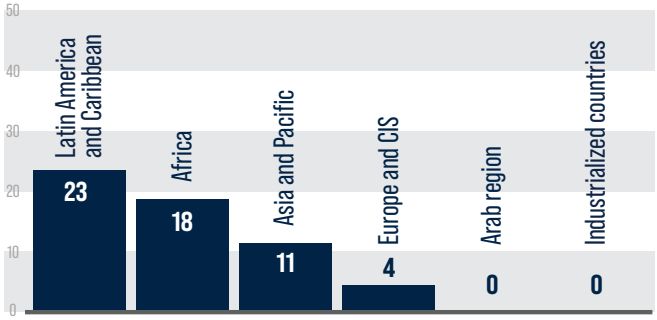
Overview of digital service provision[8]

Our findings reveal that DOs are offering services across all six digital service categories captured by the survey, with the majority of DOs offering multiple types. Our survey directly asked DOs whether they provide five specific digital categories – digital postal services, e-commerce, digital financial services, digital government services, and digital health services. While we collected data on individual digital connectivity services, we did not include an overarching question for this category. As a result, our reporting focuses on the five categories with direct overall service provision figures to ensure consistency and comparability.[9]

Current status and regional disparities

A majority (88%) of DOs consider themselves providers of at least one of these 5 digital service categories, while a sizable minority of 12% of DOs – nearly one in eight – do not yet self-identify as providers of any digital services. This represents a substantial missed opportunity for promoting economic, social, financial, and digital inclusion via the postal infrastructure. There are notable regional disparities: all DOs in industrialized countries and the Arab region, and nearly all from Europe and CIS, offer at least one digital service type. In contrast, a considerable portion of DOs in the Asia and Pacific, Africa, and Latin America and Caribbean regions currently report no digital service offerings (see figure below). Their lack of digital service offering limits the ability of their countries' governments to leverage their postal infrastructure to achieve inclusive digital transformations and other public policy objectives. As a result, the postal infrastructure is not being leveraged for multi-channel service delivery in many of the low- and middle-income countries where doing so would be the most impactful for rural populations and marginalized groups. Digitalizing Posts in these regions and diversifying the services they offer should therefore be prioritized.

Figure 14: **Percentage of DOs not considering themselves providers of any digital service type by region**



Categories of digital services offered

As expected, **digital postal services** are the most commonly offered digital service type, with 74% of DOs identifying as digital postal service providers. **E-commerce services** are nearly as prevalent, with 71% of DOs considering themselves e-commerce providers, playing an important role in empowering small businesses, particularly MSMEs, by helping them integrate into the digital economy. This high provision rate aligns naturally with DOs' existing capabilities in logistics and parcel delivery.

Importantly, DOs have also diversified beyond traditional postal and logistical services into areas critical for broader economic, social, financial, and digital inclusion. Indeed, 58% of DOs consider themselves providers of **digital financial services**, making DOs crucial players in promoting financial inclusion, while enabling marginalized populations and MSMEs to actively participate and transact within the digital economy.

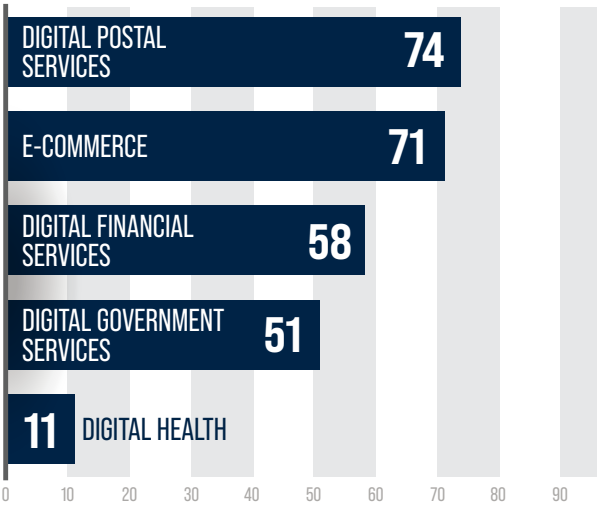
More than half of DOs have already ventured into digital government services. When delivered in person or through a multi-channel approach, these services significantly contribute to social and digital inclusion by bridging geographical gaps between citizens and the state, facilitating easier and more inclusive access to public services.

8 Throughout this report, "digital services" includes both fully online services and digitally enabled in-person services leveraging digital technology. This broader usage explicitly recognizes hybrid, multi-channel approaches as critical for inclusive service delivery, particularly in reaching underserved and less digitally connected communities.

9 To ensure consistency, we report only on categories for which DOs were directly asked whether they provide the service type. This approach better reflects strategic intent, as offering a single service among many does not necessarily indicate a meaningful presence or commitment within the category.

In contrast, despite the postal sector's crucial role in responding to the COVID-19 pandemic, **digital health services** have yet to gain significant traction among DOs. This represents an important area of untapped potential, presenting an opportunity for further leveraging postal networks to promote universal health coverage and broader social inclusion.

Figure 15: **Percentage of DOs who consider themselves digital service providers by digital service type (n = 153)**

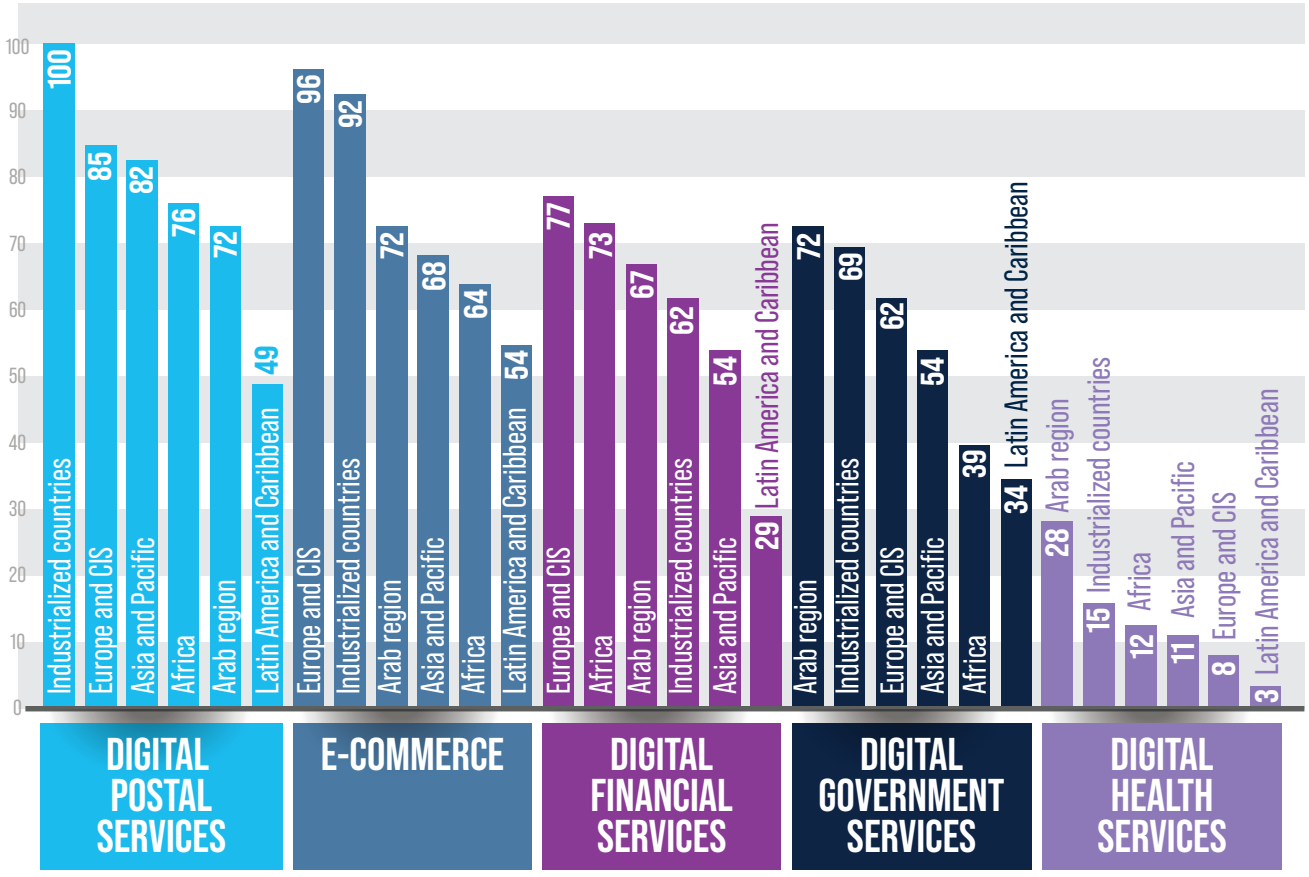


Regional variations in digital service offerings

Significant regional differences exist in the likelihood of DOs offering digital services (see figure below), though they do not necessarily follow the same pattern across all digital service categories. DOs in industrialized countries and the Europe and CIS region are the most likely to offer digital services closely linked to their core postal and logistics operations, such as digital postal services and e-commerce. However, they are not necessarily the most active in diversifying beyond these traditional areas.

DOs in the Europe and CIS, Africa, and Arab regions are more likely than average to provide digital financial services, surpassing DOs in industrialized countries. Meanwhile, DOs in the Arab region lead in offering digital government and digital health services. In contrast, DOs from the Latin America and Caribbean region lag behind all in the provision of all digital service categories analyzed. DOs in Asia tend to offer digital services at approximately the global average across all categories.

Figure 16: **Percentage of DOs who consider themselves providers of digital service types by region**



The following table summarizes these regional differences:

Table 2: **Summary of digital services offered by DOs, regional comparison**

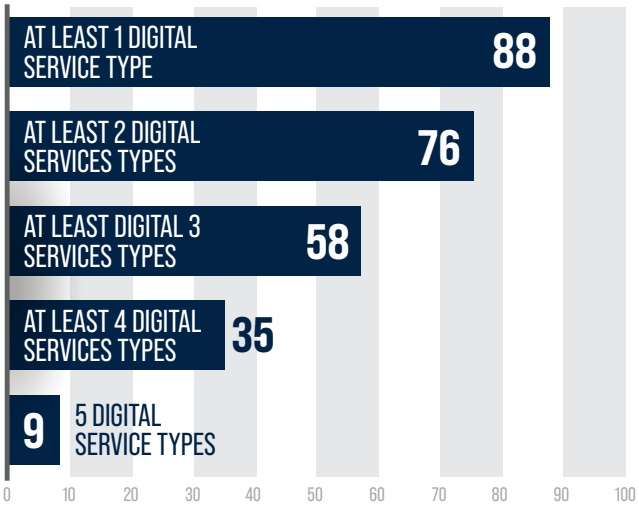
REGION	KEY FINDINGS
Africa	Above-average provision of digital financial services; below-average provision overall, particularly low in digital postal and e-commerce services.
Asia and Pacific	Provision of digital services approximately matches the global average across all categories.
Europe and CIS	High overall digital services provision; high provision rates in digital postal services, and the lead in e-commerce and digital financial services.
Arab region	High levels of digital service provision across all categories; leads globally in offering digital government and digital health services.
Latin America and Caribbean	Lowest levels of provision across all digital service categories analyzed.
Industrialized countries	Highest digital service provision rates in digital postal services; high provision rates in e-commerce services and digital government services; moderate provision of digital financial and digital health services compared to other regions.

2.3 TOWARDS A ONE-STOP SHOP CITIZEN SERVICE CENTRE MODEL OF DIGITAL SERVICE DELIVERY IN THE POSTAL SECTOR

Diversification into multiple digital service categories

Many DOs show signs of transforming into one-stop shops for digital services – or digital service hubs – by becoming providers of multiple digital service categories (see figure below). Our analysis shows that over three quarters of DOs consider themselves providers of two or more categories of digital services. The most commonly offered combination consists of digital postal services and e-commerce, available from 60% of DOs. Furthermore, nearly 60% of DOs are offering three or more digital service types. The most prevalent trio consists of digital postal services, digital financial services, and e-commerce, which is provided by 46% of DOs, followed closely by a combination of digital postal services, e-commerce, and digital government services at 42%. More than one-third of DOs are now offering four or more digital service categories. Fewer than 10% provide all five digital service categories, which can be partially attributed to the relatively low provision rate of digital health services.

Figure 17: **Levels of digital service diversification by DOs (percentage, n = 153)**



Regional trends in digital service diversification

The extent to which DOs diversify their digital services significantly varies by region, reflecting differing capacities and contexts. DOs in industrialized countries, Europe and CIS, and the Arab region stand out for their broad range of digital services. Over half of the DOs in the Europe and CIS and the Arab regions offer four or more digital service categories, closely followed by nearly half of those in industrialized countries. The Africa and the Asia and Pacific regions are making moderate progress towards digital service diversification, with 39% and 32% of DOs, respectively, offering four or more digital service types. In contrast, Latin America and the Caribbean notably lag behind, highlighting a critical area for targeted intervention and support.

Figure 18: **Levels of DO digital service diversification by region**

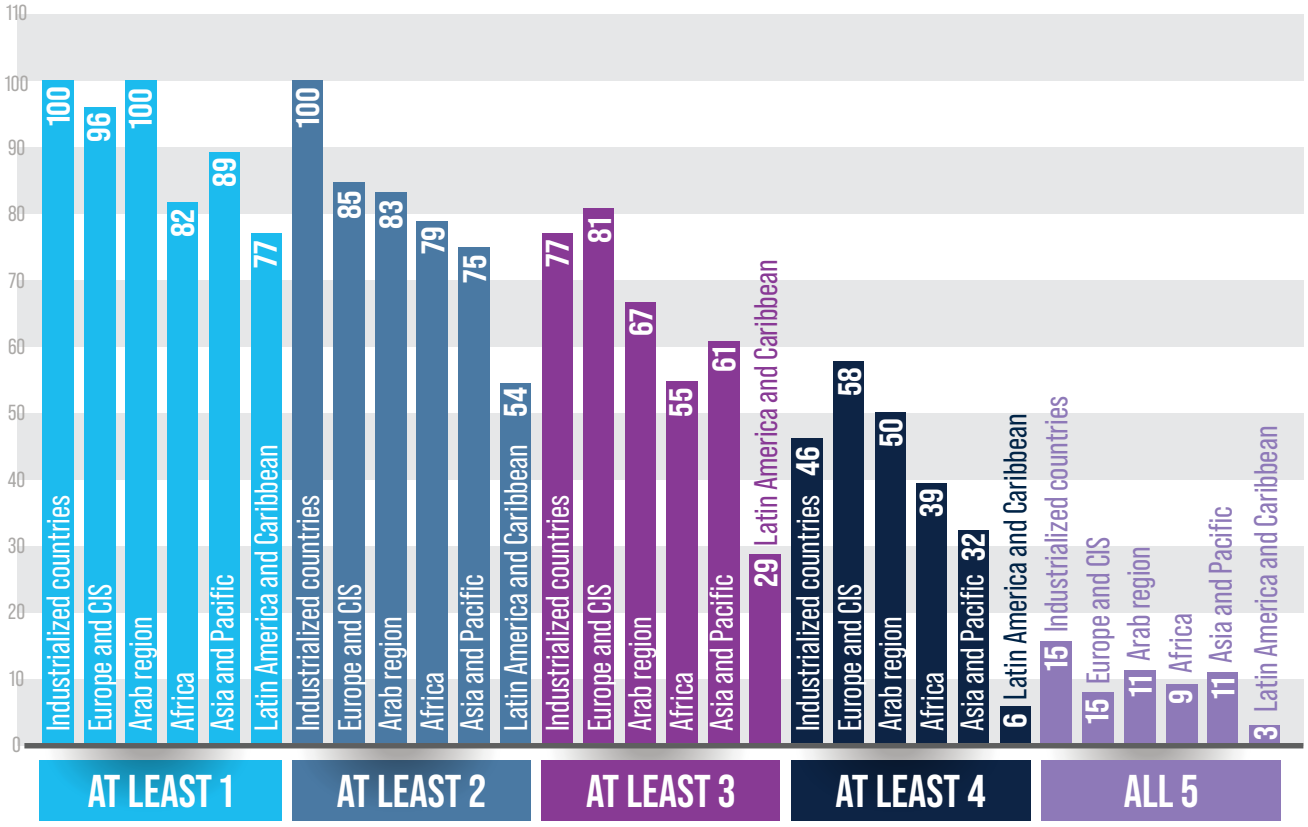


Table 3: **Regional summary of digital service diversification by DOs**

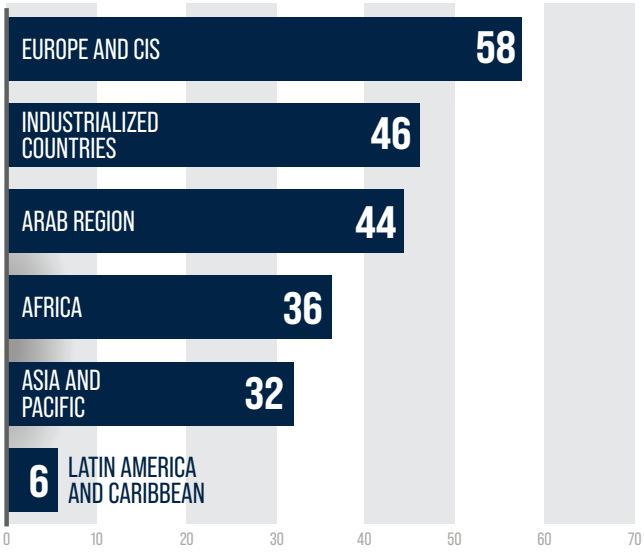
REGION	KEY FINDINGS
Europe and CIS	Highest diversification; over half offer four or more digital service categories.
Arab region	High diversification; half offer four or more digital service categories.
Industrialized countries	High diversification; nearly half offer four or more digital service categories.
Africa	Moderate diversification; nearly 40% offer four or more digital service categories.
Asia and Pacific	Moderate diversification; approximately a third offer four or more digital service categories.
Latin America and Caribbean	Lowest diversification; few DOs offer four or more digital service categories.

One-stop shop citizen service centres for holistic inclusion at post offices

Notably, over a third (34%) of DOs offer a combination of digital financial services, digital government services, and e-commerce services. When these three service types are provided together, DOs promote social, economic, financial, and digital inclusion simultaneously, positioning themselves as a vehicle to holistically mitigate exclusion resulting from economy- and society-wide digitalization. Providing digitally enabled services from the same physical location helps citizens save time and money by ensuring that they do not have to make trips to multiple offices or service providers. Moreover, by consolidating services across many service providers under one roof, physical one-stop shop service centres can help citizens more easily navigate the complexities of dealing with multiple service providers (Knox and Janenova, 2019). In-person assistance offered by staff in one-stop shops can be especially beneficial for less connected and/or less digitally savvy citizens who may require help navigating digital services.

This combination of services is most offered by DOs in Europe and the CIS, followed by those in industrialized countries, the Arab region, Africa, and Asia and Pacific. However, as illustrated in the figure below, the overall proportion is significantly lowered by limited provision rates in Latin America and the Caribbean, where only 6% of DOs offer this combination.

Figure 19: **Percentage of DOs who consider themselves providers of a combination of e-commerce services, digital financial services, and digital government services by region**



Limitations constraining full realization of inclusion benefits

The trends outlined above give the impression that DOs are already making large economic, financial, social, and digital inclusion contributions through the offering of digital services. However, as mentioned earlier, these impacts are constrained by three main limitations:

Regional disparities: DOs are less likely to offer digital services in developing regions, where these services would have the most transformative impact on economic, financial, social, and digital inclusion. Thus, marginalized populations and remote communities that would benefit most from in-person digitally enabled services often remain underserved by the postal sector.

Insufficient connectivity: UPU estimates indicate that around 100,000 post offices – nearly one in six globally – remain unconnected to the internet. Post offices serving the hardest to reach populations, who would gain the greatest benefits from digital services, are least likely to be online. Without connectivity, post offices cannot offer digital services or transform into physical one-stop digital hubs. Connecting all post offices and empowering DOs in developing regions to deliver digital services is essential for maximizing the sector's inclusion potential.

Limited service diversification within digital service categories: Although most DOs offer multiple digital service categories, their diversification within each category remains limited. Each digital service type (e-commerce, digital financial, digital government) comprises a suite of complementary offerings, each essential for comprehensive inclusion. Except for industrialized regions' relatively broad offerings in e-commerce and digital financial services, most DOs globally exhibit limited within-category diversification, particularly in digital government services. Expanding the range of services within each category is critical for DOs to fully leverage postal infrastructure for digital inclusion.

In summary, to fully maximize the postal sector's contribution to inclusive digital transformation, it is necessary to bridge regional disparities, ensure universal internet connectivity across postal networks, and diversify digital services within each category.

2.4 HIGH LEVELS OF DO DEMAND FOR DIGITAL SERVICES

High levels of demand

A lack of willingness to offer additional digital services does not seem to be a barrier for Posts to further contribute to economic, financial, social and digital inclusion through their expansive infrastructures. Our survey reveals a substantial desire to introduce new digital services among DOs (see figure below).

Figure 20: **Remaining demand for digital service types globally (percentage)**

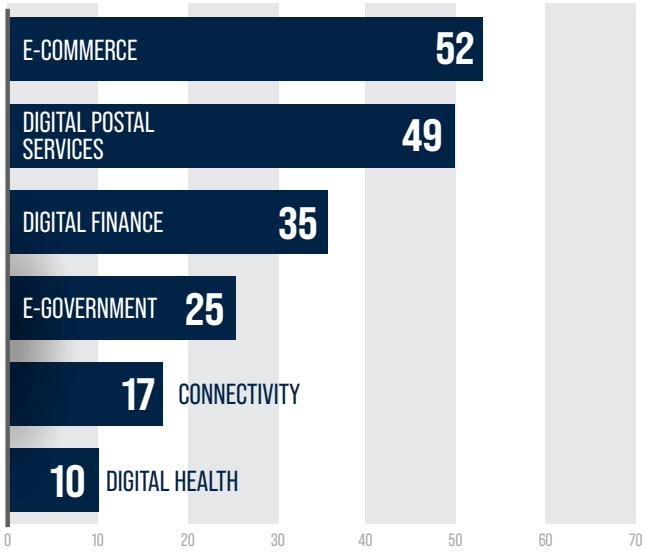
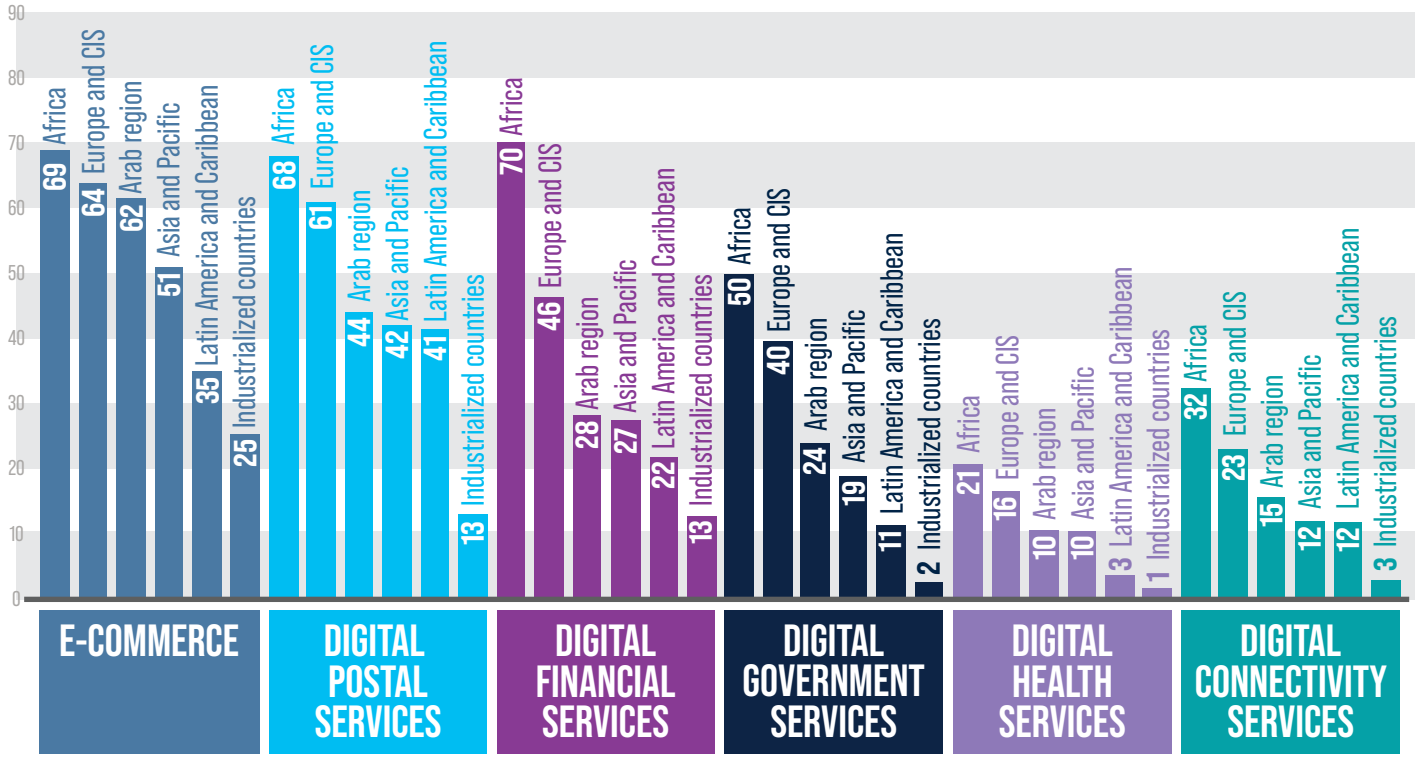


Figure 21: **Levels of DO digital service diversification by region**



High demand for core postal-aligned digital services

E-commerce services and digital postal services exhibit the highest levels of unmet demand. Around half of the DOs that do not currently offer specific services within these categories are either actively considering or already developing plans to implement them. Given these services' alignment with traditional postal operations, it is unsurprising that DOs find them appealing.

Moderate demand beyond traditional areas

Importantly, demand for digital services extends beyond these core business-aligned areas. On average, over one-third of DOs not currently providing each of the individual digital financial services, and a quarter not yet offering each of the individual digital government services, report active consideration or ongoing development efforts of these services. Given these more moderate levels of unmet demand, fully leveraging postal infrastructure to facilitate inclusive digital transformations – with post offices serving as one-stop shops offering multi-channel delivery – may require external nudges. Targeted government incentives, international awareness campaigns, or strategic partnerships could help DOs better recognize broader development benefits beyond immediate financial returns.

Regional variations in unmet demand

Unmet demand for the introduction of digital services appears to be highest in the Africa and Arab regions, followed by the Europe and CIS and the Asia and Pacific regions, where demand is more moderate but still significant. The sole exception is e-commerce, where slightly higher unmet demand is observed among DOs in Europe and CIS than in the Arab region. Addressing unmet demand should be a key focus for international efforts to support digital transformation via postal networks in these regions. High unmet demand in these regions signifies a willingness among DOs to expand digital services, suggesting that targeted investments or international partnerships could significantly accelerate the achievement of inclusive growth and sustainable development goals in these contexts.

In contrast, DOs from Latin America and the Caribbean exhibit relatively low levels of unmet demand for digital services across all categories, despite having the lowest levels of provision globally. International and regional stakeholders should seek to understand the reasons

behind this limited demand. Exploring potential regulatory or capacity-related barriers is critical to addressing the underlying issues that may be discouraging the consideration of digital service expansion in the region.

Unsurprisingly, unmet demand is lowest across all service types for DOs in industrialized countries. This is likely due to their already high levels of digitalization, coupled with greater capacity to independently introduce and expand digital services without relying on international support or funding.

2.5 EFFECTIVENESS OF DIGITAL SERVICES OFFERED THROUGH THE POST

Introducing a stickiness metric

The UPU has long advocated for digitalizing DOs as a pathway toward inclusive digital transformation. However, without concrete data, it remains difficult for policymakers and other stakeholders identify which digital services merit strategic investment and/or contribute to sustainable development. To address this gap, we have developed a **digital service stickiness metric** – a figure that provides an indication of potential sustained impact and value of digital services based on their persistence once implemented. This approach is grounded in the assumption that services failing to deliver tangible benefits are eventually discontinued. Although this assumption may not capture the complete picture, especially for recently deployed services, and while there is a risk of recall bias among respondents, our stickiness estimates nonetheless offer valuable preliminary insights. They help pinpoint which digital services seem to hold the greatest potential to promote inclusion while improving the bottom line of DOs and achieving the goals of partners. While they should be interpreted with caution, they offer a useful approach to identifying services that should be prioritized, including those that, despite not enjoying widespread implementation or not being in high demand, may hold significant social value.

Overall stickiness findings

Our analysis reveals that digital services are exceptionally sticky – DOs rarely discontinue them once implemented (see figure below). This enduring service provision indicates that these offerings provide significant value to both DOs and their partners. Key findings include:

Digital postal services and e-commerce services exhibit the highest levels of overall stickiness.

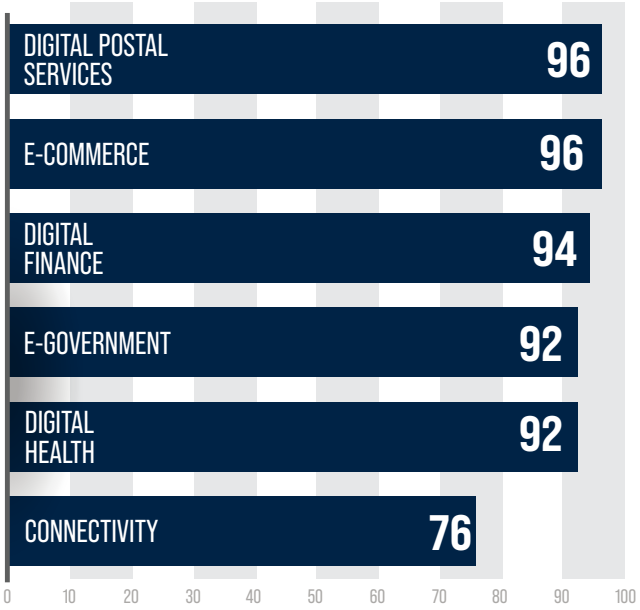
Digital financial services and digital government services similarly demonstrate very high retention, highlighting their potential long-term benefits in promoting economic, financial, and social inclusion for societies and revenue generation for DOs.

For digital health services, limited provision levels currently make it premature to draw definitive conclusions about their effectiveness. However, early evidence suggests promising retention among DOs already offering them.

Connectivity services show more varied results, generally performing the weakest overall. Nonetheless, several individual connectivity services show notably high stickiness.

The consistently high stickiness rates indicate that expanding digital services – especially in financial, governmental, and e-commerce services – not only strengthens DOs' bottom lines but also positions them as key facilitators of economic, financial, social, and digital inclusion.

Figure 22: **Remaining demand for digital service types globally (percentage)**



13 e-commerce services

12 digital government services

12 digital financial services

9 digital postal services

3 connectivity services

High levels of stickiness for individual services

Our analysis of stickiness for the 90 individual services captured by the survey reveals compelling insights. More than half of services exhibit both respectable levels of provision rates and high retention rates. Specifically, 49 services were implemented by at least 10 DOs – a deliberately low threshold chosen to spotlight emerging and promising offerings – and maintained a stickiness rate exceeding 90%. This combination of at least modest implementation and outstanding retention makes these services particularly promising for DOs looking to expand their digital portfolios and for public and private stakeholders seeking to leverage postal infrastructure to facilitate inclusive digital transformations. A complete list of these promising services can be found in Appendix 2. Additionally, while several other services showed promise, they did not meet the threshold for wider adoption.

Our analysis suggests that DO investments in and demand for digital services do not necessarily line up with the services that are most effective and hold most value. The stickiest services do not strongly align with the services most widely offered by DOs or those most in demand, which are mainly dominated by e-commerce and digital postal services. For instance, among the 49 individual services offered by 10 or more DOs with a stickiness rate of 90% or higher, the distribution includes:

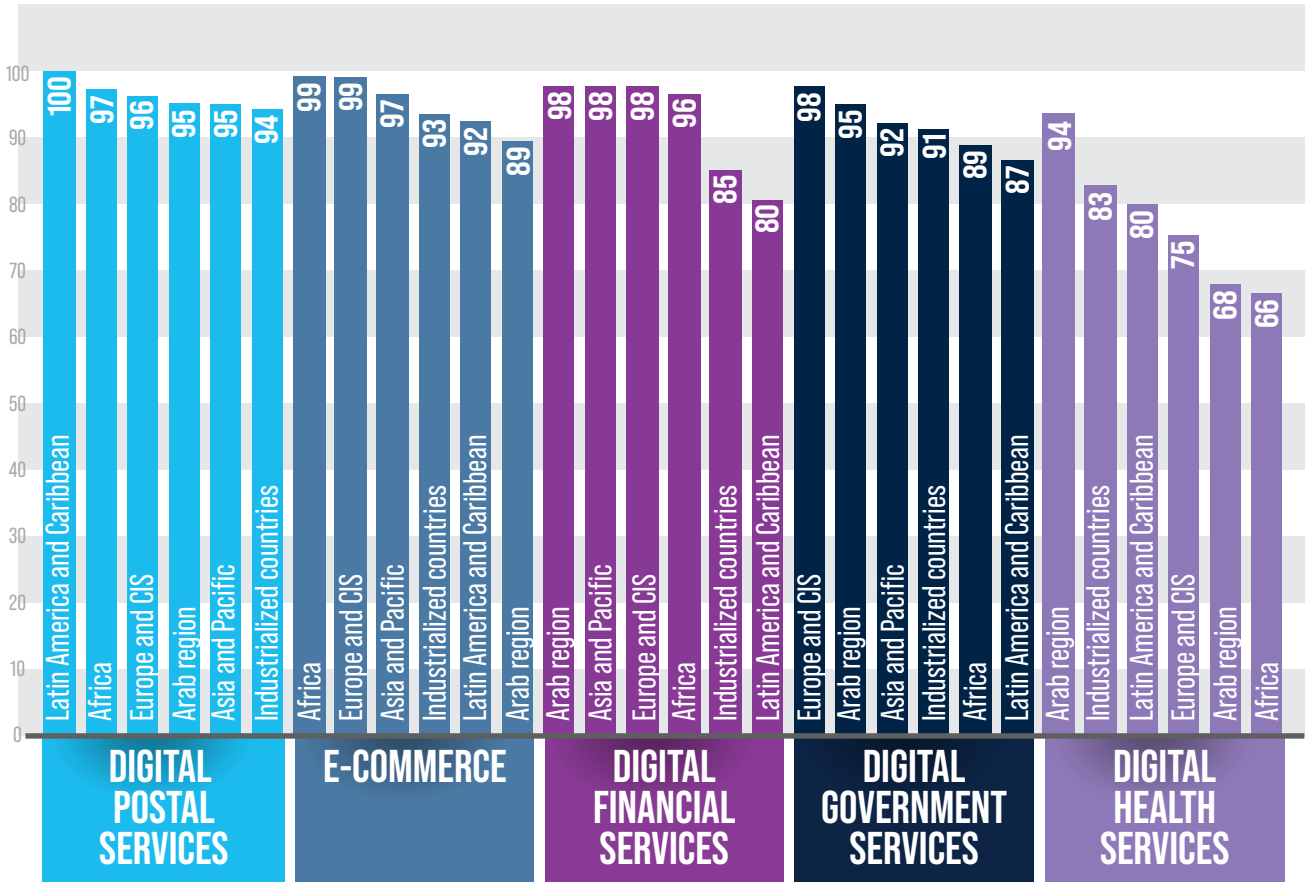
Moreover, of the 12 services with 100% stickiness – services that have never been discontinued – five are digital government services. Yet, no digital government service appears among the top 20 most in-demand services. This mismatch reinforces findings from the previous subsection: fully leveraging postal infrastructure for sustainable development and inclusive transformations may require external nudges and targeted incentives, strategic partnerships, and external support to encourage DOs to look beyond their traditional business priorities. Expanding into digital government and financial services, as well as selected connectivity services, represents not only an opportunity for sustainable revenue diversification but also a strategic pathway for governments and development actors to achieve broader public policy, sustainable development, economic, financial, social, and digital inclusion objectives.

Regional variations in service stickiness

Digital services offered by DOs appear to be sticky across all regions. In particular, digital postal services,

e-commerce, digital financial services, and digital government services consistently demonstrate high levels of stickiness globally and regionally. In contrast, digital connectivity services show mixed results both overall and by region. This is largely due to the inclusion of some of the poorest-performing services in the survey. Nevertheless, certain digital connectivity services exhibit high stickiness globally and across regions, highlighting their potential value. There are, however, notable regional exceptions, particularly for digital financial services in industrialized countries and in Latin America and the Caribbean. In industrialized countries, the relatively lower overall stickiness of digital financial services is influenced by a small sample size (only eight DOs), including one DO that initially implemented all surveyed digital financial services but later discontinued all of them. For Latin America and the Caribbean, the average stickiness of digital financial services is significantly reduced by ATMs. This service, while sticking

Figure 23: **Overall stickiness of digital service types by region (percentage)**



86% of the time globally, has only persisted a third of the time in this region. A detailed table on the stickiness of each service, broken down by region, can be found in Appendix 1.

2.6 CHALLENGES

Despite significant diversification into digital services and strong demand among DOs to expand digital offerings, they face substantial barriers limiting their ability to introduce digital services. Unless these barriers are adequately addressed, the full potential for DOs to drive economic growth; promote economic, financial, social, and digital inclusion; and support sustainable development objectives through their extensive postal infrastructure will remain underexploited.

The most critical global barrier identified is insufficient investment resources.

Key global challenges faced by DOs

The most critical global barrier identified is **insufficient investment resources.** A majority (61%) of DOs rated inadequate funding as a substantial obstacle (rated 4 or higher on a scale from 1 to 5) to providing or introducing digital services (figure 23). Beyond funding constraints, DOs commonly encounter multiple, often interconnected challenges, including:

high competition (38%) from other postal and digital service providers

inadequate digital infrastructure (37%), particularly in rural and underserved regions

difficulties convincing government stakeholders (37%) to recognize and leverage the postal sector's role in digital transformation

challenges in identifying sustainable business models (37%), making it difficult for DOs to justify investment in digital service expansion

lack of best practices and guidance materials (34%), hindering effective implementation and innovation

among staff, lack of the digital skills (33%) needed to administer and offer digital services

restrictive regulatory frameworks (33%) and a lack of enabling policy environments (32%), limiting the scope and effectiveness of digital services that DOs can provide

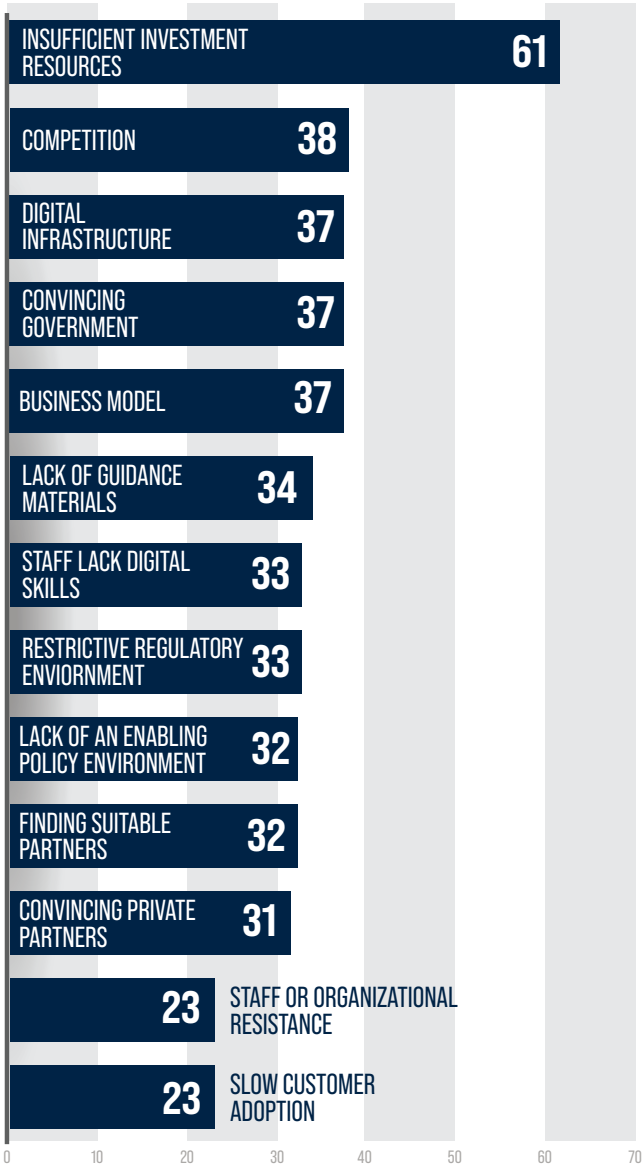
difficulty securing suitable partners (32%)

difficulty convincing private-sector partners (31%) of the strategic and developmental value of delivering digital services through postal networks

organizational and staff resistance to change (23%)

slow customer adoption (23%) of new digital services

Figure 24: **Challenges faced by DOs in providing and introducing digital services**



Regional variations in challenges

While insufficient investment resources is the top challenge in four out of six regions – and tied as the second most prevalent challenge in the remaining two (industrialized countries and the Arab region) – the relative importance of other barriers varies significantly across regions. Overall, DOs in industrialized countries and the Arab region face the fewest substantial challenges, whereas DOs in Africa and Latin America and the Caribbean report the most. Addressing barriers in the Africa and Latin America and Caribbean regions should be prioritized; without doing so, their postal infrastructure – and thus the global postal infrastructure in general – will not be maximized to its full social impact and revenue generation potential and DOs in these regions will fall behind. A detailed breakdown of these regional challenges is provided below and summarized in the accompanying figure:

Industrialized countries: The most pressing challenge is developing viable business models that generate sufficient income. Additionally, nearly a third of DOs encounter restrictive regulatory environments, difficulty convincing private-sector partners, insufficient investment resources, and high levels of competition. A moderate percentage of DOs in these countries also face barriers from a lack of enabling policy environments and difficulties persuading governments about the postal network's value in providing digital services. Digital infrastructure deficits and digitally skilled staff shortages are minor concerns, while no DOs report challenges related to guidance materials, organizational resistance, finding suitable partners, or slow customer adoption.

Arab region: Digitally upskilling staff represents the most pressing issue, followed closely by inadequate guidance materials and insufficient investment resources. Digital infrastructure deficits, organizational resistance, slow customer adoption, challenges in finding suitable partners, and business model concerns are moderately significant. However, few DOs cite the lack of an enabling environment, restrictive regulatory frameworks, convincing private partners, competition, or convincing governments about the value of postal digital services as major barriers.

Asia and Pacific: Securing sufficient investment resources emerges as the primary barrier, accompanied by restrictive regulatory environments and limited enabling policy frameworks. Digital infrastructure limitations, lack of guidance materials, and difficulties in convincing private-sector partners also represent significant obstacles.

Africa: Insufficient investment resources is the dominant concern, followed closely by challenges in convincing government stakeholders of the postal sector's potential and by significant digital infrastructure limitations. Additional major barriers include finding suitable partners, developing sustainable business models, overcoming competition, inadequate guidance materials, and shortages of digitally skilled staff.

Europe and CIS: Investment shortages represent the predominant issue, followed by strong competition, difficulties in developing sustainable business models, and challenges in convincing government about the postal sector's potential role in delivering inclusive digital services

Latin America and the Caribbean: Investment limitations are the most prevalent challenge, closely followed by substantial digital infrastructure deficits and difficulties convincing government stakeholders of the value of providing digital services via postal infrastructure. Notably, Latin America and the Caribbean is the only region where every obstacle surveyed was reported as significant by more than one-third of DOs, underscoring the broad range and depth of challenges in the region.

These regional variations reflect underlying differences in economic conditions, regulatory environments, and infrastructure capabilities. Systematically addressing these region-specific barriers is essential to fully leverage the postal sector's potential as a driver of inclusive economic growth, financial empowerment, social development, and digital transformation worldwide.

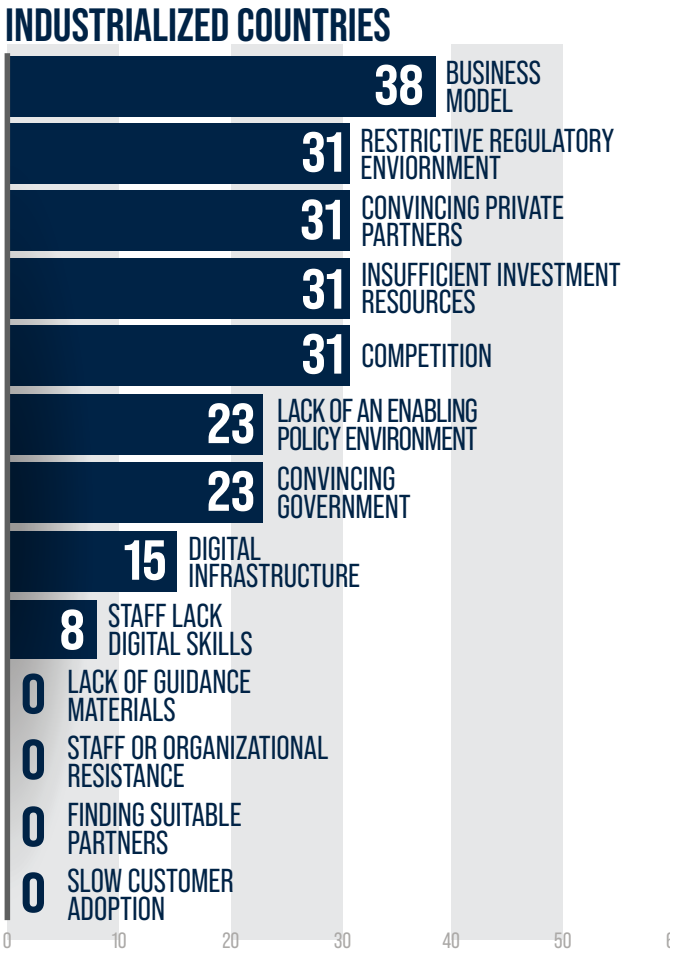
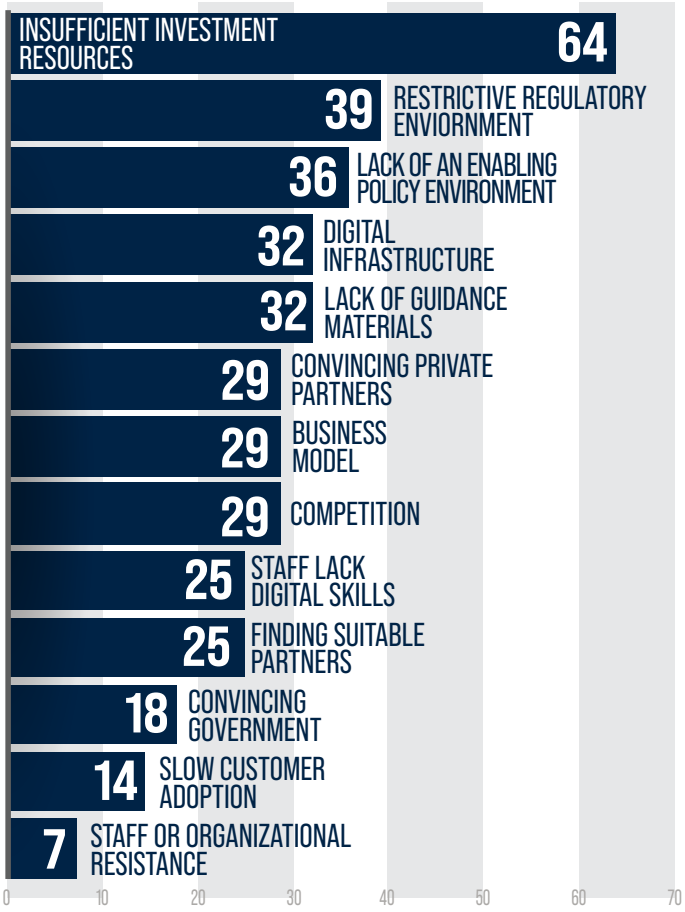
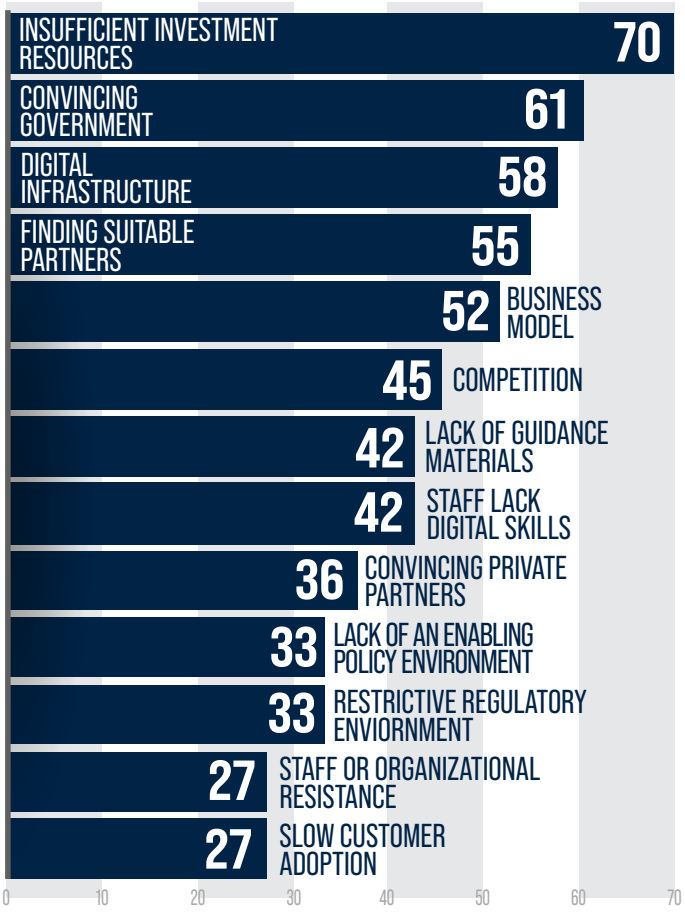


Figure 25: **Challenges DOs face in providing or introducing digital services by region (percentage)**

ASIA AND PACIFIC

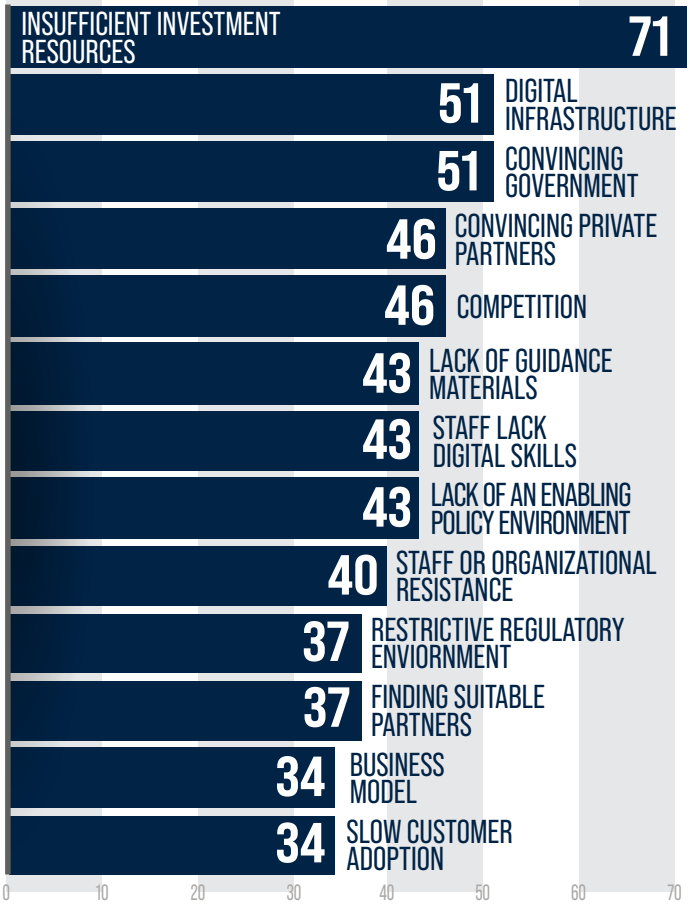


AFRICA



EUROPE AND CIS

LATIN AMERICA AND CARIBBEAN



SECTION 3

E-COMMERCE

E-commerce: an engine for inclusive economic growth

With over 2.3 billion people – more than one in four individuals worldwide – shopping online in 2021, e commerce has shifted from a niche market to a key pillar of the global economy. Between 2017 and 2021, e-commerce sales grew by 68%, contributing over USD 27 trillion to GDP across 43 developed and developing economies in 2022 (UNCTAD, 2024a). Beyond its direct economic impact, e-commerce supports progress toward 10 of the 17 UN Sustainable Development Goals,[10] including eliminating poverty, ending hunger, reducing inequalities, promoting economic growth, and promoting environmental sustainability (Revinova, 2021). E-commerce also reduces barriers to business operations, particularly benefiting micro, small and medium-sized enterprises (MSMEs). By eliminating the need for physical storefronts, expanding market access – including internationally – and lowering costs, e-commerce creates new opportunities for SMEs to compete and grow (Rillo and dela Cruz, 2016).

Persistent divides in e-commerce adoption

Despite significant growth in e-commerce adoption in developing economies, a substantial participation gap remains between developed and developing countries. While developing economies generate approximately 40% of global GDP, they account for only 15–25% of global e-commerce sales (UNCTAD, 2024b). Several structural barriers continue to hinder e-commerce adoption in these regions, including inadequate digital infrastructure, lower rates of internet usage and meaningful connectivity, and limited digital literacy. Without interventions to bridge this digital divide, MSMEs in developing economies risk being further excluded from global markets. Given these persistent adoption gaps, DOs have a unique opportunity to bridge logistical and digital barriers, particularly for MSMEs and women entrepreneurs.

Leveraging postal infrastructure to support MSMEs and women-owned businesses

For MSMEs, which contribute 50% of global GDP, 60–70% of employment, and make up over 90% of businesses worldwide (International Labour Organization, 2019), access to reliable logistics and delivery services is a critical factor in participating in e-commerce. However, many MSMEs face logistical constraints owing to a lack of affordable delivery solutions. DOs are well positioned to bridge this gap by leveraging their extensive physical infrastructure and last-mile delivery capabilities. Many MSMEs rely on DOs for parcel deliveries and logistics in the absence of affordable private courier options (Tagawa, 2020). By integrating e-commerce services, DOs can help MSMEs overcome barriers such as high transaction costs and search frictions, limited access to domestic and international markets, infrastructure gaps, and social constraints. By addressing these challenges, e-commerce services offered by the Post can enhances MSME productivity and profitability (Ladrière et al., 2022; Pearce, 2022; UNCTAD, 2025). Beyond direct-to-consumer (B2C) sales, e-commerce enables MSMEs to

By integrating e-commerce services, DOs can help MSMEs overcome barriers such as high transaction costs and search frictions, limited access to domestic and international markets, infrastructure gaps, and social constraints.

10 This is highly dependent on whether e-commerce services are delivered in ways that take into account and mitigate potential negative environmental (e.g., packaging waste and carbon emissions), economic (e.g., market competition), and social externalities.

participate in business-to-business (B2B) commerce, making it easier for them to integrate into national and global value chains (Ladrière et al., 2022). Additionally, e-commerce offers flexibility for entrepreneurs, reducing the need for physical storefronts – a factor that is particularly beneficial for women entrepreneurs (Sirimanne and Adhikari, 2023).

Beyond logistical challenges, many MSMEs in developing regions face significant barriers to participation in the digital economy. These issues are particularly pronounced among rural MSMEs and women-owned businesses, which are less likely to participate in e-commerce.

Beyond logistical challenges, many MSMEs in developing regions face significant barriers to participation in the digital economy, including a lack of online presence, limited access to digital technologies, and a shortage of staff with digital skills (UNCTAD, 2024a). These issues are particularly pronounced among rural MSMEs and women-owned businesses, which are less likely to participate in e-commerce (UNCTAD, 2023b). For rural businesses, poor digital infrastructure, connectivity issues, and more frequent power outages limit their ability to engage with online markets, while last-mile logistical gaps make efficient order fulfilment more difficult (Nazir and Roomi, 2021). Women entrepreneurs, meanwhile, often face additional challenges such as lower access to credit, fewer business networks, and societal constraints that limit their ability to scale their operations (Sirimanne and Adhikari, 2023). Given that DOs already serve rural and women-owned MSMEs, expanding e-commerce services through DOs presents an opportunity to enhance digital and economic inclusion while strengthening MSMEs' competitiveness.

The emerging role of DOs in economic inclusion through e-commerce

Building on their established infrastructure and experience with MSMEs, DOs are increasingly embracing a strategic role in driving economic inclusion through expanded e-commerce offerings. As mail and small parcel delivery volumes decline, diversifying into e-commerce services has emerged as a key business opportunity for the postal sector. Many DOs see e-commerce expansion as essential to their long-term sustainability, and **71% of surveyed DOs now identify as e-commerce service providers,** making e commerce the second most widely offered digital service type after digital postal services. Beyond being a natural extension of postal operations, e-commerce presents both business potential for DOs and economic opportunities for underserved markets. By expanding e-commerce services, DOs are helping bridge gaps in market access, reducing logistical barriers for MSMEs, and enabling broader participation in local and international trade. Their role in connecting businesses to consumers, supporting last-mile logistics, and providing essential financial and digital tools reinforces the postal sector's potential as a key driver of inclusive economic development.

Our survey results indicate that DOs are providing e-commerce services that enhance the economic inclusion of MSMEs. These services offer tangible benefits by:

improving the convenience of e-commerce deliveries, ensuring greater accessibility for both merchants and consumers

reducing warehousing burdens by enabling merchants to store inventories closer to customers, speeding up delivery times and lowering costs

providing financing solutions that expand merchant reach and help mitigate financial risks

offering actionable business intelligence, equipping MSMEs with data-driven insights to make informed decisions

facilitating access to international markets, enabling MSMEs to participate in cross-border trade and global value chains

Although DOs are already contributing significantly to economic inclusion, further expanding the range of e-commerce services they offer could substantially increase their impact.

Opportunities to broaden the postal sector's e-commerce impact

While DOs are making important contributions to economic inclusion through e-commerce services, there remains substantial room for growth. Although e-commerce service provision is fairly widespread, the provision of individual services – and thus their full benefits – remains limited. Maximizing impact requires not only offering e-commerce services but also expanding the range of services provided. On average, DOs that identify as e-commerce service providers offer just 6.9 out of the 17 surveyed services. Among these, online customs declarations are the most widely available, with 63% of DOs providing this service. However, no other e-commerce service has exceeded 50% provision. Payment on delivery (44%) and pick-up and drop-off (PUDO) points (42%) rank second and third, respectively, but still fall short of widespread implementation. These findings highlight a significant opportunity for DOs to broaden their role in economic inclusion by expanding the availability of e-commerce services. Without higher provision rates, the global postal network will remain an underutilized resource in advancing economic participation and growth. However, realizing these opportunities requires addressing notable regional disparities that currently limit the postal sector's full potential.

Regional disparities in e-commerce service provision

Significant regional disparities exist in the provision of e-commerce services by DOs. While over 92% of DOs in Europe and CIS and industrialized countries report offering e-commerce services, this figure drops to just 54% in Latin America and the Caribbean. The Arab region (72%) and Asia and Pacific (68%) are closer to the global average, while Africa lags slightly at 64%. Similar disparities are observed across the 17 individual e-commerce services analyzed (see Appendix 1), highlighting the need for targeted efforts to expand e-commerce provision in developing regions.

Disparities are also evident in the depth of services offered. DOs in developing regions tend to provide a more limited range of e-commerce services. DOs in industrialized countries offer an average of 10.2 out of the 17 e-commerce services analyzed, whereas DOs in Africa and in Latin America and the Caribbean only provide about one-third of these services (see figure 26 below). As a result, even when DOs in developing regions offer e-commerce services, they may not fully deliver their associated benefits. Bridging this gap requires not just the introduction of e-commerce services, but also the expansion of existing service portfolios. Deepening DOs' e-commerce portfolios in developing regions will allow them to play a more significant role in economic growth, digital transformation, and sustainable development.

Figure 26: **Percentage of DOs who consider themselves providers of e-commerce services by region**

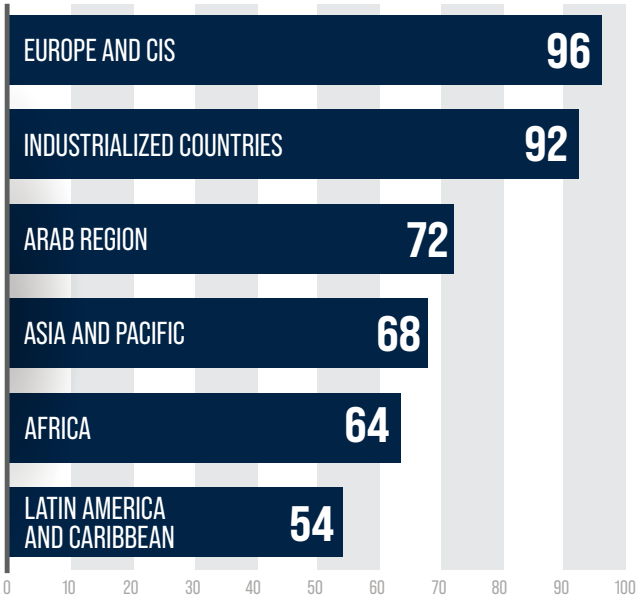
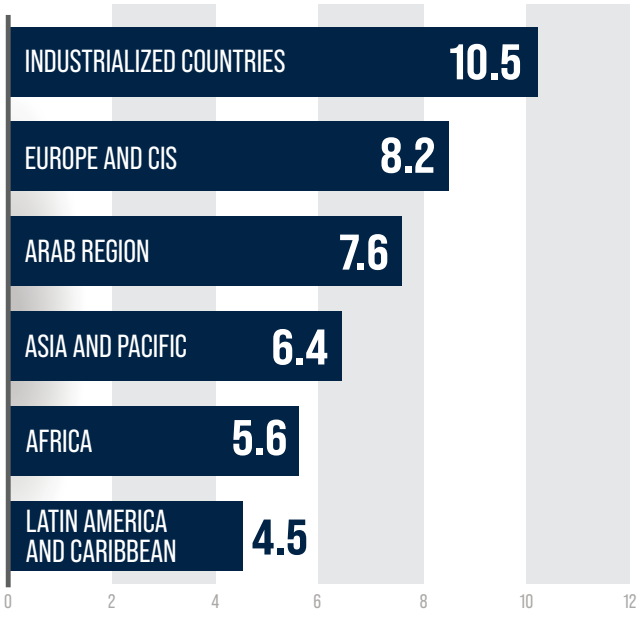


Figure 27: **Average number of e-commerce services DOs offer by region (n = 109, only DOs who consider themselves providers of e-commerce services)**



The table below summarizes regional disparities in the provision and diversity of e-commerce services by DOs. It highlights leading regions and underscores areas requiring targeted investment, capacity-building, and strategic support, particularly in Africa and in Latin America and the Caribbean, to enhance economic inclusion and the postal sector's role in global digital trade.

For comprehensive data tables and more detailed regional analyses on specific e-commerce services, please refer to Appendix 1. Having provided overall overviews of the DO e-commerce landscape, the rest of this section covers DO provision rates and demand for specific e-commerce services.

Table 4: **Regional summary of the level of DO e-commerce services provision and average number of services offered**

REGION	E-COMMERCE SERVICE PROVISION	AVERAGE NUMBER OF SERVICES OFFERED (OUT OF 17)	KEY OBSERVATIONS
INDUSTRIALIZED COUNTRIES	Very high (92%)	10.2	Most comprehensive service portfolios; lead globally in e-commerce
EUROPE AND CIS	Very high (96%)	8.5	Extensive e-commerce service provision, but lag slightly behind industrialized countries
ARAB REGION	Moderate–high (72%)	7.6	Growing e-commerce provision but limited diversity of services
ASIA AND PACIFIC	Moderate (68%)	6.4	Notable provision, but still significant opportunities to expand service range and provision rates
AFRICA	Moderate (64%)	5.6	Moderate provision overall, but limited service diversity and substantial room for growth
LATIN AMERICA AND CARIBBEAN	Lowest (54%)	4.5	Least diversified service provision

BOX 7

UzPost – Transforming pick-up points into inclusive multi-brand e-commerce hubs

In January 2024, UzPost launched an innovative initiative to convert its existing network of delivery points into multi-brand pick-up locations, significantly enhancing the convenience and accessibility of e commerce services across Uzbekistan. Key stakeholders in this initiative include leading e-commerce marketplaces such as Uzum Market, Wildberries, Zoodmall, and Ozon, whose integration with UzPost's network has enabled streamlined logistics and improved customer service. Customers now benefit from greatly enhanced convenience, including the ability to try on clothing, shoes, and accessories at designated post office fitting areas and pay for orders upon receipt from select marketplaces.

By repurposing existing postal infrastructure rather than building new facilities, UzPost has demonstrated a strong commitment to sustainability, avoiding the emission of over 5,740 tons of CO2 in 2024. In just six months, more than 160 delivery points were converted under the programme, resulting in around 18,000 processed orders and an impressive redemption rate of nearly 83%. These environmental and operational gains are complemented by plans to scale the initiative across UzPost's entire network of over 1,500 post offices, including those in small towns and underserved areas, extending the benefits of e-commerce inclusion to even more communities.

Importantly, the initiative also supports gender-inclusive development. With over half of UzPost's workforce made up of women, the transformation of postal pick-up points into dynamic e-commerce hubs has created new professional development and income-generating opportunities. Employees have received targeted training on new systems and logistics processes, allowing them to take on more specialized roles.

Sources: UPU TradePost awards application

3.1 DELIVERY SERVICES FACILITATING E-COMMERCE

DOs are expanding their role as key facilitators of digital trade by introducing flexible delivery solutions that enhance accessibility and customer convenience. Among these, PUDO points have emerged as the most widely offered e-commerce delivery service, currently provided by 42% of DOs worldwide. This service is particularly valuable in areas where home delivery is unreliable or expensive, allowing customers to collect or return parcels at designated locations, often closer to their homes or businesses. The growing importance of PUDO services is reflected in its high demand among DOs that do not yet offer it, making it the most sought-after e-commerce delivery service for future provision.

To improve accessibility and adaptability in e-commerce deliveries, DOs are introducing innovative solutions that cater to diverse customer needs. For customers with irregular schedules, mobility constraints, or limited home delivery options, parcel lockers and smart lockers provide a secure and convenient alternative. Currently, 34% of DOs offer parcel lockers, while 25% provide smart lockers equipped with advanced digital functionalities. These solutions enhance last-mile delivery efficiency, particularly in regions with inadequate addressing systems, where home deliveries are challenging. By deploying these services, DOs are helping to bridge infrastructure gaps and extend the reach of e commerce to more communities, including those in remote areas or informal settlements.

Returns solutions are essential for strengthening consumer confidence and promoting trust between buyers and merchants, particularly in markets where consumer protections are limited. These services enable refunds and exchanges for products that are damaged, do not fit, or fail to meet expectations, helping to reduce risks for both customers and MSMEs. Currently, 38% of DOs provide returns solutions, improving the reliability of e-commerce transactions and fostering a safer purchasing environment. Similarly, on-demand delivery is gaining traction, now offered by 31% of DOs. This option allows customers to schedule deliveries at their convenience, reducing the risks associated with receiving high value or time-sensitive purchases when they are unavailable. By enhancing flexibility and reliability in e-commerce logistics, DOs are playing a crucial role in making digital trade more accessible and inclusive.

Table 5: **DO level of implementation and demand for e-commerce delivery services**

PUDO POINTS	42%	61%
RETURNS SOLUTIONS	38%	52%
PARCEL LOCKERS	34%	55%
ON-DEMAND DELIVERY	31%	51%
SMART LOCKERS	25%	53%

Detailed regional provision rates and additional in-depth analyses and data on e-commerce delivery services are available in Appendix 1. The following subsection addresses warehousing solutions.

3.2 WAREHOUSING SOLUTIONS

Managing inventory and ensuring fast, cost-effective deliveries remain major obstacles for MSMEs engaging in e-commerce, particularly in developing regions where logistics infrastructure is weak. Many DOs are addressing these challenges by offering warehousing and fulfilment solutions that enable businesses – especially MSMEs – to store inventory closer to customers, reduce overhead costs, and streamline order fulfilment. Currently, 34% of DOs provide e-commerce fulfilment services, which support merchants by handling inventory management, packing, and shipping orders. By outsourcing these functions to the postal network, businesses can reduce logistical complexities, improve delivery reliability, and better compete in digital markets.

In addition to fulfilment services, 18% of DOs are offering on-demand warehousing solutions, which allow e-commerce merchants to store inventory closer to customers, reducing delivery times and lowering costs associated with maintaining independent storage facilities. These services are particularly valuable for MSMEs, which often lack the financial and logistical capacity to manage large-scale warehousing operations. By leveraging the postal network's existing infrastructure, DOs can help bridge logistical gaps for small businesses, improving their ability to compete in digital markets. Beyond economic benefits, on-demand warehousing and fulfilment centres

BOX 8

Magyar Posta's fulfilment centre – Revolutionizing e-commerce logistics in Hungary

Magyar Posta has significantly strengthened Hungary's e-commerce sector through its state-of-the-art SMART by MPL fulfilment centre, launched in early 2023. Designed to support the rapidly growing local e-commerce market – forecasted to expand by nearly 30% over the next four years – this fulfilment centre leverages fully automated, robotized warehouse technology to streamline e-commerce logistics. The investment established an 800-square-meter automated storage facility, supported by robots that operate 24/7 between 3,000 automated crate places and 240 pallet places, collectively accommodating up to 240 tonnes of products. This high degree of automation significantly reduces human error, ensures round-the-clock operation, and allows Magyar Posta to offer comprehensive outsourced logistics, including warehousing, packaging, labelling, delivery, and returns management.

SMART by MPL represents an unprecedented integration of fulfilment and parcel logistics services within Hungary, combining Magyar Posta's extensive national postal logistics network with advanced warehouse technology. Customers, ranging from MSMEs to large corporations such as banks, insurance companies, and telecom providers, benefit from shorter lead times, reduced operational costs, and increased efficiency. Clients can manage their entire fulfilment process through an intuitive digital platform, enabling detailed tracking of stock levels, real-time order statuses, and shipment progress. Additionally, parcels can be delivered through diverse channels such as home delivery, Magyar Posta's existing pick-up points, parcel lockers (including for returns), or post offices. Magyar Posta also facilitates foreign cash-on-delivery as a convenient payment option for online shoppers who prefer or require paying in cash upon receipt, alongside streamlined support for product returns.

By centralizing and automating logistics processes, SMART by MPL allows local businesses to dedicate their resources more fully to business development, customer acquisition, and market expansion. Furthermore, the integration of sustainability principles – maximizing warehouse space usage and minimizing energy consumption – positions Magyar Posta as an environmentally responsible logistics provider, substantially lowering its ecological footprint while setting new benchmarks for sustainable business practices in Hungary's e-commerce sector.

Sources: UPU TradePost awards application (Magyar Posta, 2024, 2023)

positioned closer to consumers can also contribute to environmental sustainability by reducing emissions through shorter delivery routes (UNCTAD, 2025). Given the high demand for these services, with more than half of non-offering DOs either actively developing or considering their implementation, there is significant potential for the postal sector to expand its role in e-commerce logistics and sustainable supply chain management.

Table 6: **DO level of implementation and demand for e-commerce warehousing solutions**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
E-COMMERCE FULFILMENT	34%	59%
ON-DEMAND WAREHOUSING	18%	52%

Detailed regional provision rates, along with additional in-depth analyses and data on e-commerce warehousing solutions, are available in Appendix 1. The next subsection outlines financial solutions DOs are providing to support trust and convenience in e-commerce transactions.

3.3 E-COMMERCE FINANCE SOLUTIONS

Limited trust and payment options remain significant barriers to e-commerce participation, particularly in regions where digital payment adoption and consumer confidence in online transactions are low. DOs are addressing these challenges by offering secure and reliable payment solutions that facilitate trust between buyers and sellers. These services are particularly crucial for e-commerce merchants seeking to reach underserved customers who may be hesitant to transact with unfamiliar vendors.

Among these solutions, payment on delivery is the most widely offered e-commerce finance service, provided by 44% of DOs. This service allows customers to inspect or receive goods before making payment, increasing confidence in online purchases while enabling merchants to expand their reach to consumers who may lack access to digital payment methods. Demand for this service is substantial, with nearly half of DOs that do not currently offer payment on delivery either actively developing or considering its adoption. Expanding these delivery-focused financial services could further enhance e commerce accessibility, particularly in regions where digital payment penetration remains low.

A smaller portion of DOs (11%) offer escrow services, which provide an added layer of security for buyers and sellers by holding funds in trust until the customer has received and confirmed satisfaction with the product. This service reduces risks for consumers purchasing from unfamiliar merchants while also offering businesses greater assurance that digital payments will be completed. While escrow provision remains limited, interest in the service is growing, with nearly 40% of DOs that do not currently offer it either developing or considering its implementation.

Table 7: **DO level of implementation and demand for e-commerce finance solutions**

PAYMENT ON DELIVERY	44%	48%
ESCROW	11%	39%

Detailed regional provision rates, along with additional in-depth analyses and data on e-commerce finance solutions, are available in Appendix 1. The subsequent subsection discusses additional merchant support services offered by DOs to streamline e-commerce operations.

BOX 9

Pos Indonesia – Empowering MSMEs through community collaboration centres and inclusive e commerce finance services

Pos Indonesia's more than 200 community collaboration centres (also known as Pos Bloc), which are primarily located outside major urban areas, leverage underutilized postal infrastructure – including some architecturally significant historical colonial buildings – transforming them into dynamic community hubs specifically designed to support MSMEs. These centres offer MSMEs a wide array of resources, including high-speed internet, dedicated spaces for showcasing products, live-streaming studios for social selling, training sessions in digital marketing, financial management, and customer service, as well as valuable networking opportunities. Through these services, Pos Indonesia helps MSMEs, particularly women entrepreneurs, who constitute approximately 64.5% of Indonesia's MSME sector, access essential digital tools and become competitive in the online marketplace.

Pos Indonesia's cash-on-delivery (COD) services further extend e-commerce inclusivity by addressing the needs of the large unbanked population in Indonesia. This payment method allows customers, especially those in suburban and rural areas with limited access to digital payment solutions, to pay for goods upon receipt. In 2023 alone, Pos Indonesia's COD transactions reached 4.5 million, totalling 780 billion Indonesian rupiah.

This integrated approach exemplifies how Pos Indonesia is strategically repurposing its postal network and property infrastructure, creating a sustainable ecosystem to support MSMEs while simultaneously providing valuable logistical and financial services. In addition to the support offered at Pos Bloc centres, MSMEs benefit from Pos Indonesia's national fulfilment centres and the Pos Aja! mobile app, which facilitates streamlined deliveries, including pick-up requests, and digital business management. These initiatives align with broader government objectives to enhance digital and financial inclusion, thereby strengthening the resilience and competitiveness of Indonesia's local economies, particularly in areas underserved by traditional banks and financial service providers. Such efforts ensure the inclusive participation of marginalized communities in the country's growing digital economy.

Source: Interview with Pos Indonesia staff, 2024 TradePost awards

3.4 MERCHANT SUPPORT AND INTELLIGENCE

E-commerce merchants – especially MSMEs – often face operational inefficiencies and limited access to actionable business insights, which can hinder their ability to optimize logistics, streamline operations, and expand their market reach. Some DOs are addressing these challenges by providing digital tools and intelligence solutions that help merchants make more data-driven business decisions.

One key area of support is the integration of postal and delivery services into e-commerce merchants' websites and sales platforms. Currently, one-third of DOs offer this service, allowing businesses to automate shipping processes, track deliveries in real time, and enhance overall convenience. Moreover, demand for this service remains high, with two-thirds of DOs that do not yet offer it either considering or actively developing its implementation. This indicates a strong recognition within the postal sector of the importance of seamless logistics integration in supporting e-commerce growth.

In addition, some DOs are equipping merchants with digital tools to manage shipping and delivery processes more efficiently. Currently, 31% of DOs provide online management tools for shipping documentation and delivery options, allowing businesses to streamline logistics, reduce administrative burdens, and improve overall operational efficiency. The demand for these tools remains strong, with more than half of DOs that do not yet offer them either actively considering or developing their implementation.

Performance reports are another valuable tool that some DOs offer to support e-commerce merchants in optimizing their business operations. Currently, 28% of DOs provide merchants with access to performance data, including delivery performance metrics, cost analytics, customer behaviour insights, and geographic trends. These reports enable merchants to enhance their sales strategies, improve customer service, and refine logistics planning to boost efficiency. Demand for performance reporting services is strong, with half of DOs that do not yet provide them either considering or developing this capability.

One in five DOs (20%) now offer inventory forecasting solutions, helping e-commerce merchants improve stock management and operational efficiency. These solutions enable merchants to prevent stockouts, minimize excess inventory costs, optimize warehouse space utilization, and plan staffing needs more effectively. Demand for inventory forecasting services is also notable, with nearly half of DOs that do not currently offer them either considering or developing this capability.

Table 8: **DO level of implementation and demand for e-commerce merchant support and intelligence solutions**

INTEGRATION OF POSTAL WEB SERVICES WITH E-MERCHANT'S WEBSITE	34%	66%
ONLINE MANAGEMENT OF DOCUMENTS/ MERCHANDISE DELIVERY OPTIONS	31%	55%
PERFORMANCE REPORTS	28%	50%
INVENTORY FORECASTING	20%	46%

Detailed regional provision rates, along with additional in-depth analyses and data on merchant support and business intelligence services, are available in Appendix 1. Next, we examine the support provided by DOs to facilitate MSMEs' participation in international e-commerce.

BOX 10

India Post's Dak Ghar Niryat Kendra – Inclusive exports through the postal network

Dak Ghar Niryat Kendras (post office export centres) represent a significant initiative by India Post to align with the Government of India's public policy objectives of boosting exports, supporting MSMEs, and promoting inclusive economic growth. Under the broader umbrella of Prime Minister Modi's "One District-One Product" campaign, this initiative seeks to facilitate direct access to global markets for small businesses, artisans, women entrepreneurs, and MSMEs from remote and rural areas who face significant barriers in participating in international trade. This strategic effort directly complements India's Foreign Trade Policy 2023, which explicitly emphasizes the operationalization of Dak Ghar Niryat Kendras to enhance cross-border e-commerce and economic inclusivity.

India Post's extensive collaboration with key stakeholders, including Indian Customs, the Directorate General of Foreign Trade, and various partner agencies, has been central to the initiative's success. The Dak Ghar Niryat Kendras offer comprehensive export support through a hybrid model combining physical infrastructure and digital platforms. This multi-channel approach allows MSMEs to manage almost every step of the export process online – from initial registration, customs clearance, and shipment tracking, to financial transaction management – while postal staff, known as Dak Niryat Sahayaks, provide essential on-the-ground assistance on navigating the digital platform for less connected customers as well as assistance with packaging, GST registration, Import–Export Code generation, and export documentation.

As of September 2023, less than a year since the initiative was launched, over 825 Dak Ghar Niryat Kendras had been established in rural and remote post offices, serving more than 3,000 MSMEs – including 300 women entrepreneurs – who previously had limited export opportunities. These centres had processed more than 200,000 shipments, cumulatively valued at approximately USD 5 million, indicating substantial and rapidly growing uptake. The initiative particularly benefits artisans and small scale producers from smaller towns and remote areas, where customs procedures and export formalities previously represented significant logistical and financial challenges. By leveraging India Post's extensive physical network and trusted brand reputation, the initiative provides affordable, transparent, and user-friendly export services, reducing dependency on costly intermediaries.

Dak Ghar Niryat Kendras not only empower communities economically by facilitating global market access but also promote broader socio-economic benefits such as job creation, increased community income, and gender-inclusive growth.

Source: UPU TradePost awards application (India Post, 2023)

3.5 MERCHANT SUPPORT FOR INTERNATIONAL E-COMMERCE

Participating in global e-commerce presents significant challenges for MSMEs, particularly in navigating international shipping complexities and regulatory compliance. Many DOs are addressing these barriers by offering solutions that streamline cross-border trade, enabling MSMEs to expand their market reach. Currently, 63% of DOs provide online customs declaration services, facilitating faster and more efficient processing of international shipments. There is strong demand for further expanding this service, and nearly three-quarters of DOs that do not currently offer online customs declarations are either developing or actively considering its introduction.

DOs are also helping MSMEs better manage the costs associated with cross-border trade. Over one-third of DOs provide calculation of estimated total landed costs, giving e-commerce merchants a clear breakdown of all expenses related to international deliveries. This service allows MSMEs to price their products more competitively. Additionally, providing this information to parcel recipients can improve transparency and alleviate concerns about surprise customs duties, which can be a significant barrier to cross-border purchases.

A smaller proportion of DOs (14%) offer virtual international addressing services, a solution that enables MSMEs to establish a professional presence in foreign markets and manage cross-border operations without opening a physical office. This service can be particularly valuable for businesses in developing countries seeking to expand internationally but facing logistical and financial constraints.

Table 9: **DO level of implementation and demand for services facilitating international e-commerce**

ONLINE CUSTOMS DECLARATION	63%	73%
CALCULATION OF ESTIMATED TOTAL LANDED COSTS	36%	50%
VIRTUAL INTERNATIONAL ADDRESS SERVICE	14%	43%

Detailed regional provision rates, along with additional in-depth analyses and data on international e commerce support services, are available in Appendix 1. The next subsection describes how DOs support MSMEs in establishing an online presence through virtual marketplaces and online stores.

BOX 11

Correos de México – Enabling inclusive e-commerce through CorreosClick

Launched by the Servicio Postal Mexicano (Correos de México), CorreosClick is a digital marketplace created to support artisans, microenterprises, and small producers often excluded from mainstream e commerce platforms. Aligned with the Mexican government's national goals for digital inclusion and economic development, the platform provides an accessible and secure channel for domestic and international sales – leveraging the deep territorial reach of Mexico's postal network. The project is supported by the Secretariat of Infrastructure, Communications and Transport and by the Government of Mexico City through its Ministry of Economic Development (SEDECO), which has played a key role in promoting the platform and organizing training for local entrepreneurs. Financially backed by the Postal Union of the Americas, Spain, and Portugal (PUASP) and with technical assistance from the UPU, CorreosClick positions small Mexican businesses to participate in digital trade while reaching global markets across 191 UPU member countries.

CorreosClick primarily supports businesses that are frequently overlooked by commercially driven e commerce platforms owing to their smaller scale, lower marketing budgets, or rural locations. These include traditional artisans, local textile makers, herbal product producers, independent booksellers, and micro-entrepreneurs offering handmade jewellery, clothing, candles, or sweets. By targeting this underserved segment, Correos de México is making e-commerce more inclusive and culturally representative, while fostering economic opportunities in marginalized communities.

The platform is built on a business-to-business-to-consumer (B2B2C) model. It enables sellers to list products directly – without incurring platform or listing fees – and offers one of the lowest commission rates in the market. Payment processing is handled securely via BBVA. Through detailed seller guides, workshops, and personalized support, Correos de México ensures that even first-time digital merchants can confidently navigate registration, packaging, shipment, and customer service. Once an item sells, the seller is notified by email, prepares the product for shipping, and drops it off at one of over 1,000 digitally connected post offices and over 800 supplementary drop-off locations across the country.

The platform's national coverage and use of Mexpost (Correos de México's express mail service) ensure that even sellers in remote areas can reliably fulfil domestic and international orders. International shipments are handled using official postal export procedures, allowing sellers to bypass commercial export channels and benefit from simplified customs treatment. Packages pass through Mexico City's airport and are transferred to foreign postal operators for final delivery, all while maintaining traceability via the International Postal System. This logistical integration gives microenterprises access to global markets without the overhead and regulatory burdens typical of private-sector platforms.

CorreosClick illustrates how national postal operators can act as powerful enablers of e-commerce inclusion when backed by public infrastructure, national governments and multilateral support. With PUASP and UPU technical and financial assistance, Mexico's public postal system has transformed into a platform for economic empowerment – providing rural producers and urban artisans alike with tools to thrive in the digital economy.

Sources: UPU TradePost awards application (CorreosClic, n.d.; SEDECO CDMX, 2024; Universal Postal Union, 2024)©

3.6 VIRTUAL MARKETPLACE OR ONLINE STORE

Small businesses often struggle to establish an online presence owing to limited financial resources, digital skills, and technical expertise – barriers that some DOs are addressing by offering virtual marketplaces and online stores. Currently, one in five DOs provide such a marketplace, creating direct connections between e-commerce merchants and customers. By offering virtual marketplaces, DOs help lower the entry barriers for small businesses that may lack the capacity to develop their own online stores. The demand for these services is high, with more than half of DOs that do not yet offer them either considering or actively developing virtual marketplaces. Notably, an additional one in five DOs were already in the process of developing such platforms at the time of the survey.

Table 10: **DO level of implementation and demand for virtual marketplace or online store**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
VIRTUAL MARKETPLACE OR ONLINE STORE	20%	53%

Detailed regional provision rates, along with additional in-depth analyses and data on virtual marketplace and online store services, are available in Appendix 1. The stickiness of these e commerce services and their sustainability in DO operations is discussed in the following subsection.

3.7 E-COMMERCE SERVICES ARE STICKY

Although measuring the long-term sustainability of e-commerce services directly can be challenging, our "stickiness" metric – the extent to which services remain offered after introduction – is a useful indicator. Survey results indicate that e-commerce services stick 96% of the time, a rate comparable to the high stickiness observed for digital postal services. The high stickiness rates of e-commerce services provide insight into their perceived value and long-term sustainability for DOs and the businesses they support. Once implemented, these services are rarely discontinued, suggesting that they consistently generate benefits for both DOs and their e-commerce partners. This persistence suggests that e commerce services play a crucial role in strengthening the postal sector's position in the digital economy.

The data indicates that not only is e-commerce sticky as a whole service category, but individual services also exhibit strong retention rates. Nearly all surveyed e-commerce services have stickiness rates of 88% or higher, with the exception of virtual marketplaces or online stores, which remain in operation 84% of the time. Certain services – online customs declarations, returns solutions, and integration of postal web services with e-merchant platforms – showed a 100% stickiness rate, indicating their strong alignment with business needs and operational efficiency for DOs.

E-commerce services demonstrate high stickiness across all regions, with retention rates ranging from 89% in the Arab region to 99.2% in Africa. While these findings suggest that e-commerce services continue to deliver value in diverse geographic contexts, it is important to acknowledge that stickiness metrics may be subject to biases or data limitations (see the limitations section in the introduction). Nonetheless, the consistently high retention rates reinforce the role of DOs in facilitating e-commerce provision and ensuring the long-term viability of digital trade solutions.

In summary, DOs are actively enhancing economic inclusion by delivering essential e-commerce services that address critical logistical, financial, and operational barriers faced by MSMEs globally. Despite strong progress and high retention rates (stickiness) of these services, further expanding the breadth and diversity of e-commerce offerings remains essential. Addressing regional disparities and scaling under-adopted but highly demanded services, such as flexible delivery options, warehousing solutions, and secure financial tools, will be crucial for maximizing the postal sector's role as a catalyst for inclusive economic growth and digital transformation. The following section explores how DOs promote financial inclusion and enable marginalized groups and MSMEs to actively participate in the digital economy through digital financial services.

SECTION 4

DIGITAL FINANCIAL SERVICES

Financial inclusion and sustainable development

Financial inclusion is a critical driver of progress across multiple dimensions of sustainable development. Notably, 8 out of the 17 Sustainable Development Goals (SDGs) explicitly include targets related to financial inclusion, highlighting its pivotal role in promoting economic growth, reducing inequalities, empowering women, enhancing livelihoods, and alleviating poverty. Considerable progress has been achieved in recent years: the proportion of adults globally with access to a financial account increased significantly, reaching 76% in 2021 – an increase of 50% from a decade prior (World Bank, 2021a).

However, despite this progress, approximately 1.4 billion adults worldwide remain without access to formal financial services, with marginalized populations disproportionately excluded. While the gender gap in financial inclusion has narrowed in recent years, women are still 6 percentage points less likely than men to own a financial account (World Bank, 2021a). Similarly, people living in poverty, rural communities, unemployed individuals, and youth tend to experience lower levels of financial inclusion. The unbanked encounter multiple barriers to formal financial access, such as geographic distance from financial institutions, lack of formal identification documents, and insufficient financial resources (World Bank, 2021a). Digital financial services offer significant potential for overcoming these barriers and enhancing financial inclusion.

The potential of digital financial services

When effectively implemented, digital financial services – including payments, credit (especially micro-credit), savings, insurance, and investment products – can significantly mitigate barriers limiting access to financial services. For instance, digitally enabled financial accounts allow users to perform transactions remotely, overcoming geographic isolation from physical financial institutions and enabling access at any time of day rather than being limited to the operating hours of physical service locations. Such accounts also enable governments to efficiently distribute social benefits and relief funds during crises and natural disasters. Countries equipped with robust digital payment infrastructure, complemented by digital identification and data-sharing systems, were notably faster, more efficient, and more effective at distributing essential social assistance during the COVID-19 pandemic, even reaching previously unbanked citizens (World Bank, 2022). Governments issuing salaries and social assistance digitally benefit from cost reductions, improved traceability, and reduced corruption compared to cash-based payments (Setor et al., 2021). Meanwhile, recipients of digital payments gain from receiving the full intended amounts, alongside enhanced convenience, safety, and greater discretion. In contexts where social assistance may carry stigma, the ability to receive support privately – without drawing attention – can help preserve recipients' dignity and reduce potential social judgement. Additionally, digital insurance products offer critical protection to smallholder farmers, marginalized workers, and micro-entrepreneurs whose livelihoods face increasing threats from climate change and severe weather events (Better Than Cash Alliance, 2023).

Digital financial services have been linked to positive impacts across 13 of the 17 SDGs, particularly in areas such as poverty alleviation, gender equality, and economic growth (Better Than Cash Alliance, 2023). These services are particularly beneficial for MSMEs and marginalized groups, including women, who typically experience greater exclusion from the formal financial system. Moreover, access to digital financial services has been shown to strengthen women's decision-making power within households and enhance their overall financial independence (Better Than Cash Alliance, 2023).

Without access to digital financial services, meaningful participation in the digital economy becomes nearly impossible, reinforcing the economic exclusion of underserved populations.

The postal sector's role in digital financial inclusion

DOs are uniquely positioned to deliver inclusive digital financial services, especially in areas underserved by traditional financial institutions, owing to their extensive existing infrastructure, proximity to marginalized communities, and established trust among these populations (UPU, 2021). Globally, approximately 1.5 billion people use financial services provided by DOs, positioning the postal sector as the second-largest contributor to financial inclusion after commercial banks (UPU, n.d.). The UPU financial inclusion strategy is built around four key pillars, which are enabling digital payments, digital savings, inclusive insurance and microfinance products and solutions. Between 84% and 90% of DOs already offer financial services (Khan and Dukelskiy, 2023). Citizens worldwide rely on DOs for various financial services, including savings and postal accounts, pension and scholarship disbursements, social aid payments, e-commerce and bill payments, mobile payments, insurance, and credit (UPU, n.d.). Moreover, the global postal network's extensive physical infrastructure – comprising over 650,000 contact points – ensures that these services are accessible even in remote areas, frequently at more affordable rates than those offered by commercial banks. Postal financial services have been particularly beneficial for women, who typically experience lower levels of financial inclusion. In developing countries, the ratio of women to men using postal financial services is 1.27 to 1, while in developed countries, it stands at 1.21 to 1 (UPU, 2015). Globally, one in three Posts offers products specifically designed for women (Khan and Dukelskiy, 2023).

DOs are uniquely positioned to deliver inclusive digital financial services, especially in areas underserved by traditional financial institutions, owing to their extensive existing infrastructure, proximity to marginalized communities, and established trust among these populations

BOX 12

The role of digital financial services offered by Posts in promoting financial inclusion for women

Digitally connected post offices are emerging as essential infrastructure for achieving last-mile financial inclusion – particularly for women and underserved populations. With over 650,000 post offices worldwide, a majority located in rural and low-income areas, the postal network represents a uniquely trusted and proximate channel for delivering digital financial services (DFS).

As a 2025 UPU study highlights, when postal operators are equipped with digital tools, they can offer a wide range of services: from mobile savings and remittances to bill payments and government-to-person (G2P) transfers (UPU, 2025). These services are critical for closing persistent gender gaps in financial access, especially in communities where women face mobility, literacy, and trust barriers. The report highlights how postal–fintech partnerships play a catalytic role in this transformation. Fintechs bring innovation and digital user experiences, while Posts provide physical reach, regulatory familiarity, and customer trust. Together, they can co-design inclusive, gender-responsive financial products that meet the needs of marginalized communities.

To fully unlock this potential, countries must invest in:

upgrading postal infrastructure and connectivity

training postal agents to deliver DFS with a gender lens

creating enabling regulatory frameworks that allow postal entities to serve as digital financial service providers or agents

Inclusion through digital post offices is not only feasible – it is foundational to delivering on global commitments to financial inclusion, gender equality, and the SDGs.

According to the survey results, **58% of DOs already identify themselves as digital financial service providers**,[11] making DFS the third most widely offered category of digital services by DOs, after digital postal and e-commerce services. Vulnerable populations – including individuals experiencing homelessness or unemployment, refugees, and rural residents – often face significant barriers to accessing digital financial services owing to high costs, limited connectivity, and lack of access to appropriate devices (Consumers International, 2024). Our findings suggest that DOs can play a meaningful role in helping overcome these barriers by providing digital financial services in an inclusive manner. Specifically, the large majority (89%) of DOs offer digitally enabled financial services in person at post office counters. This service delivery method is particularly inclusive for rural communities and other marginalized groups less likely to have reliable access to digital technology, helping ensure these services reach populations who might otherwise be excluded from participating fully in the digital economy.

DOs are currently making valuable contributions to their countries' payment ecosystems and financial inclusion landscapes by offering a variety of inclusive digital financial services. For the purposes of this report, these services are classified into four categories:

- **Digital financial account services and management**
- **Digital payment instruments**
- **Digital remittances and bill payment services**
- **Digital social and insurance financial services**

Given the already high percentage of DOs offering financial services (Khan and Dukelskiy, 2023), there is significant potential to expand and diversify their financial offerings into the digital sphere. However, none of the individual digital financial services examined in the survey are currently offered by a majority of DOs; in fact, only six services are provided by more than one-third of DOs (financial accounts capable of making digital payments, mobile money deposits and withdrawals, online payment of postal services, electronic remittances, online bill payment, and top-up mobile credit). On average, DOs identifying as digital financial service providers offer fewer than half (6.6) of the 14 surveyed services. Moreover, while over one-third of DOs are either actively developing or considering most of these services, a surprisingly large number report having never considered many individual digital financial services. These findings indicate substantial room for improvement, particularly by increasing the provision of digital financial services and the depth of services offered. Moreover, fully realizing this potential requires addressing existing regional disparities in the provision of digital financial services.

Regional disparities in the provision of digital financial services

The regional distribution of DOs offering digital financial services is notably uneven. DOs in the Europe and CIS region lead in the provision of digital financial services, while those in Africa, the Arab region, and industrialized countries also exceed the global average. In contrast, DOs in Asia and the Pacific – and particularly in Latin America and the Caribbean – have been slower in introducing digital financial services. Additionally, disparities extend beyond the presence of services, with clear differences in the diversity and number of digital financial services provided. DOs from industrialized countries tend to offer most of the 14 surveyed services, averaging around 10.2 services. In sharp contrast, DOs in Latin America and the Caribbean offer only about one seventh of these services (see figure 28 below). These regional disparities indicate that many DOs, especially in Latin America and the Caribbean and, to a lesser extent, Africa, are not fully capitalizing on their potential to advance economic growth, financial inclusion, and digital participation. Closing this gap requires expanding and modernizing physical and digital infrastructure, the introduction of additional digital financial services, and a significant expansion of existing service portfolios to more fully realize the economic and developmental benefits of offering digital financial services via the Post.

11 Throughout this report, "digital services" includes both fully online services and digitally enabled in-person services leveraging digital technology. This broader usage explicitly recognizes hybrid, multi-channel approaches as critical for inclusive service delivery, particularly in reaching underserved and less digitally connected communities.

Figure 28: **Percentage of DOs who consider themselves providers of digital financial services by region (n = 153)**[12]

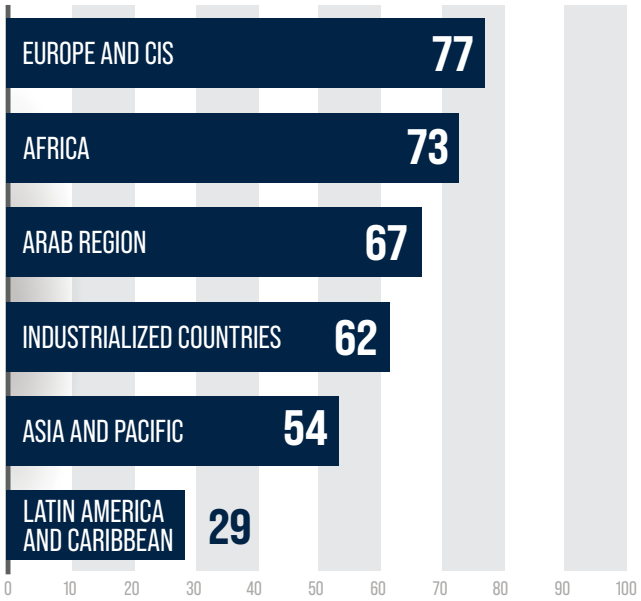
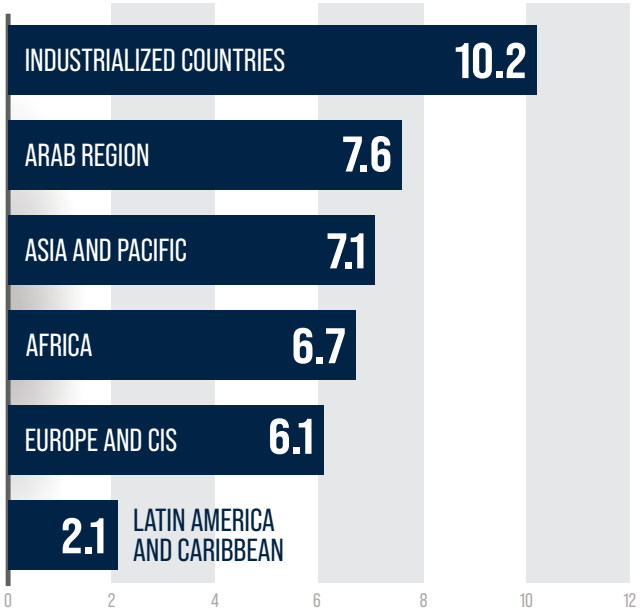


Figure 29: **Average number of digital financial services offered by region (n = 89, only DOs who consider themselves providers of digital financial services)**



BOX 13

India Post Payments Bank – Leveraging digitally connected post offices for financial inclusion

India Post, operating one of the largest postal networks globally with over 155,000 post offices, has connected all its locations to the internet. This upgrading of postal infrastructure has enabled India Post to further contribute to financial inclusion in India through digital financial services offered by its subsidiary, the India Post Payments Bank (IPPB), making its services available in even the most remote villages of the country. Digital financial services offered by IPPB have been especially beneficial for women and populations in rural areas.

Around 90% of post offices are located in rural areas, providing India Post with a digitally enabled banking network that reaches parts of the country that commercial banks tend to stay away from. Digitally upgrading post offices and equipping them with IPPB's digitally enabled banking services reduced the average distance to banking services to just 5 to 10 kilometres, overcoming geographic barriers that previously limited access. IPPB now services over 105 million accounts, with women and rural residents being more likely to open accounts, highlighting its contribution to financial inclusion. In total, 59% of its over 26 million new accounts in 2024 were opened by women and 77% were opened in rural areas.

During the COVID-19 pandemic, when many financial institutions ceased operations, India Post's digitally upgraded post offices became an essential lifeline for millions, enabling services like cash deposits, withdrawals, money transfers, bill payments, and direct benefit transfers from government schemes, particularly aiding farmers, women and other vulnerable groups. Moreover, India Post offers digital government services, including the issuance of digital identity services, facilitating access to a wide range of public benefits. This comprehensive digital transformation has enhanced the postal sector's visibility, improved public trust, and contributed significantly to financial empowerment and digital literacy among underserved communities

Sources: (Asariparambil, 2024; MicroSave, 2021; UPU, 2023b)

Table 11: **Regional summary of digital financial services provision by DOs**

REGION	DFS PROVISION LEVEL	AVERAGE NUMBER OF SERVICES (OUT OF 14)	KEY OBSERVATIONS
INDUSTRIALIZED COUNTRIES	Moderate (62%)	High (10.2)	Broadest service portfolios
EUROPE AND CIS	Highest (77%)	Moderate (7.6)	Leads globally in provision; but less diverse DFS offerings than industrialized country DOs
ARAB REGION	High (73%)	Moderate (7.1)	High provision levels; room to increase service diversification and reach
ASIA AND PACIFIC	Moderate (67%)	Moderate (6.7)	High provision; room to increase service diversification
AFRICA	Low (54%)	Moderate (6.1)	Moderate provision; significant opportunities for increased diversification
LATIN AMERICA AND CARIBBEAN	Lowest (29%)	Very low (2.1)	Severely limited DFS offerings; requires targeted interventions and capacity building

The table 11 summarizes regional disparities in the provision and diversification of digital financial services (DFS) by DOs:

For in depth regional analyses, including detailed data tables and figures on specific digital financial services, please refer to Appendix 1. Having provided overall overviews of the DO digital financial services landscape, the rest of this section covers DO provision of specific digital financial services.

4.1 DIGITAL FINANCIAL ACCOUNT SERVICES AND MANAGEMENT

Limited access to secure financial accounts remains a significant barrier to financial inclusion, particularly for marginalized populations. To address this challenge, DOs are offering a variety of digital financial account services that enable customers to effectively manage and access their funds. Currently, 41% of DOs offer financial accounts capable of supporting digital payments, facilitating customer participation in the broader digital economy. Additionally, 35% of DOs provide customers with the ability to deposit or withdraw from mobile money accounts.

Nearly one-third (32%) offer deposits and withdrawals for digitally enabled accounts, and 22% offer mobile wallet solutions. The same proportion (22%) provides online management of postal bank accounts, enhancing convenience and allowing customers greater control over their finances.

Detailed regional provision rates and in-depth analyses on digital financial account services and management are available in Appendix 1. The following subsection covers digital payment services that DOs offer to simplify financial transactions.

12 The Digital Panorama survey focused specifically on digital financial services, while the 2023 Global Panorama on Postal Financial Inclusion (Khan and Dukelskiy, 2023) covered financial services more broadly. The two reports use different regional classifications, which limits the comparability of regional breakdowns.

Table 12: **DO level of implementation and demand for e-commerce finance solutions**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
FINANCIAL ACCOUNT CAPABLE OF MAKING DIGITAL PAYMENTS	41%	42%
MOBILE MONEY DEPOSITS AND WITHDRAWALS	35%	34%
DEPOSITS AND WITHDRAWALS FOR DIGITAL PAYMENT ENABLED ACCOUNTS	32%	37%
MOBILE WALLET	22%	39%
ONLINE FINANCIAL ACCOUNT MANAGEMENT	22%	33%

4.2 DIGITAL PAYMENT SERVICES

Many DOs are providing essential digital payment solutions that simplify routine financial transactions and improve overall accessibility. For rural customers, using DOs for digital payments can be particularly valuable, as it reduces the need to travel long distances. Additionally, by facilitating digital transactions, DOs could potentially help customers establish digital transaction histories, making it easier for underserved groups – including marginalized populations and MSMEs – to access other financial services such as credit (Klapper, 2024).

At the most basic level, nearly half (46%) of DOs already offer online payment solutions for postal services. This service is among the most in-demand digital service captured by the survey, with 60% of DOs not currently offering it either actively developing or considering its introduction. The high demand for this service is unsurprising, given its direct connection to postal operations.

Beyond basic postal payment solutions, many DOs are expanding their digital payment offerings to facilitate transactions between individuals and businesses (B2C and C2B). For example, 44% of DOs currently offer electronic remittances – a service with significant socio-economic impacts. Remittances can reduce poverty, support rural development domestically, and contribute to national GDP when processed internationally (World Bank, 2023). Additionally, 37% of DOs offer digital payment solutions for third-party, non-postal services, notably including bill payments. Furthermore, approximately one third (34%) of DOs offer mobile credit top-ups, which in many countries can also serve as mobile money, thus further expanding financial inclusion. The continued strong demand among DOs for these services suggests substantial potential for growth and enhanced financial inclusion.

Table 13: **DO level of implementation and demand for digital payment services**

ONLINE PAYMENT OF POSTAL SERVICES	46%	60%
ELECTRONIC REMITTANCES	44%	29%
ONLINE BILL PAYMENT	37%	46%
TOP-UP MOBILE CREDIT	34%	37%

Detailed regional provision rates and in-depth analyses on digital payment services are available in Appendix 1. Next, we cover digital payment instruments offered by DOs.

BOX 14

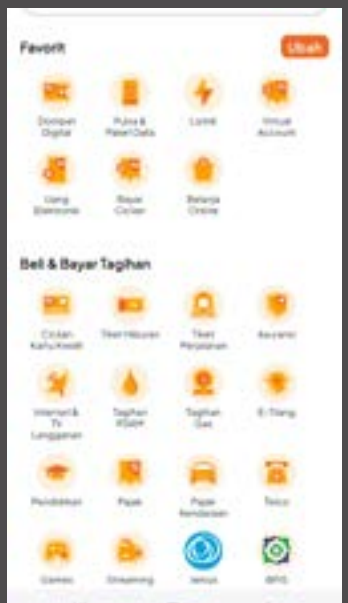
Pos Indonesia – promoting financial inclusion through hybrid payment solutions

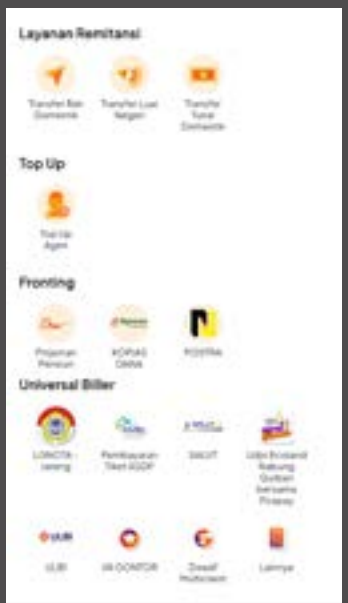
Pos Indonesia's PosPay platform exemplifies how national postal networks can deliver inclusive digital payment services through a multi-channel model. Available as a mobile application and web platform, PosPay enables customers to pay for bills from over 1,000 service providers – including utilities, taxes, education fees, insurance, and loan instalments – anytime and anywhere. Importantly, this service is not limited to smartphone users. Customers without smartphones or internet access can complete their transactions in person at over 4,300 digitally connected post offices or through USSD (Unstructured Supplementary Service Data) codes using basic mobile phones. This inclusive approach reflects Pos Indonesia's commitment to bridging the financial services gap in underserved areas, where commercial banks have minimal presence.

The success of PosPay is built on Pos Indonesia's recent nationwide digital transformation, which connected nearly all of its post offices to the internet using a combination of 4G mobile broadband, fibre optic connections, and VSAT (very small aperture terminal) in very remote areas. This infrastructural upgrade allowed digital transactions to be processed seamlessly through both online and physical channels. The hybrid model not only ensures accessibility for less digitally connected populations but also enhances user trust by preserving the availability of face-to-face support through post office staff.

What makes PosPay particularly impactful is Pos Indonesia's strategic decision to focus on smaller cities and rural areas where traditional financial service providers are largely absent. This strategy is only possible because of Pos Indonesia's legal obligation to fulfil the universal service obligation, which ensures that its extensive network reaches remote and underserved regions. By leveraging this legally mandated footprint, Pos Indonesia is uniquely positioned to promote financial inclusion at national scale. The platform's inclusive capabilities extend further through its remittance and money transfer services. Users can send money to anyone, regardless of whether the recipient has a bank account, and recipients can then collect their funds in cash at the nearest post office. This is particularly impactful in rural areas, where unbanked populations are more prevalent. With over 6 million PosPay users and over 51 million Indonesians accessing digital financial services through physical service points, Pos Indonesia is playing a pivotal role in expanding financial access and reducing the digital divide.

As a result of regulatory limitations, Pos Indonesia is not licensed to offer full banking services. However, it acts as a front-end partner for a range of banking and non-banking financial institutions. Through these partnerships, PosPay users gain access to credit, insurance, and investment products. Financial institutions, in turn, benefit from Pos Indonesia's vast physical reach and customer base, enabling them to serve remote and underserved areas they might not otherwise reach as well as reach customers using the PosPay app. This synergy between public infrastructure and private financial service providers demonstrates the power of the postal network in advancing national financial inclusion goals.





Sources:
Interview with Pos Indonesia staff

4.3 DIGITAL PAYMENT INSTRUMENTS

Many DOs are actively enabling online transactions and reducing reliance on cash transactions for marginalized populations and rural residents through the provision of convenient payment instruments. These payment instruments enhance customer safety and convenience by decreasing the need to store large sums of cash at home or carry cash for market transactions and other financial activities. They also promote financial autonomy, particularly benefiting women by providing them with greater control over how their money is spent.

Among the digital payment instruments offered by DOs, nearly a quarter (24%) provide debit cards, allowing secure and convenient access to funds for daily transactions. Additionally, 20% of DOs offer ATMs for on-demand cash withdrawals, while a smaller proportion (16%) provide credit cards. These instruments increase transaction security, convenience, and financial accessibility, especially benefiting users in cash-dependent communities.

Table 14: **DO level of implementation and demand for digital payment instruments**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
DEBIT CARD	24%	34%
ATMS	20%	24%
CREDIT CARD	16%	33%

Detailed regional provision rates and in-depth analyses on digital payment instruments are available in Appendix 1. The subsequent subsection covers digital social protection and insurance financial services.

4.4 DIGITAL SOCIAL AND INSURANCE FINANCIAL SERVICES

Access to social protection and insurance services is vital for helping individuals and households cope with unexpected shocks, crises, and vulnerabilities. DOs are supporting governments and citizens by offering digital social protection and insurance services. A quarter (25%) of DOs streamline the delivery of social benefits by enabling direct payments into beneficiaries' financial accounts. This ensures that funds reach recipients quickly and reliably, reducing risks of corruption, mismanagement, or errors associated with physical cash distribution. Additionally, over one in five DOs (22%) are making digital insurance products more accessible, helping individuals and workers protect themselves against livelihood risks – such as drought insurance for smallholder farmers.

Table 15: **DO level of implementation and demand for digital social and insurance financial services**

DIRECT CREDIT FOR SOCIAL PROGRAMMES	25%	29%
ACCESS TO DIGITAL INSURANCE PRODUCTS	22%	27%

Detailed regional provision rates and in-depth regional analyses on digital social and insurance financial services are available in Appendix 1. The following subsection examines the service delivery channels used by DOs to offer digital financial services.

BOX 15

Jordan Post – Delivering inclusive cash-based assistance through trusted infrastructure, prepaid ATM cards, and biometric innovation

Jordan Post has emerged as a key partner in the Jordanian government's efforts to deliver inclusive, cash-based social protection to both citizens and refugees. Through close collaboration with the National Aid Fund (NAF) and the Ministry of Social Development, Jordan Post distributes and administers prepaid ATM cards to over 100,000 of Jordan's poorest households, enabling secure and dignified access to monthly financial support. This is part of the largest cash transfer programme in the MENA region, and has significantly contributed to poverty and inequality reduction. These prepaid cards are an integral component of the government's broader multi-channel approach, which also includes e wallets and bank transfers, ensuring that marginalized populations, particularly low-income households without smartphones or bank accounts, are not left behind.

Jordan Post has also partnered with the World Food Programme (WFP), the United Nations High Commissioner for Refugees (UNHCR), and IrisGuard to deliver humanitarian cash assistance securely to refugees residing in Jordan. Utilizing advanced iris recognition technology developed by IrisGuard, approximately 85,000 Syrian refugee households can securely and efficiently access humanitarian aid directly through prepaid cards and mobile wallets at Jordan Post locations. Iris recognition provides real time identity verification, eliminating the need for physical identification documents and ensuring fraud-resistant aid distribution. The technology's effectiveness has significantly accelerated aid delivery, enhancing financial inclusion and security for refugees.

Building upon this successful foundation, Jordan Post is further expanding the use of iris recognition technology in partnership with the Ministry of Digital Economy and Entrepreneurship by enabling secure activation of the SANAD e-government application. Available at all Jordan Post offices, this service has facilitated digital inclusion for nearly one million Jordanian citizens. Additionally, leveraging its extensive postal infrastructure and trusted position, Jordan Post has initiated innovative projects such as biometric passport home delivery services, further extending secure and inclusive public services. During the COVID-19 pandemic, Jordan Post also demonstrated adaptability by deploying its delivery staff to bring critical cash support directly to recipients' homes, underscoring its essential role in inclusive, last-mile social protection delivery.

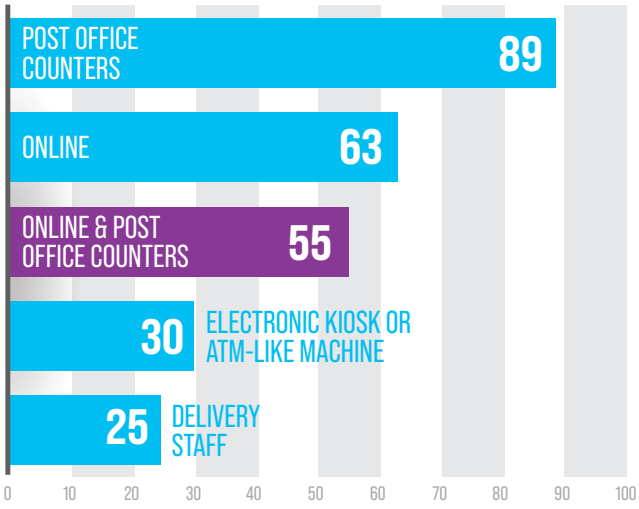
Sources: (IrisGuard, n.d.; Jordan Post, n.d.; Jordan Times, 2025; UNHCR, n.d.)

4.5 CHANNELS USED FOR DIGITAL FINANCIAL SERVICES

Post offices play a crucial role in delivering financial services, particularly in rural areas where traditional financial institutions are scarce or absent. UPU research highlights that permanent postal branches outnumber banking branches in 33% of countries (Khan and Dukelskiy, 2023). Moreover, owing to their universal service obligation, DOs often maintain more geographically extensive retail networks than traditional banks, which typically avoid operating in rural and remote areas because of low returns on investment. Consequently, postal branches frequently serve as essential financial access points for underserved communities.

Our analysis suggests that DOs effectively leverage their extensive physical networks to promote financial inclusion through digital financial services, especially among rural and marginalized populations. Offering digital financial services through postal counters significantly enhances accessibility for customers lacking reliable online access. Among the 85 DOs identifying as digital financial service providers, 89% deliver these services at post office counters, making it the most widely used channel for DFS delivery (see figure below). DOs also leverage additional channels, including online options such as websites and mobile apps (63%), ATMs or electronic kiosks (30%), and postal delivery staff (25%). Delivery staff particularly enhance financial inclusion by reaching customers located far from financial institutions or post offices and those facing mobility constraints, including individuals with disabilities, women affected by restrictive social norms, and nomadic populations.

Figure 30: **Percentage of DOs offering digital financial services by channel type (n = 89)**



Across most regions, DOs predominantly deliver digital financial services at post office counters. The exception is industrialized countries, where online delivery is more common. In the Arab region, DOs offer services equally through counters and online platforms (see figure 31). Hybrid delivery – combining physical counters with online platforms – is prevalent across most regions, especially among DOs in industrialized countries, the Arab region, and Asia and Pacific. Conversely, Latin America and the Caribbean significantly lags. Hybrid models are especially beneficial, enabling DOs to reach digitally connected customers while ensuring continued accessibility for communities with limited connectivity. ATMs and electronic kiosks are most common among DOs in industrialized countries and the Arab region. Approximately 25% to 30% of DOs in most regions use postal delivery staff to offer DFS, except for Latin America and the Caribbean, where no DOs reported using this channel. A detailed regional breakdown of DFS channels is available in figure 31. The next subsection assesses the stickiness and long-term sustainability of the digital financial services offered by DOs.

BOX 16

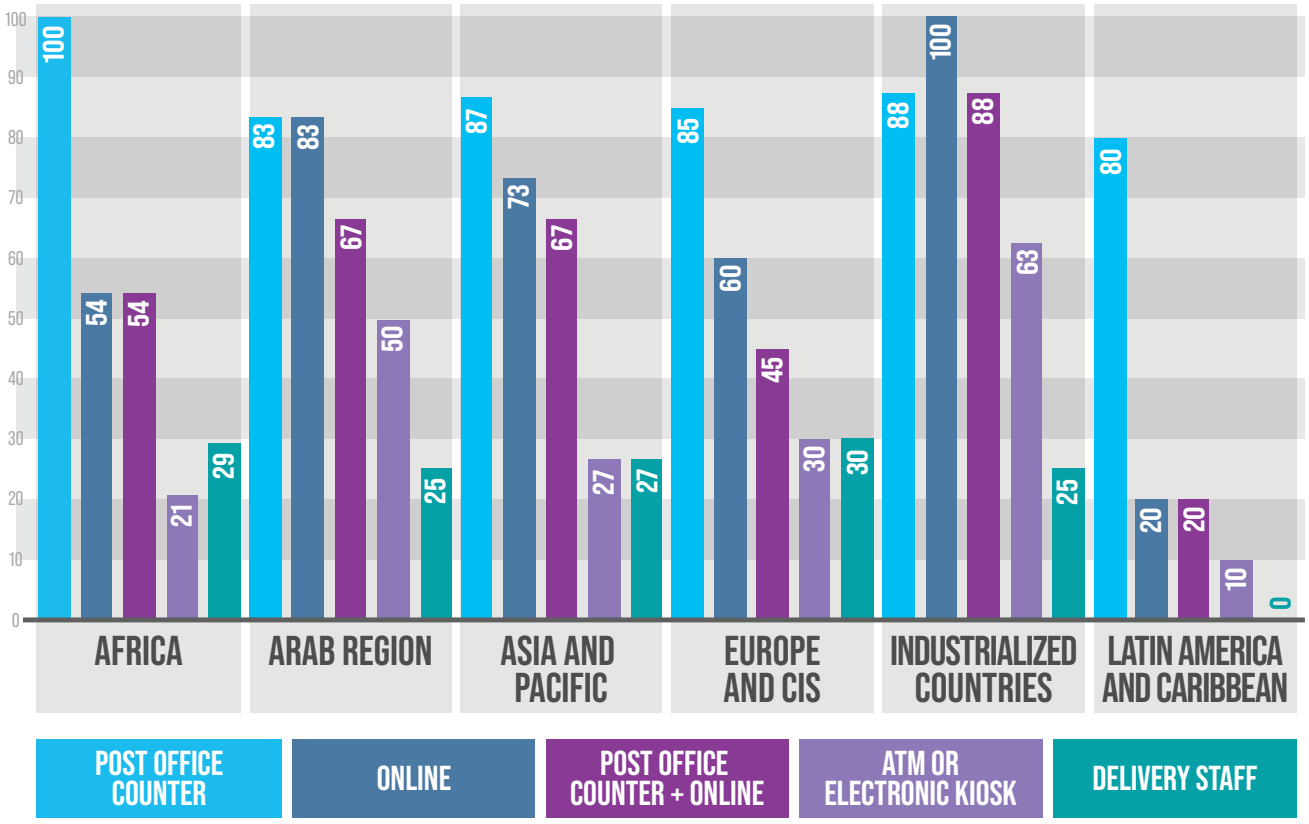
Mongol Post empowering Mongolia's nomadic tribes through digitally enabled services offered via delivery staff

Mongol Post is advancing financial and digital inclusion for nomadic tribes and Mongol society at large through a strategic partnership involving the UPU and Mongolia's ARD Group, a non-bank financial institution. Because of regulatory restrictions that prevent Mongol Post from directly offering financial services, the partnership enables it to leverage its extensive infrastructure to deliver digital financial services such as microloans, insurance, and investment opportunities through ARD subsidiaries – ARD Credit, ARD Insurance, and ARD Securities. These products are seamlessly integrated into software systems installed at post offices and point-of-sale (POS) terminals across rural Mongolia.

With financial support from the Japanese Ministry of Internal Affairs and Communication's Japan Fund at the UPU, Mongol Post has deployed 150 POS terminals – specifically personal digital assistants (PDAs) – to extend service delivery into remote areas lacking physical post offices. Postal delivery staff utilize the PDAs to facilitate transactions, provide financial literacy training, and deliver essential digital financial services directly to nomadic pastoralists, enhancing financial access and skills for rural populations. The initiative aims for broad impact, including enrolling pastoral households into livestock insurance schemes, supporting microenterprises, and empowering women financially – thus actively promoting inclusive growth and resilience among Mongolia's rural communities.

Mongol Post is collaborating with other key partners such as Unitel and e-Mongolia to further expand its digital service offerings. Through its partnership with Unitel, Mongol Post sells SIM cards and hosts mobile operator services at post office locations, generating additional revenue and supporting mobile connectivity in rural areas. Meanwhile, its integration with the e-Mongolia digital government platform allows citizens to access over 600 e government services at post offices, where staff assist users in navigating the platform and applying for vital documents such as passports, ID cards, and birth and marriage certificates. These services are especially important for rural residents who lack reliable internet access. Looking ahead, Mongol Post plans to roll out additional services such as credit scoring, e-commerce platforms, online loans, and securities trading, and to act as an agent for telecom and private pension services, further solidifying its role as a cornerstone of inclusive digital transformation in Mongolia and effectively turning Mongol Post into a one-stop shop for digital services.

Figure 31: **Percentage of DOs offering digital financial services through each delivery service channel by region**



4.6 DIGITAL FINANCIAL SERVICES ARE STICKY

Although measuring the long-term sustainability of digital financial services directly can be challenging, our "stickiness" metric – the extent to which services remain offered after introduction – is a useful indicator. Our analysis indicates that digital financial services have high retention, with an overall stickiness rate of approximately 94%. This high stickiness suggests these services deliver consistent value to DOs, their partner financial institutions, and technology providers.

Digital financial services demonstrate high stickiness at the individual service level as well. Nearly all surveyed digital financial services show retention rates above 90%, with two exceptions: ATMs (86%) and mobile credit top-ups (88%). Regionally, digital financial services exhibit exceptionally high stickiness, exceeding 95% in all regions except industrialized countries (85%) and Latin America and the Caribbean (80%). The lower rate in Latin America and the Caribbean is primarily driven by the low retention of ATMs, with only one-third sticking in the region. In industrialized countries, the reduced stickiness is influenced by a small sample size – only eight DOs offered DFS – and one DO's discontinuing all 14 surveyed digital financial services. Excluding this outlier, only one other DO discontinued a single DFS, highlighting overall strong retention within industrialized countries.

In summary, DOs are actively promoting financial inclusion by delivering a range of digital financial services that address critical barriers faced by marginalized populations and MSMEs, including geographic isolation, limited access to secure financial accounts, and inadequate financial transaction tools. Despite strong retention (stickiness) of these services, expanding both the provision and diversity of digital financial services remains crucial. Addressing existing regional disparities and scaling essential but under-adopted services – such as digital payment solutions, secure payment instruments, and accessible digital insurance – will be vital for maximizing the postal sector's contribution to inclusive economic growth and sustainable development. The following section explores how DOs help bring governments closer to the people and advance social and digital inclusion through the provision of essential digital government services.

SECTION 5

DIGITAL GOVERNMENT SERVICES

Government services and sustainable development

Essential government services are fundamental to promoting economic growth, improving citizens' quality of life, and advancing progress toward the SDGs. All 17 SDGs, 169 targets, and 231 indicators "require the provision of public goods or the implementation of a public sector policy and, therefore, depend on public service to coordinate, mediate or directly provide" (UNDP, 2016, p. 1). However, many governments – particularly in developing countries – face significant challenges in ensuring universal access to government services. Barriers such as budgetary constraints, inadequate infrastructure, and difficulties in reaching marginalized populations and remote areas significantly restrict government service delivery. When government services are only available in person, they often remain inaccessible to rural residents, who must travel long distances to major towns or cities to access them. To address this, the United Nations has emphasized the need for public institutions to "adopt innovative approaches in public service delivery" to ensure that marginalized groups such as the elderly, refugees, children, youth, rural residents, and other vulnerable groups are not left behind (United Nations, 2017).

The potential of digital government services

Digital government services offer governments the potential to substantially reduce the cost of delivering essential public services while simultaneously removing many physical barriers faced by remote communities. The impact of these services, however, depends on how inclusively they are implemented. Properly designed digital government services can positively contribute across multiple SDGs, especially in areas such as poverty alleviation, economic inclusion, good governance, and social protection (Ishengoma and Shao, 2025). The European Commission (2024) highlights that "implemented well, e-government enables citizens, enterprises and organizations to carry out their interactions with government more easily, more quickly and at lower cost."

However, existing digital divides tend to mirror offline inequalities, resulting in the same marginalized and remote populations who have less access to in person government services being disproportionately excluded from digital government services (Helsper, 2021; Hernandez and Roberts, 2018). Over-reliance on digital-only government services, therefore, risks exacerbating inequalities rather than alleviating them. Digitally upgraded postal networks, with their extensive reach, can serve as digital building blocks or "phygital public infrastructure" (UPU, 2024) that enable inclusive digital transformations and help overcome potential digital and social exclusion arising from digitalization.

The postal sector's role in inclusive digital government service provision

Postal networks can offer an effective and inclusive response to this challenge. With extensive infrastructure in rural and remote areas, DOs are uniquely positioned to

By offering or contributing to multi-channel service delivery – including in-person assistance at rural post offices – DOs help ensure digital services reach underserved populations.

deliver digital government services in ways that complement e-government platforms. By offering or contributing to multi-channel service delivery – including in-person assistance at rural post offices – DOs help ensure digital services reach underserved populations. This presents a triple-win scenario: governments achieve greater inclusivity and effectiveness in service delivery; DOs diversify their revenues; and most importantly, citizens enjoy enhanced access, choice, and convenience when engaging with public services.

Unsurprisingly, this potential has been recognized and digital government services have emerged as a key strategic area for DOs seeking to diversify their offerings (Eggrickx et al., 2018). Survey results indicate that this diversification is well underway, with **51% of DOs identifying as providers of digital government services.**[13] The survey analyzed 23 unique digital government services, drawing on established frameworks: 16 services were adapted from the United Nations' E-Government Index Survey's Online Services Index (UN DESA, 2024b), while the remaining services were retained from the previous UPU Digital Panorama Survey.

Through the provision of digital government services, DOs are positioning themselves as key partners of the state in ensuring inclusive access to essential public services. These services cover a broad range of government functions, including:

Making digital payments to government – Enabling citizens and businesses to pay taxes, fines, and other government fees online or through postal service points.

Digital identification services – Supporting identity verification processes, including issuing and managing digital-ID services and biometric registrations.

Digital government services for businesses – Facilitating business registrations, licensing, and compliance reporting to streamline interactions between governments and enterprises.

Digital government services related to family and personal status – Providing access to official documents such as birth and marriage certificates.

Digital government services facilitating transportation – Enabling the renewal of driver's licences, vehicle registrations, and transport-related permits through digital platforms.

Digital government services facilitating international travel – Assisting with passport applications and visa processing.

Digital government services facilitating property development and construction – Supporting applications for building permits, land registrations, and other real estate-related government services.

Social protection – Enhancing access to government benefits such as pensions, unemployment assistance, and social welfare programmes.

13 Throughout this report, "digital services" includes both fully online services and digitally enabled in-person services leveraging digital technology. This broader usage explicitly recognizes hybrid, multi-channel approaches as critical for inclusive service delivery, particularly in reaching underserved and less digitally connected communities.

Posts' contributions to social inclusion through digital government services build on their broader role in advancing social development goals. A recent UPU guide on social services (Hale and Alexander, 2021) highlights numerous examples of Posts serving as key partners to governments, multilateral agencies, and non-governmental organizations in delivering social services – many of which incorporate digital components. At least 160 UPU member countries and territories provide social services via their postal infrastructure.

Opportunities to expand postal sector contributions

While many DOs promote social inclusion by offering digital government services, considerable opportunities remain to broaden their scope. Achieving maximum impact on inclusivity and government efficiency requires DOs to not merely offer digital government services but to provide a diverse array of these services. Although 51% of DOs identify as digital government service providers, service provision tends to be narrowly focused. Only one service – utility bill payments – is offered by more than 40% of DOs, and just two services (utility bill payments and government fee payments) are offered by more than one-third. Beyond these payment-related services, provision remains limited, with no other digital government service surpassing 17% provision among DOs. On average, DOs identifying as providers of digital government services offer just 5 of the 23 surveyed services, indicating significant room for deepening their digital government service portfolios. Addressing this gap represents a strategic opportunity for DOs to enhance their contributions to social and digital inclusion. Expanding beyond payments to include a broader range of digital government services would enable DOs to strengthen government outreach, especially to underserved populations, thus transforming the global postal infrastructure into a more effective tool for inclusive and sustainable development.

Addressing regional disparities to maximize impact

Survey findings highlight significant regional disparities in the likelihood that governments leverage DOs to extend the reach of digital government services. DOs in the Arab region lead in service provision, followed by DOs in industrialized countries and Europe and CIS, all surpassing the global average. Meanwhile, DOs in the Asia and Pacific region offer digital government services at levels consistent with the global average. In contrast, DOs in Africa and in Latin America and the Caribbean lag behind significantly, restricting their potential to enhance digital and social inclusion.

Notably, these regional trends do not necessarily reflect the broader provision of digital government services by governments themselves. For example, despite relatively low scores on the UN's Online Service Index (OSI) (UN DESA, 2024), governments in the Arab region extensively leverage their postal networks to deliver digital services. In contrast, Latin American and Caribbean countries score higher on the OSI, yet they are least likely to utilize their postal networks for digital service delivery (see figure 53). This indicates that low levels of postal-provided digital government services in Latin America and the Caribbean do not reflect a general lack of e-government development. Instead, it highlights a missed opportunity: the postal sector has not been effectively integrated into national e-government strategies. Addressing this gap could greatly enhance accessibility, especially for underserved communities.

In addition to variations in overall provision, significant regional disparities exist in the depth of digital government services offered by DOs. Although the Arab region leads both in overall provision rates and average service range provided, DOs across all regions typically offer only a limited subset of the 23 analyzed services (see figure 33). This limited portfolio constrains DOs' contributions to inclusive government service delivery, restricting their potential impact on social inclusion and governance efficiency. To fully realize the potential of the global postal network, DOs must not only introduce additional digital government services but also significantly deepen existing service offerings.

Figure 32: **Percentage of DOs who consider themselves providers of digital government services by region**

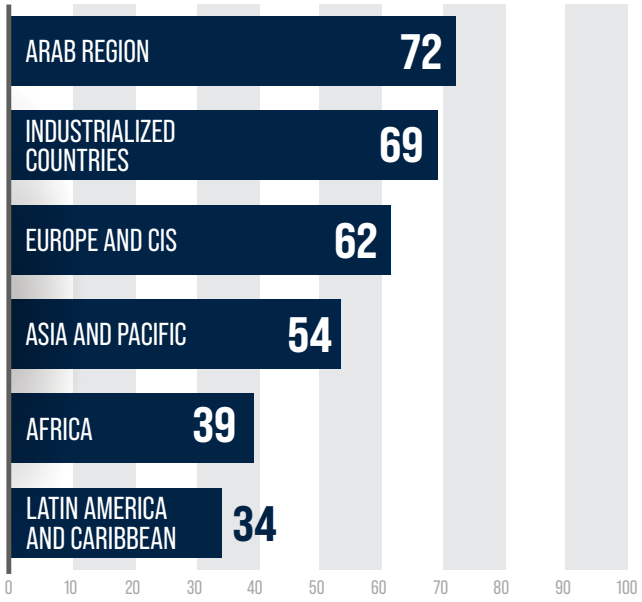
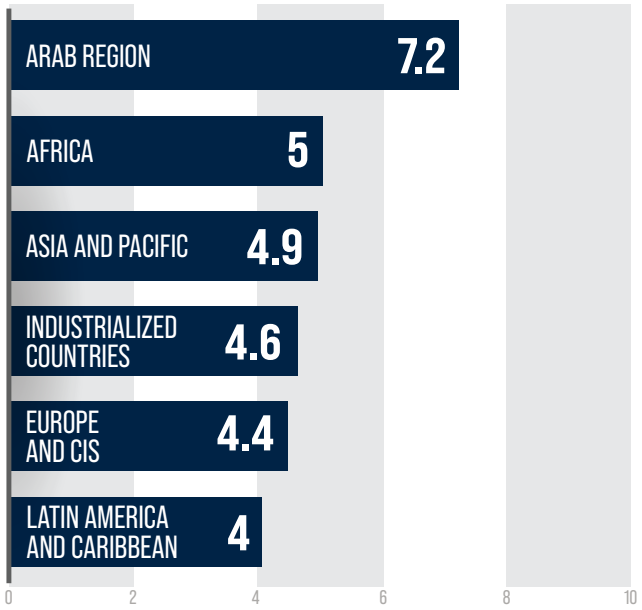


Figure 33: **Average number of digital financial services offered by region (n = 78, only DOs who consider themselves providers of digital government services)**



BOX 17

Egypt Post – a multi-channel one-stop shop for inclusive government and financial services

Egypt Post, in partnership with the United Nations Development Programme (UNDP) and the Egyptian government, has digitally transformed its extensive network of over 4,300 post offices, positioning itself as a key enabler of inclusive digital government services. Through substantial investments in digital infrastructure and employee training which began in 2018, Egypt Post now offers 27 digital government services, ranging from national identification and utility payments to social security and civil registry services. This initiative significantly reduces barriers to public services, particularly benefiting women, elderly citizens, and low-income and rural communities who previously faced substantial challenges accessing digital government services.

This digital modernization effort was also central to Egypt's broader strategy for financial inclusion and sustainable development. Egypt Post provides accessible digital financial services, including savings accounts, electronic remittances, and mobile wallet services, to over 25 million customers, many of whom are accessing formal financial services for the first time. Egypt Post also counts on the largest number (4.8 million) of financial accounts held by women of any financial institution or bank in the country. Moreover, Egypt Post has introduced its "Wassalha" and "Yalla" apps to promote e-commerce, providing MSMEs with access to tools that reduce barriers to conducting business online such as managing shipments, tracking orders, staff salary payments, supplier pay-outs, expense management, and electronic invoicing. The organization also launched a payment-on-delivery shipping product in 2020. In total, Egypt Post provides over 160 government, e-commerce, financial, and postal services through a combination of post offices, digital apps, kiosks and ATMs.

Sources: (Asariparambil, 2024; MicroSave, 2021; UPU, 2023b)

BOX 18

Zampost's digital transformation centres – Bringing digital government closer to citizens

Zampost, in strategic partnership with the SMART Zambia Institute – the e-government division of Zambia – has launched digital transformation centres (DTCs) across the country, significantly enhancing digital inclusion and accessibility of government services. A primary goal of this initiative, dubbed "Boma Pafupi" (meaning "government close to you"), is to bring government services closer to citizens, reducing the need for long and costly travels to central administrative offices in Lusaka.

Connectivity at DTCs is powered by Starlink's high-speed satellite internet, providing reliable and fast digital access even in remote and rural areas traditionally underserved by fixed and mobile infrastructure. Citizens visiting the DTCs can access high-speed internet free of charge. To date, Zampost has equipped 109 post offices with Starlink terminals, greatly expanding free high-speed internet access for citizens in rural and remote areas, and empowering Zampost to deliver effective and secure e government services across the country.

The DTCs serve as accessible points for a wide array of government services through their integration with SMART Zambia's "ZamPortal" e-government platform. Citizens can conveniently apply for, access and/or pay for over 300 services, including road tax, land rates, passport applications, vehicle licences, and hunting licences, directly at post offices. Zampost personnel provide in-person assistance to users of all ages and digital proficiency levels, ensuring inclusive and equitable service delivery.

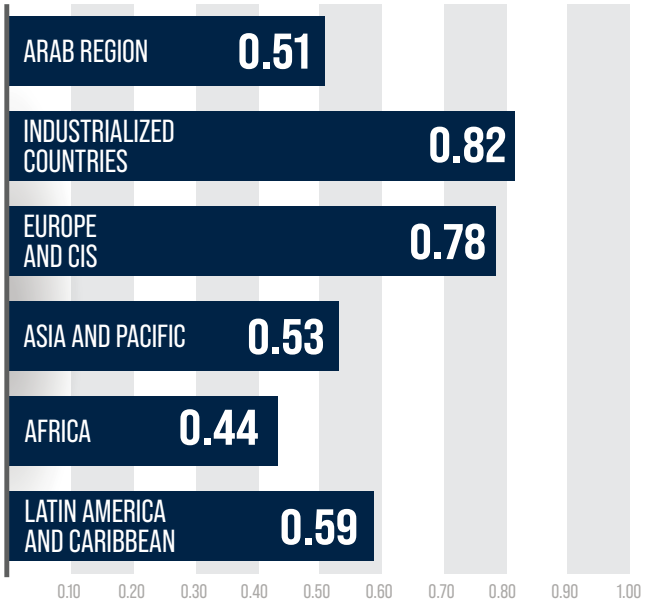
This initiative aligns with SMART Zambia's broader ambition to create a citizen-centric government that leaves no one behind in the nation's digital transformation. By offering digital literacy support and free internet access, Zampost empowers all citizens – whether digitally savvy or not – reinforcing community resilience and expanding digital accessibility across Zambia. Future plans aim to extend these services to all Zampost locations nationwide.

Sources: (SMART Zambia Institute, 2025, 2024, n.d.; YAR 89.7 FM, 2024)

Table 16: **Regional summary of digital government service provision by DOs**

REGION	DIGITAL GOVERNMENT SERVICE PROVISION LEVEL	AVERAGE NUMBER OF SERVICES OFFERED (OF 23)	KEY OBSERVATIONS AND RECOMMENDATIONS
ARAB REGION	Highest (72%)	Highest (but low) (7.2)	Global leaders; relatively diverse digital government service offerings and strong hybrid service delivery models.
INDUSTRIALIZED COUNTRIES	High (69%)	Low (4.6)	Strong provision, but room to further diversify services. Primarily make use of post office counter as service delivery channel.
EUROPE AND CIS	High (62%)	Low (4.4)	Robust digital government services portfolio; potential to enhance service diversity.
ASIA AND PACIFIC	Moderate (54%)	Low (4.9)	Moderate levels of provision but signifi-cant scope for increasing range and accessibility.
AFRICA	Low (39%)	Low (5)	Below-average provision; significant opportunity to expand services and channels to enhance accessibility and inclusion.
LATIN AMERICA AND CARIBBEAN	Lowest (34%)	Lowest (4.0)	Least integrated into national e government strategies; substantial room for growth through targeted inter-ventions.

Figure 34: **Average regional scores on the United Nations e-government survey's Online Services Index, 2024 (n=148)**[14]



The table 16 summarizes regional disparities in the provision and diversity of digital government services by DOs.

For regional analyses and data tables on specific digital government services, please see Appendix 1.

Postal networks as inclusive multi-channel service hubs

Current models of digital government service delivery frequently emphasize digital-only solutions, inadvertently excluding marginalized and rural communities. Even when governments establish physical service centres, they are typically concentrated in urban areas. Moreover, rural and underserved populations often lack reliable internet connectivity, suitable digital devices, or the necessary digital literacy to effectively engage with online government services, further widening existing inequalities.

In contrast, postal networks possess inherent advantages that enable them to effectively address these challenges. By transforming post offices into one-stop, multi-channel service delivery hubs, DOs can offer inclusive digital government solutions that reach citizens regardless of their location or digital capability. With extensive physical infrastructure already established in rural and remote

14 Only those countries included in both the UN e-government survey and in the UPU digital services survey (represented by DOs).

BOX 19

India Post's Aadhaar updation centres – Enabling inclusive access to digital ID

Aadhaar, India's nationwide biometric digital ID system, has become one of the largest and most important enablers of inclusive service delivery in the world. Each Aadhaar number is linked to an individual's photograph, fingerprints, and iris scan, enabling secure access to a range of public and private services – from accessing subsidies and government benefits to opening bank accounts or mobile SIM registration. With over 1.3 billion Indians enrolled, keeping Aadhaar records up to date is essential to ensure continued access to these critical services. Recognizing this, the Government of India has adopted a multi-channel approach to Aadhaar enrolment and record maintenance, offering both online self-service options and in-person Aadhaar updation centres across the country.

India Post plays a central role in this strategy through its network of post office Aadhaar updation centres. These centres are part of the wider Aadhaar updation centre ecosystem that includes banks, BSNL (India Telecom Corporation Ltd.), and state government offices. The extensive rural reach of post offices, thanks to India Post's universal service obligation, uniquely positions the postal network to serve remote and underserved populations. Citizens visiting these centres can enrol for Aadhaar for the first time or update key details such as their photograph, address, phone number, or biometric data – essential for maintaining accurate records and ensuring ongoing eligibility for government services.

The service is provided either for free or at minimal cost, making it accessible for low-income populations. Trained postal staff provide guidance and support in person, ensuring that even individuals with limited digital skills or internet access can maintain their Aadhaar records with dignity. India Post's Aadhaar centres are a powerful example of how national postal networks can be integrated into digital public infrastructure to ensure that no one is left behind in a digitalizing society.

Sources: (Das, 2022; India Post, n.d.; Marathe, 2024; Unique Identification Authority of India, n.d.)

regions, post offices are ideally positioned to offer in-person support, complementing digital channels and ensuring no one is excluded from critical public services.

Many DOs have already embraced this role, actively delivering inclusive digital government services. Among DOs providing digital government services, 87% do so through in-person channels at post office counters, highlighting their role as physical extensions of national e-government initiatives. This model significantly enhances access for underserved groups while offering citizens greater flexibility in choosing how they engage with government services. Leveraging postal networks as part of comprehensive multi-channel strategies represents a valuable opportunity to drive more inclusive governance, helping governments extend essential services to all citizens effectively and equitably. Having provided overall overviews of the DO digital government service landscape, the rest of this section covers DO provision of and demand for specific digital government services as well as the channels DOs leverage to deliver digital government services.

5.1 DIGITAL PAYMENTS TO GOVERNMENT AND UTILITY COMPANIES

Many DOs are empowering rural and underserved populations to conveniently and securely interact with governments and utility providers through multi-channel digital payment services, including in-person options that help these groups save time and reduce the costs previously incurred from travelling long distances to access such services. According to survey results, nearly half (44%) of DOs currently offer digital payment services for utilities, and more than one-third (34%) facilitate digital payments of government fees. These two services are among the most prevalent digital government services provided by DOs, highlighting their strategic importance. Additionally, they represent significant opportunities for further expansion, as approximately one third of DOs not currently offering these services are either actively considering or developing them.

Table 17: **DO level of implementation and demand for digital payment to government services**

PAY UTILITIES	44%	33%
PAY GOVERNMENT FEES	34%	31%

Detailed regional provision rates and data on digital payment services to government are available in Appendix 1. The following subsection covers digital identification services.

5.2 DIGITAL IDENTIFICATION SERVICES

Access to official identification remains a significant barrier for many rural and marginalized communities, limiting their ability to engage with essential public services and fully participate in society (World Bank, 2021b). Some DOs are addressing this critical barrier by providing inclusive digital identification services. By doing so, DOs facilitate greater access to essential services across diverse sectors – including finance, telecommunications, and healthcare – which typically require formal identification. For instance, nearly 160 countries require an official ID for SIM card registration, effectively excluding individuals without identification from accessing digital content, processes, and services independently (GSMA, 2021). Currently, approximately one in six DOs (17%) offer digital ID services. Additionally, 16% of DOs enable digitally supported birth certificate applications, 13% facilitate applications for physical ID cards, and 13% provide credentialing services, allowing verification of the authenticity of critical documents, certifications, and credentials.

Table 18: **DO level of implementation and demand for digital identification services**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
DIGITAL ID	17%	35%
APPLY FOR BIRTH CERTIFICATE	16%	27%
APPLY FOR ID CARD	13%	30%
CREDENTIALING SERVICES	13%	28%

Detailed regional provision rates and data on digital identification services are available in Appendix 1. Next, we cover services related to family and personal status.

Table 19: **DO level of implementation and demand for family and personal status digital government services**

CHANGE ADDRESS	15%	27%
DEATH CERTIFICATE	13%	24%
MARRIAGE CERTIFICATE	9%	26%
SUBMIT INCOME TAX	7%	21%
DECLARE TO POLICE	4%	18%

Detailed regional provision rates and data on family and personal status smervices are available in Appendix 1. The subsequent subsection explores DO support for international travel facilitation.

5.3 FAMILY AND PERSONAL STATUS

Many DOs are increasingly leveraging their extensive physical networks to offer digitally enabled family and personal status services, ensuring that rural and underserved communities can conveniently access essential public services. According to the survey, 15% of DOs offer digitally enabled address updates with authorities, while 13% provide death certificates for deceased family members. Fewer DOs offer services such as digitally enabled marriage certificates, income tax submissions, or police declarations. Although overall provision of these services among DOs remains modest, there is substantial interest among non-offering DOs in developing or introducing them. Over one in four non-offering DOs are actively considering or developing digitally enabled solutions for death certificates, address updates, and marriage certificates, while approximately one in five are exploring the introduction of digital income tax submission services.

5.4 INTERNATIONAL TRAVEL FACILITATION

Some DOs are helping rural and marginalized populations access official international travel documentation through digitally enabled services at locally accessible post offices. Currently, 15% offer digitally enabled passport application services, enabling individuals from underserved communities to apply for passports conveniently and securely. Moreover, about one-third of DOs that do not currently offer passport services are either actively developing or considering introducing them, indicating significant room for growth. Visa application services are offered by a smaller proportion (6%) of DOs, but over one-fifth of non-offering DOs are considering or developing these services. For citizens in regions where visa applications are accepted exclusively online, DOs' provision of in-person visa application support ensures equitable access, particularly benefiting elderly populations and individuals without reliable digital connectivity.

BOX 20

Digital civil status and social services through Egypt Post

Egypt Post plays a significant role in expanding access to essential government services, including civil status registration and updates, through its vast national network. At Egypt Post branches across the country, citizens can request birth, death, marriage, and divorce certificates, and update civil registry information – services traditionally limited to specialized government offices and the national government's Digital Egypt e-government portal. Offering these services through the postal network supports the government's broader public policy goal of ensuring more inclusive, citizen-centric service delivery, especially for those in remote or underserved areas.

These services are part of a broader suite of government and financial services Egypt Post offers, as outlined in box 17. In addition to civil status documents, citizens can register for and receive government cash transfers through Egypt Post-issued prepaid cards. These same cards enable users to pay utility bills, make purchases online and in stores, and withdraw cash at ATMs. By integrating these services into one trusted access point, Egypt Post not only reduces the burden on citizens who would otherwise have to visit multiple government institutions, but also mitigates digital and social exclusion by offering face-to-face service alongside digital systems. This model is especially impactful for women, elderly citizens, and low-income groups who may lack digital access or mobility.

Sources: (Egypt Post, n.d.)

Table 20: **DO level of implementation and demand for travel services**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
PASSPORT	15%	32%
VISA APPLICATION	6%	22%

Detailed regional provision rates and data on international travel facilitation services are available in Appendix 1. The next subsection covers DO provision of social protection services.

5.5 SOCIAL PROTECTION

Social protection plays a critical role in helping individuals and families cope with and prepare for economic shocks and crises, enabling recipients to escape or avoid poverty (World Bank, 2024). Digitally enabled social protection systems can provide substantial benefits for both governments and citizens. For public administrations, digital social protection can lower operational costs, enhance data accuracy and transparency, facilitate improved monitoring, and accelerate service delivery. Beneficiaries gain through reduced travel times and lower transportation costs associated with applying for and collecting social benefits (Burattini et al., 2022). Additionally, digital social protection particularly benefits women, as it provides them with increased control over their funds and reduces safety risks associated with collecting payments in person. However, for these benefits to be inclusive, digital social protection services must remain accessible even to those who are less connected or lack adequate digital skills. Unfortunately, digitalization trends in social protection systems often presume widespread digital access, inadvertently creating barriers for marginalized populations – including rural communities, elderly citizens, and those with limited digital literacy (Alston, 2019; Faith et al., 2024). As in-person channels become less available, these populations risk exclusion from essential social support programmes.

Some DOs have started addressing this challenge by offering digitally enabled, in-person assistance at post offices to help individuals navigate social protection application processes. Presently, only 10% of DOs provide this support, but there is growing interest in expanding such services, with 23% of non offering DOs actively considering or developing digital social protection application services.

BOX 21

Digital passport applications made easier through Poste Italiane's Polis project

As part of Italy's flagship Polis project, Poste Italiane has begun offering digitally enabled passport application and renewal services directly through post offices across the country – bringing vital government services closer to citizens, especially in rural areas. These services are available over the counter in upgraded post offices. This expansion aligns with the government's wider effort to reduce geographic inequalities and foster a more inclusive digital transformation, particularly for older adults and rural populations who often face barriers to accessing online services. As detailed in the case study in box #2,The postal network's vast reach – particularly in nearly 7,000 towns with fewer than 15,000 residents – makes it a strategic partner in ensuring no one is left behind in Italy's modernization efforts.

Passport services are just one of more than 25 digital government services made available through the Polis initiative, which include access to social security records, digital identity documents, judicial certificates, and civil registration services. Many of these services are free when accessed via self-service kiosks and incur only a small fee when performed at the post office counter. This multi-channel model – combined with Poste Italiane's trusted presence – illustrates how postal operators can effectively promote digital inclusion while improving service accessibility and efficiency at scale.

Sources: (Poste Italiane, n.d.)

Table 21: **DO level of implementation and demand for direct credit for social protection**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
SOCIAL PROTECTION APPLICATION	10%	23%

Detailed regional provision rates and data on social protection services are available in Appendix 1. The following subsection discusses vehicle and transportation services.

5.6 VEHICLE AND TRANSPORTATION

Some DOs are making it more convenient for marginalized groups and rural residents to maintain valid driving credentials and registrations. Currently, only 10% of DOs provide digitally enabled motor vehicle registration, and the same percentage offer digitally enabled driver's licence applications. Despite these modest provision rates, interest in expanding these services is noteworthy: 28% of DOs that do not yet provide driver's licence services are actively considering or developing them, while 21% are exploring digitally enabled vehicle registration services.

Table 22: **DO level of implementation and demand for vehicle and transportation digital government services**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
REGISTER A MOTOR VEHICLE	10%	21%
DRIVER'S LICENCE	10%	28%

Detailed regional provision rates and data on vehicle and transportation services are available in Appendix 1. The next subsection covers digitally enabled property and construction services.

BOX 22

Expanding inclusive access to social protection through Kenya's Huduma centres

Kenya's Huduma centres play a pivotal role in delivering inclusive social protection services, offering citizens in-person access to vital government programmes at a single, integrated service point. While these services can be accessed online via the eCitizen portal, Huduma centres offer additional convenience and choice – particularly for those with limited digital literacy or internet connectivity. These physical centres significantly enhance accessibility for marginalized populations, including women, youth, persons with disabilities (PWDs), the elderly, and low-income citizens in rural and underserved areas.

Huduma centres facilitate access to a wide range of welfare and social protection services that go far beyond simple application or inquiry. They serve as access points for financial empowerment and welfare programmes such as the UWEZO Fund and the Women Enterprise Fund, which offer subsidized credit and financial assis¬tance to women, youth, and PWDs. The Youth Enterprise Development Fund provides both financial support and business development services for youth-owned enterprises. Huduma centres also deliver key pension-related services from the Treasury and Department of Pensions. They also provide extensive support for National Social Security Fund services, including member and employer registration, card replacement, state¬ment retrieval, and claims processing. The National Government Affirmative Action Fund is also accessible through Huduma centres providing support to women, youth, PWDs, children in need, and the elderly.

These services represent just a portion of the more than 70 digital government services offered through the Huduma Centre network, which also includes access to health, education, agriculture, business licensing, utilities, legal and judicial services, and national identification. As detailed in the previous Huduma Centre case study in this report (see box #3), many Huduma centres are co-located within Kenya Posta's post offices, allowing them to serve as accessible public service hubs even in remote regions.

Sources: (Huduma Kenya, n.d.)

5.7 PROPERTY AND CONSTRUCTION

Administrative processes related to property development and construction can be complex and burdensome. Although provision is currently low, some DOs are beginning to address this challenge by offering digitally enabled government permit and registration services. These services include building permit applications, environmental permit applications, and land title registrations. Only a small proportion (2% to 4%) of DOs currently offer each of these services. However, interest in expanding these offerings is notable, as approximately a quarter of DOs not currently providing these services are actively considering or developing them.

Table 23: **DO level of implementation and demand for property and construction digital government services**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
BUILDING PERMIT	4%	25%
ENVIRONMENTAL PERMIT	3%	22%
LAND TITLE REGISTRATION	2%	25%

Detailed regional provision rates and data on property and construction services are available in Appendix 1. The next subsection covers digital government services tailored specifically to businesses.

BOX 23

CASE STUDY

La Poste contributes to the availability of public services within 20 minutes from home: the postal network's role in France Services

La Poste plays a central role in France's ambitious "France Services" initiative, originally launched as "Maisons de Services Au Public". This government-led programme aims to bring public administration closer to citizens by ensuring that everyone can access essential government services within 20 minutes of their home. France Services centres are hosted by a range of entities, including local authorities, community associations, and prominently, La Poste's network of post offices. Based on research team analysis of open data from the French government, La Poste operates approximately 16% of the nearly 2,500 fixed-location France Services centres across the country. Its infrastructure is particularly leveraged in remote and rural areas, where alternative hosts are often limited or unavailable.

Each France Services centre works in partnership with 12 national institutions – including family allowances (CAF), health insurance (CPAM), public finances (DGFiP), and France Travail – to offer a comprehensive suite of public services. Advisors stationed at La Poste-operated centres assist citizens in navigating a range of administrative procedures, including vehicle registration, driver's licence applications, health and social insurance queries, retirement planning, and tax submissions. Notably, vehicle registration and identity document services, such as driver's licence applications, rank among the top five reasons people visit France Services locations.

France Services advisors play a pivotal role in mitigating digital exclusion – an essential function given that 86% of users report difficulties with digital technology and 55% are over the age of 55. Advisors provide digital literacy training, assist with the creation and navigation of email and digital government portal accounts, and support users in completing digital forms and accessing online portals. Crucially, four out of five administrative procedures are successfully resolved during the initial visit.

Sources: (CityMag Martignas-sur-Jalle, 2024; data.gouv.fr, n.d.; France Services, n.d., n.d., n.d.; La Poste, 2024b; La Poste Groupe, 2024, 2021; Ministère de l'économie, des finances, et de la souveraineté industrielle et numérique, 2025; The Connexion, 2020)

5.8 DIGITAL GOVERNMENT SERVICES TAILORED TO BUSINESSES

MSMEs frequently encounter significant administrative hurdles when starting or operating their businesses. Currently, fewer DOs offer digitally enabled services tailored explicitly for businesses compared to services aimed at individuals. Nevertheless, some DOs have begun supporting MSMEs through services such as business registration (11%) and business licence applications (10%). Despite relatively low current provision, there is considerable interest among DOs to introduce these offerings, with around one-quarter of non-offering DOs either considering or actively developing them. This indicates substantial potential for growth in this area, which could further strengthen the role of the postal sector in supporting small business development and rural economic growth.

Table 24: **DO level of implementation and demand for business-tailored digital government services**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
REGISTER A BUSINESS	11%	25%
APPLY FOR A BUSINESS LICENCE	10%	26%
ASSISTANCE WITH E-PROCUREMENT	9%	23%
SUBMIT BUSINESS TAX	7%	21%

Detailed regional provision rates, along with data on digital services tailored specifically to businesses, are available in Appendix 1. The following subsection examines the channels used by DOs to deliver digital government services.

5.9 CHANNELS LEVERAGED FOR DIGITAL GOVERNMENT SERVICE DELIVERY

Delivering inclusive digital government services remains a significant challenge, particularly for governments seeking to reach rural and underserved communities. While digital solutions have the potential to enhance accessibility, uneven distribution of digital infrastructure and internet usage between urban and rural areas threatens to exacerbate existing inequalities. Although many governments have established physical "one-stop shops" or "multi-function service centres" to complement digital services, these centres are often concentrated in urban and densely populated regions, limiting their effectiveness in addressing rural access challenges (Hernandez et al., 2024).

Transforming post offices into one-stop-shop citizen service centres for digital government services can significantly bridge accessibility gaps for rural and marginalized communities. By leveraging their extensive physical presence, DOs can reduce the geographic and digital barriers that citizens often face when interacting with government agencies, thereby decreasing travel times, costs, and other inconveniences. Furthermore, DO delivery staff can serve as mobile access points, extending these services directly to the homes of citizens in the most remote or underserved locations, including individuals with mobility constraints. In doing so, postal networks become critical facilitators of inclusive multi-channel service delivery, ensuring no citizen is left behind in accessing essential public services.

Our analysis indicates that DOs are already playing an important role in ensuring the inclusive delivery of digital government services. Of the 78 DOs identifying as providers of digital government services, 87% deliver these services in person at post office counters – the most widely utilized delivery channel across all regions. By leveraging physical counters, DOs help overcome digital barriers, ensuring that underserved communities and individuals with limited online connectivity or digital skills can still conveniently access essential government services.

Alongside high levels of in-person service delivery, many DOs providing digital government services online also offer these services at post office counters, demonstrating a clear movement toward hybrid (multi-channel) service delivery. However, DOs remain more than twice as likely to deliver services exclusively through post office counters rather than through a hybrid model. This is likely because, in many countries, DOs act as extensions of national e-government

BOX 24

CASE STUDY

Zimpost – Empowering MSMEs through inclusive e-procurement

Zimpost, in collaboration with the Procurement Regulatory Authority of Zimbabwe (PRAZ), has embarked on an initiative to empower MSMEs by facilitating digitally enabled access to public procurement services through its extensive network of post offices and Digital Centers. By leveraging its widespread physical infrastructure, Zimpost is extending essential procurement services – previously accessible exclusively online – to MSMEs that face significant barriers to digital engagement owing to limited connectivity or digital literacy.

This strategic partnership capitalizes on Zimpost's established network, comprising more than 220 Digital Centers across the country, a majority in rural and underserved communities, offering local entrepreneurs the resources needed to effectively participate in government procurement processes. These services include registration as government suppliers, submission of procurement bids, and access to procurement-related information. Providing these services at accessible community locations like post offices promotes economic inclusion, empowering MSMEs to engage competitively and inclusively in the national economy. This model builds on the success of Zimpost's Digital Center initiative (see box 26 in section 6.2), which has already demonstrated the value of digitally upgrading postal networks in bridging the digital divide. This partnership also highlights the potential for post offices to act as a digital building block or digital public infrastructure facilitating inclusivity. Thanks to the efforts made to connect post offices in recent years through the Digital Center initiative, Zimpost is now able to unlock new partnerships and deliver a broader range of inclusive services than originally envisioned, proving that early investments in digitalizing postal infrastructure can generate future value for governments, citizens, and businesses.

By partnering with Zimpost, PRAZ benefits from a trusted, nationwide delivery platform that ensures even the most remote communities can access public procurement opportunities. This initiative aligns with the Zimbabwean government's broader goals articulated in the National Development Strategy, which prioritizes inclusive digital transformation and economic empowerment of marginalized groups.

Sources: (Kazunga and Chidakwa, 2022; Mirror, 2022; Vladimir Dube, 2024)

portals rather than independently creating new digital government portals. The responsibility for developing such systems typically falls to national governments or government ministries and departments. DOs that serve purely as physical extensions of national digital portals may not be reporting the existence of digital portals since they do not offer them themselves. Thus the survey results likely underestimate the postal sector's true contribution to multi-channel service delivery for digital government services.

Regional differences in the delivery channels leveraged by DOs for digital government services are notable. DOs in Africa predominantly rely on post office counters to deliver these services, followed closely by those in Europe and CIS. Meanwhile, DOs in industrialized countries are the least likely to offer digital government services online, with only a third doing so – likely a reflection of the widespread availability of well-established national and local e-government portals in these regions. Conversely, Latin America and the Caribbean show notably low levels of online service delivery through DOs.

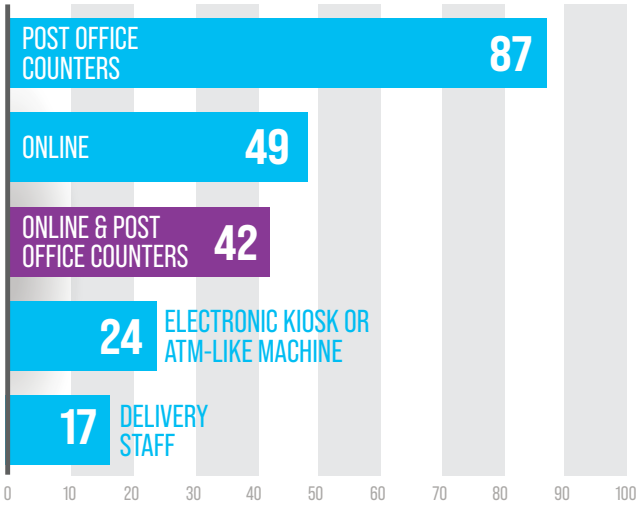
Blended or hybrid service delivery – combining online platforms with post office counters – is most prevalent in the Arab region, followed by Africa, Asia and the Pacific, and Europe and CIS. In contrast, only 8% of DOs in Latin America and the Caribbean offer hybrid service delivery. Additionally, DOs in the Arab region stand out for their comparatively higher use of advanced ATMs and postal delivery staff as digital government service delivery channels. For a detailed regional breakdown of digital government service delivery channels, see the figure below. Lastly, the stickiness and long-term sustainability of digital government services are discussed in the next subsection.

5.10 DIGITAL GOVERNMENT SERVICES ARE STICKY

While the effectiveness of digital government services can be difficult to measure directly, our stickiness metric provides an indication of their perceived value and continued relevance. Digital government services, once introduced by DOs, are rarely discontinued, suggesting that their delivery through the postal network provides lasting benefits to both DOs and their government partners. Overall, digital government

services have a global stickiness rate of approximately 92%, underscoring their potential to generate sustained value once adopted. Notably, digital government services demonstrate high levels of stickiness not just as a category but also as individual services. Nine of the surveyed services were found to have stuck 100% of the time. However, it is important to note that some of these services have been adopted by fewer than 10 DOs, which reduces the confidence in their reported stickiness rates.

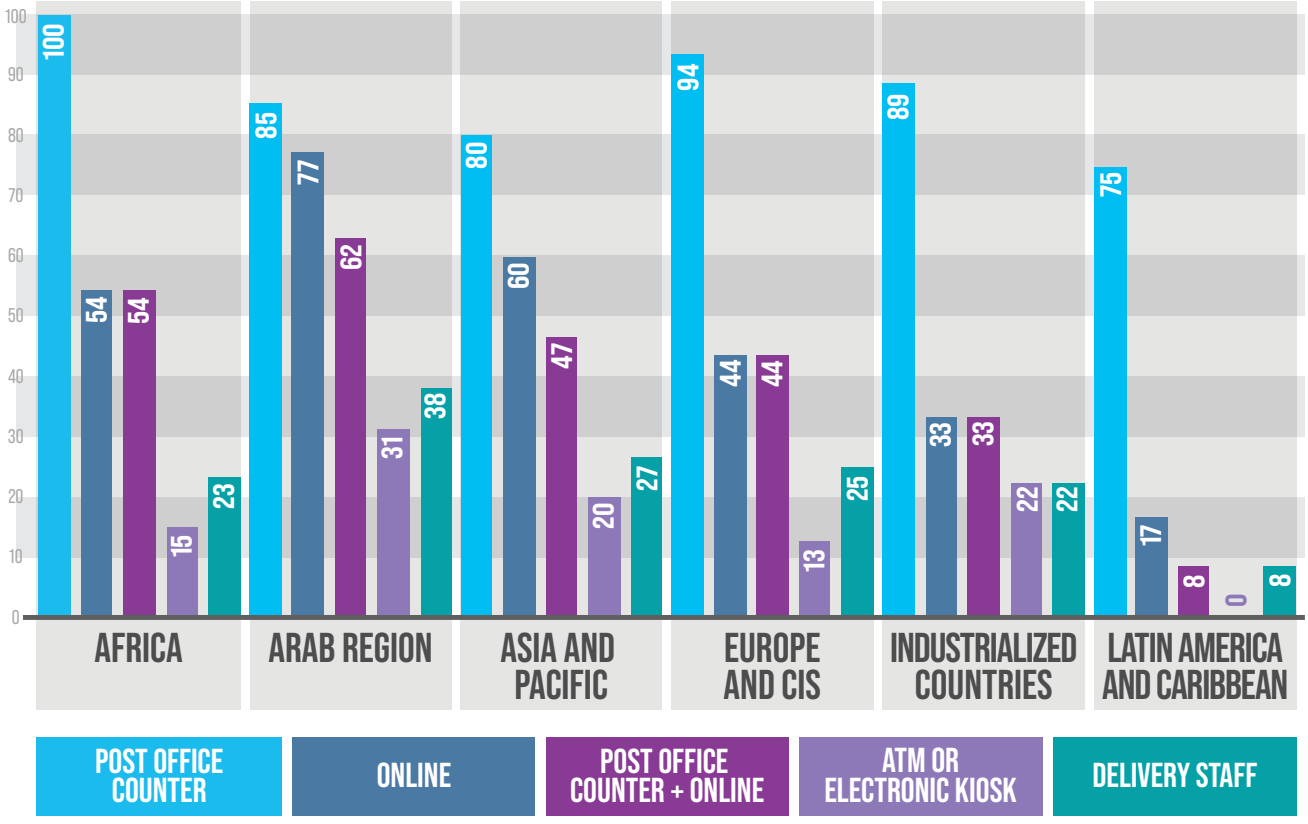
Figure 35: **Percentage of DOs offering digital government services by channel type (n = 78)**



Regional variations in stickiness rates exist but are minor, ranging from 87% in Latin America and the Caribbean to 98% in Europe and CIS. This high retention across regions reinforces the potential long term impact of delivering digital government services through postal networks and suggests that they have broad appeal and can offer long-term benefits, underscoring their potential to support sustained improvements in government service delivery and social inclusion.

In summary, DOs are playing an increasingly critical role in enabling inclusive access to digital government services, helping marginalized populations and rural communities overcome substantial barriers to essential public services. Moreover, by leveraging their extensive networks and multi-channel delivery – particularly through post office counters – DOs are effectively bringing governments closer to citizens, significantly extending the reach of digital government services to remote and underserved areas. Although these services demonstrate high retention rates (stickiness), significant potential remains to further expand both their provision and the range of digital government services offered by individual DOs. Addressing existing regional disparities and broadening the portfolio of offered services will be essential for maximizing the postal sector's contribution to inclusive governance, economic growth, and sustainable development. The following section explores how DOs directly promote digital inclusion through essential digital connectivity services and solutions.

Figure 36: **Percentage of DOs offering digital government services through each service delivery channel by region**



SECTION 6

DIGITAL CONNECTIVITY SERVICES

Current state of internet usage and the digital divide

In 2024, 5.5 billion people – 68% of the global population – used the internet at least once every three months (ITU, 2024). However, global averages mask substantial disparities across countries, socio economic groups, and particularly between urban and rural communities. While nearly all individuals in high-income countries regularly access the internet, usage rates are significantly lower in low-income countries (LICs) (27%) and lower middle income countries (LMICs) (54%). Within countries, the urban–rural digital divide remains pronounced: in 2023, only 48% of rural residents worldwide used the internet at least once every three months, compared to 83% of urban residents (ITU, 2024). This divide is especially severe in LICs, LMICs, least developed countries (LDCs), landlocked developing countries (LLDCs), and small island developing states (SIDS). Furthermore, marginalized populations – including women, the elderly, individuals with limited education, ethnic and religious minorities, indigenous communities, refugees, and persons with disabilities – remain disproportionately disconnected, threatening to exacerbate inequalities (ITU, 2022).

Barriers to meaningful connectivity

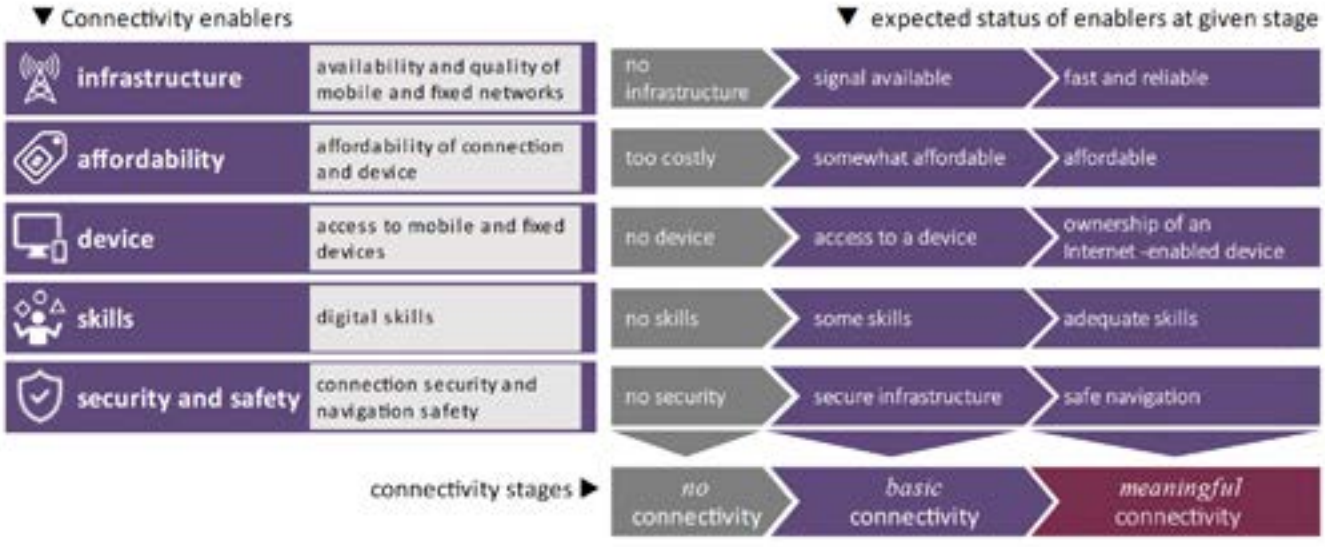
Moreover, when considering additional barriers that internet users may encounter after access (e.g., internet speed, stability of connection, data availability, suitable devices, frequency of usage, skills), digital inequalities between geographies and groups widen substantially (A4AI, 2022; ITU, 2022; United Nations Office of the Secretary-General's Envoy on Technology and ITU, 2021). This results in disadvantaged groups and geographies being less meaningfully connected or unable to fully benefit from internet usage. Achieving meaningful connectivity – where users have reliable internet access, adequate speed, affordable data, appropriate personal devices, and sufficient digital skills – requires targeted interventions beyond simply increasing basic internet access (see figure 37). Addressing these dimensions is essential to ensure that all communities, particularly those marginalized or living in remote areas, can fully benefit from digital participation. Digitally upgrading and leveraging existing infrastructures with extensive reach, such as national postal networks, can help overcome meaningful connectivity barriers and mitigate risks of digital exclusion and inequality.

Achieving meaningful connectivity – where users have reliable internet access, adequate speed, affordable data, appropriate personal devices, and sufficient digital skills – requires targeted interventions beyond simply increasing basic internet access.

Leveraging the postal network for digital inclusion

Digital connectivity has become a transversal enabler for socio-economic development. As all sectors become increasingly digitalized, reliable internet access is a gateway for participation across the education, health, finance, commerce, and governance sectors, linking connectivity directly to all 17 SDGs (ITU, 2022). With over 650,000 post offices globally – most located in rural and underserved areas – the postal network is uniquely positioned to address digital connectivity gaps precisely where disparities in internet access and usage are most pronounced. DOs already serve populations at higher risk of digital exclusion,

Figure 37: **Five enablers of meaningful connectivity (United Nations Office of the Secretary-General's Envoy on Technology and ITU, 2021).**



including women, elderly people, ethnic and religious minorities, migrants, and refugees. This extensive network represents an underutilized resource capable of driving digital inclusion by extending internet access, providing digital skills training, and supporting digital infrastructure development.

Earlier sections of the report highlighted how DOs mitigate digital exclusion by delivering essential digitally enabled services through multiple channels, particularly in-person interactions at post office counters. Building on this role, our findings show that DOs are also actively offering digital connectivity services and solutions aimed at directly increasing internet access, supporting infrastructure expansion, and addressing meaningful connectivity barriers such as device affordability and digital skills.

The postal network is uniquely positioned to address digital connectivity gaps precisely where disparities in internet access and usage are most pronounced. DOs already serve populations at higher risk of digital exclusion.

Current digital services provision and opportunities for expansion

In all, 70% of the DOs surveyed offer at least one of the 15 digital connectivity services analysed,[15] highlighting their emerging role as enablers of meaningful connectivity. By helping customers gain reliable internet access and enhancing digital infrastructure, DOs contribute to multiple dimensions of meaningful connectivity (see table below). Specifically, DOs help extend the reach of digital services, promote efficient use of existing digital infrastructure, and address affordability barriers by providing direct internet access and affordable digital devices. Additionally, many DOs offer digital skills training, empowering customers to safely and effectively participate in the online world. Some DOs also directly support the establishment of new broadband networks, thus further contributing to infrastructure expansion. Through these efforts, DOs are actively helping bridge digital divides, fostering increased connectivity, and promoting inclusive participation in the digital economy and digital society.

15 This figure differs from other digital service types owing to a variation in measurement methodology. While other categories were assessed based on DOs' self-identification as providers of the specific digital service type, signaling strategic intent, the digital connectivity figure encompasses all DOs offering any related services. This broader approach was required given the absence of a specific survey question **asking DOs if they were providers** of digital connectivity services, similar to those used for other categories.

Table 25: **Contribution of DO digital connectivity services and solutions to meaningful connectivity**

CONNECTIVITY SERVICE TYPE	MEANINGFUL CONNECTIVITY ENABLERS CONTRIBUTED TO
Helping extend the reach and promoting the efficient use of digital infrastructure	Infrastructure
Providing access to the internet	Infrastructure; affordability
Digital equipment provision and sales	Device; affordability
Digital skills training	Digital skills training; security and safety
Supporting and setting up new broadband networks	Infrastructure

Although DOs are clearly contributing to digital inclusion through connectivity services, there remains significant room for further growth. Maximizing the postal sector's impact on meaningful connectivity and digital inclusion requires expanding both the range and availability of connectivity services. While over 70% of DOs offer at least one of the 15 connectivity services analyzed, the scope of services provided is typically limited. On average, DOs that provide digital connectivity services offer just 3.6 out of the 15 surveyed services. Furthermore, none of these services are offered by more than 30% of DOs, with only four – co-location, SIM card sales, free internet, and public computer access – provided by at least a quarter of DOs. The remaining services have notably lower provision rates. These findings indicate considerable untapped potential for DOs to enhance their contributions to digital inclusion and help bridge connectivity gaps. Without broadening the range of connectivity solutions offered, the global postal network will remain an underutilized asset for promoting inclusive digital participation.

Regional differences in digital connectivity provision

Regional disparities in the provision of digital connectivity services by DOs are notable. DOs in the Arab region are global leaders in offering connectivity services, with nearly all surveyed DOs providing at least one service. This region is closely followed by DOs in industrialized countries, Europe and CIS, and Asia and the Pacific, all of which exceed the global average. In contrast, DOs in Africa show slightly lower provision rates, while DOs from Latin America and the Caribbean lag significantly behind, with only about half offering any digital connectivity services (see figure 38 below). These disparities highlight significant opportunities to enhance digital inclusion, particularly by leveraging existing postal infrastructure in regions with lower provision rates.

Regional disparities also exist in the depth of digital connectivity services and solutions offered by DOs (see figure 39 below). DOs from industrialized countries and the Arab region typically provide a broader range of connectivity services compared to other regions. However, across all regions, the number of connectivity services offered remains limited, indicating that most DOs currently make only modest contributions to meaningful connectivity. This underscores the considerable opportunity for DOs globally to increase their impact by expanding both their provision of digital connectivity services and the depth of services offered. Achieving this will require not only introducing additional connectivity solutions but also strategically enhancing existing service portfolios to fully leverage the postal network as a vehicle for advancing digital inclusion and meaningful connectivity.

Figure 38: **Percentage of DOs offering at least one connectivity service or solution by region (n = 108)**

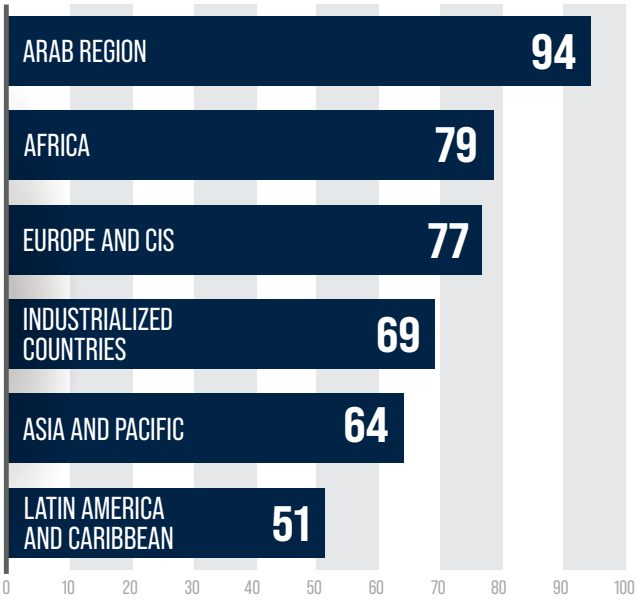
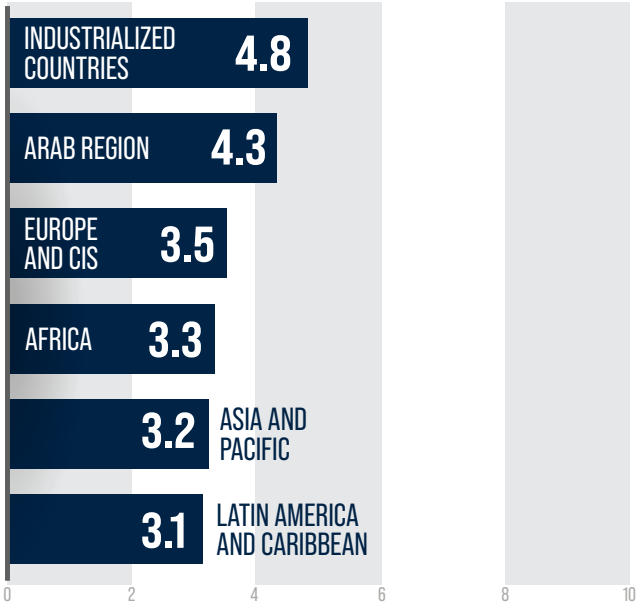


Figure 39: **Average number digital connectivity services and solutions offered by region (n = 108, only includes DOs who provide at least one connectivity service or solution)**



The table below summarizes regional disparities in the provision and diversification of digital connectivity services by DOs.

Table 26: **Regional summary of digital connectivity service provision by DOs**

REGION	CONNECTIVITY SERVICE PROVISION LEVEL	AVERAGE NUMBER OF SERVICES OFFERED (OUT OF 15)	KEY OBSERVATIONS AND RECOMMENDATIONS
ARAB REGION	Very high (94%)	Low (4.3)	Global leaders with extensive service portfolios and highest stickiness rates
INDUSTRIALIZED COUNTRIES	Moderate (69%)	Highest, but low (4.8)	Strong provision; potential to diversify further
EUROPE AND CIS	High (77%)	Very low (3.5)	High provision; opportunity exists to further diversify and expand connectivity solutions
ASIA AND PACIFIC	Moderate (64%)	Very low (3.2)	Moderate service provision; substantial opportunity for increased diversification
AFRICA	High (79%)	Very low (3.3)	High provision; opportunity exists to further diversify and expand connectivity solutions
LATIN AMERICA AND CARIBBEAN	Low (51%)	Lowest (3.1)	Limited connectivity services and diversity of services officered

For detailed regional analyses, including data tables and figures on specific digital connectivity services, please refer to Appendix 1. Having provided an overview of the DO digital connectivity landscape, the rest of this section covers DO provision and demand for specific digital connectivity services.

6.1 EXTENDING THE REACH AND PROMOTING THE FUNCTIONING OF DIGITAL INFRASTRUCTURE

Expanding digital infrastructure to rural and underserved areas is crucial for achieving meaningful digital inclusion and ensuring equitable access to online services. DOs are already contributing to connectivity expansion and improved functionality of existing digital infrastructure through various approaches, including co-location of telecommunications equipment at postal facilities and providing data-driven services such as spectrum monitoring to inform infrastructure deployment and management. These services not only lower costs and logistical barriers but also position DOs as critical partners to telecommunications companies and in national connectivity strategies.

Co-location of telecommunications infrastructure at postal facilities is currently the most widely implemented connectivity-related service among DOs. Nearly 30% of DOs provide co-location services, allowing telecommunications operators to deploy antennas, fibre-optic connection points, satellites, servers, and edge computing equipment more efficiently and cost-effectively. Co-location is particularly valuable in rural and remote areas, where DOs typically have extensive physical networks and well established community relationships (UPU, 2023c).

In addition, 13% of DOs support telecommunications companies through spectrum monitoring services. Through these services, DOs help telecommunications companies make data-driven decisions about infrastructure deployment, maintenance, and optimization. Leveraging their postal fleet and staff, who regularly operate in even the most remote areas, DOs can gather and deliver timely data on network coverage and signal strength from regions that are otherwise challenging to monitor. This positions DOs as promising partners in improving the reach and functionality of digital infrastructure nationwide.

Table 27: **DO level of implementation and demand for services that extend the reach of and promote the functioning of digital infrastructure**

CO-LOCATION	29%	14%
SPECTRUM MONITORING	13%	26%

Detailed regional analyses for each digital connectivity service and solution above are available in Appendix 1. The following subsection examines how DOs provide direct internet access to communities.

6.2 PROVIDING ACCESS TO THE INTERNET

DOs are helping address challenges related to internet affordability and reliability by providing public internet access through their postal infrastructure, ensuring that citizens in underserved areas can conveniently and affordably connect to the internet. Over a quarter of DOs currently provide their customers with free internet access at post offices. This service is twice as common as offering internet access for a small fee, which is provided by only 14% of DOs. Furthermore, DOs show a slightly greater interest in providing free internet services, with 28% of non-offering DOs considering or developing such services. Additionally, few DOs have discontinued offering free internet, suggesting sustained demand and value. In contrast, internet access for a fee has a notably higher discontinuation rate (see table 28), indicating it may be less effective in promoting connectivity while generating value, particularly as mobile broadband coverage becomes more widespread.

Table 28: **DO level of implementation and demand for internet access services**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs	DISCONT.
FREE INTERNET	27%	28%	3%
FREE COMMUNITY WI-FI	15%	19%	2%
INTERNET FOR FEE	14%	20%	17%

6.3 DIGITAL EQUIPMENT PROVISION

Meaningful connectivity requires owning an internet-enabled device of sufficient quality to fully access digital services and opportunities. Yet disparities in device ownership persist, particularly affecting rural residents and marginalized groups. DOs are addressing this barrier by providing convenient access to and sales of digital equipment through their extensive postal networks.

A quarter of DOs provide public computer equipment for onsite use. This service is particularly beneficial for communities whose residents lack devices at home, who face affordability barriers, and for "smartphone-only" internet users who may require the larger screen or additional processing power of a computer to complete productive tasks, such as studying or working on a job application (Faith and Hernandez, 2024). Indeed, 27% of DOs sell SIM cards, while 18% register SIM cards on behalf of their customers. Furthermore, 16% of DOs sell digital equipment such as smartphones, laptops, and PCs. Selling these devices through post offices can be especially advantageous in rural areas, where internet enabled devices are often less available and are more expensive than in urban areas. This disparity is often caused by market inefficiencies, poor infrastructure, and rent-seeking behaviour by intermediaries in the extended supply chain. For example, research by GSMA found that internet enabled devices could be 20% more expensive in rural areas of Bangladesh compared to urban areas (GSMA, 2022). By selling affordable

BOX 25

CASE STUDY

Leveraging postal fleets for mobile coverage monitoring – Österreichische Post and Australia Post

Recognizing the need for accurate and granular data to improve mobile connectivity, Österreichische Post and Australia Post support innovative mobile coverage monitoring programmes. These initiatives aim to identify coverage gaps, particularly in rural and underserved areas, helping governments and telecommunications companies strategically enhance the reach and quality of their networks. Both postal operators utilize their extensive vehicle fleets – already travelling regularly across both densely populated and remote regions – to collect real-time mobile network data.

In Austria, Österreichische Post has partnered with Ranlytics to equip postal vehicles with specialized sensors that continuously measure network coverage and quality during routine deliveries. This approach offers telecommunications providers detailed, location-specific insights at a fraction of the cost compared to conventional methods, significantly improving the precision and efficiency of network enhancement efforts. The data is used to generate dynamic coverage maps and visualizations, enabling stakeholders to identify weak signal zones and prioritize infrastructure upgrades more effectively.

Australia Post collaborates with the Australian government under the Better Connectivity Plan to systematically assess mobile coverage across regional and rural Australia. Using postal delivery trucks fitted with advanced measurement tools, Australia Post identifies mobile coverage "blackspots," providing essential data that informs targeted investments by telecom operators and governmental bodies. The initiative contributes to the development of public-facing maps and visual representations of mobile service availability, fostering transparency and public engagement.

Leveraging postal vehicles in this manner presents a unique advantage over traditional telco-led assessments, as postal fleets naturally cover extensive geographic areas on a consistent basis, ensuring comprehensive and up-to-date coverage data.

BOX 26

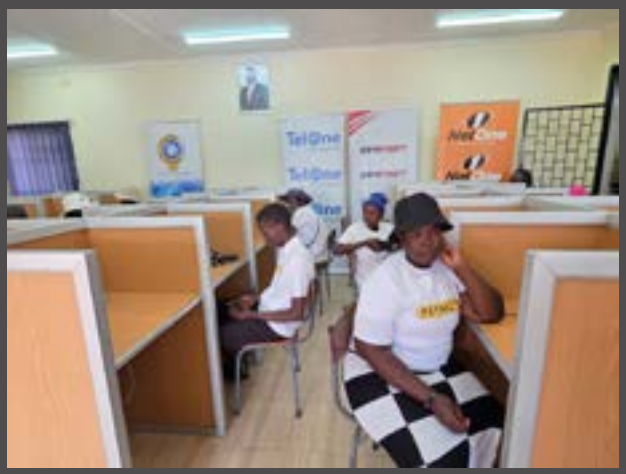
CASE STUDY

Zimpost's digital centers

Zimpost, in collaboration with the Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ), has established over 200 Digital Centers (formerly known as community information centres) across Zimbabwe. These centres, primarily located in rural and marginalized communities, aim to bridge the urban–rural digital divide by providing residents with crucial digital infrastructure and services. Equipped with computers, internet access, printing, photocopying, scanning, and even gaming facilities, Digital Centers are designed as hubs where community members can access information and essential digital tools, empowering them to participate more actively in social, economic, and governmental processes.

The Digital Center initiative, which was funded by Zimbabwe's Universal Service Fund, targets underserved populations, including rural inhabitants, the elderly, and economically disadvantaged groups who traditionally face barriers to accessing digital technologies. Along with post offices, Zimpost has established Digital Centers in 24 shipping containers placed in very remote areas located far away from existing post offices, helping further expand the CIC network. By offering affordable and localized digital services, Digital Centers facilitate greater civic engagement, improve education outcomes, and support local entrepreneurship and economic activities. Furthermore, Zimpost's Digital Centers are instrumental in achieving national digital inclusion goals outlined in Zimbabwe's National Development Strategy, aligning with the vision of nationwide internet accessibility by 2030.

Looking forward, Zimpost and POTRAZ plan to further expand the network of Digital Centers, enhance their sustainability through community-driven approaches, and continuously upgrade infrastructure to ensure these centres effectively meet evolving community needs, and are considering leveraging Digital Centers to provide e-government services.



Sources: (Gumbo, 2024; MISA Zimbabwe, 2023; Pikirayi, 2018)

digital devices at rural post offices, DOs can help address affordability barriers for some of the least connected rural communities. Demand from DOs to introduce these services and products is notable, particularly for public computer equipment, which is under consideration or development by over a quarter (27%) of non-offering DOs.

Table 29: **DO level of implementation and demand for digital equipment provision and sales services**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
SIM CARD SALES	27%	14%
PUBLIC COMPUTER EQUIPMENT	25%	27%
SIM CARD REGISTRATION	18%	14%
DIGITAL EQUIPMENT SALES	16%	17%

Detailed regional provision rates and data on digital equipment provision and sales services are available in Appendix 1. The subsequent subsection explores digital skills training services offered by DOs.

6.4 DIGITAL SKILLS TRAINING

Even after gaining online access and securing suitable devices, many individuals face significant challenges owing to a lack of digital literacy that makes it impossible to fully participate in digital society, especially for marginalized groups (European Union Agency for Fundamental Rights, 2023). This limitation restricts their ability to access essential services and fully benefit from the opportunities available online. Individuals with lower digital literacy are less likely to effectively utilize digital services related to education, finance, healthcare, and government, and are more vulnerable to online scams and misinformation (Sirlin et al., 2021). Recognizing these challenges, many DOs have started providing digital skills training to their customers, leveraging their trusted relationships and extensive networks to enhance digital literacy.

Currently, 14% of DOs offer digital skills training for citizens, while 11% provide targeted digital skills training for businesses, such as MSMEs. Furthermore, there is a growing interest among DOs in expanding digital skills training programmes. Approximately one in five DOs that do not currently offer digital skills training are either considering or actively developing such programmes.

Table 30: **DO level of implementation and demand for digital skills training**

DIGITAL SKILLS TRAINING FOR CITIZENS	14	20
DIGITAL SKILLS TRAINING FOR BUSINESSES	11	17

Detailed regional provision rates and data on digital skills training services are available in Appendix 1. The following subsection covers the role of DOs in supporting and establishing broadband networks. 6.5 Supporting and setting up new broadband networks

BOX 27

CASE STUDY

La Poste's Ardoiz tablet – helping meaningfully connect seniors

Seniors are among the most digitally excluded groups owing to lower levels of internet access, limited familiarity with digital tools, and reduced confidence navigating technology. At the same time, they are one of the most frequent users of postal services, which uniquely positions DOs to serve as trusted entry points for engaging and empowering elderly citizens in the digital world. Recognizing this, France's La Poste has developed the Ardoiz tablet – a device designed to meet the specific needs of older adults.

The Ardoiz tablet features a simplified and intuitive user interface, with large icons, high-contrast displays, and accessible language. It comes preloaded with essential applications such as email, video calling, web browsing, weather updates, digital photo sharing, and cognitive games – all curated with input from experts in senior care and gerontechnology. These features are designed to help seniors stay connected with family, maintain independence, and engage more confidently with digital services.

La Poste provides extensive, personalized support to seniors adopting the Ardoiz tablet. Upon delivery, specially trained postal staff assist seniors in setting up and activating their tablets, connecting them to Wi-Fi, configuring email accounts, and demonstrating basic functionalities. Continuous support is also available through a dedicated telephone helpline, where seniors can receive guidance for trouble shooting issues or performing new tasks six days a week. Additionally, La Poste organizes group training workshops at local post offices, enabling seniors to learn collectively and foster social interactions. Over 120,000 seniors across France have been supported with the Ardoiz tablet.

Beyond the Ardoiz tablet, La Poste's post offices offer various complementary services aimed at supporting elderly customers. These include personalized advice on using other digital tools and services, assistance with administrative tasks such as online form submission, and even postal employees performing regular home visits to provide welfare checks and ensure overall well-being. These comprehensive measures demonstrate La Poste's deep commitment to inclusive digital transformation, enabling elderly citizens to remain active and connected participants in the digital age.

Sources: (La Poste, 2024b, 2024a, 2022, n.d., n.d.)

CASE STUDY

Turkish Post (PTT Corp.) – Increasing e-commerce inclusion for women entrepreneurs through digital skills and e-commerce training

Turkish Post (PTT Corp.) has launched the "Increasing E-commerce Inclusion of Women" initiative, a project designed to enhance the digital and economic participation of women entrepreneurs and women cooperatives throughout Türkiye. Led by PttAVM, PTT's e-commerce affiliate, the initiative directly supports the Turkish government's broader policy goals of economic empowerment, digital inclusion, and gender equality by facilitating women's active participation in digital trade.

The project offers women entrepreneurs a comprehensive package of services specifically designed to overcome common barriers to digital commerce. This includes free e-commerce training in a range of areas such as digital marketing, customer behaviour, product listing, and sales optimization. Additionally, technical assistance is provided to help participants install and effectively manage their own e-commerce platforms. Special commission rates on PttAVM's platform further reduce operational costs, allowing women-led businesses to competitively offer their products online. These practical support services address the challenges women entrepreneurs often face, such as limited digital skills, technical infrastructure difficulties, and gender-based biases in business environments.

Since its inception in June 2020, the project has adopted an inclusive and hybrid approach to training, offering both online and face-to-face sessions. By the end of 2024, sessions had been conducted in 38 provinces across Türkiye. In the first half of 2025, activities continued in at least 20 additional provinces, ensuring broad geographic coverage – including rural and underserved communities often overlooked by traditional e-commerce models. Women entrepreneurs participating in the project have significantly expanded their market reach nationwide, resulting in substantial economic benefits, greater financial independence, and enhanced business skills. As of the end of 2024, the project had enabled more than 2,450 women entrepreneurs to use postal services for domestic and international sales, generating a total sales value of approximately 16 million Turkish lira.

The partnership between Turkish Post, PttAVM, and the General Directorates of Tradesmen, Craftsmen, and Cooperatives of the Ministry of Trade exemplifies strong collaboration aimed at creating sustainable economic growth and social inclusion. By fostering women's economic empowerment and digital trade literacy, this initiative not only contributes to reducing gender inequalities but also promotes economic resilience and growth across Türkiye.

Source: UPU TradePost awards application

BOX 29

Some designated postal operators directly provide internet connectivity services to customers

Beyond simply embracing digital transformation, several postal operators have expanded into the telecommunications sector – offering both mobile and fixed internet services. These initiatives not only give customers more choice in selecting their internet service providers, but also leverage the postal network's role as a trusted local institution. By offering internet services through an organization with an extensive physical presence, DOs can provide convenient, in-person support where customers can register, manage, or get assistance with their internet services.

Notable examples:

Correios (Brazil): Correios launched "Correios Cellular," an MVNO leveraging TIM Brasil's network through a partnership with Surf Telecom. The service offers prepaid mobile plans with benefits like zero-rated access to WhatsApp and key government websites, aiming to enhance digital inclusion across Brazil.

Poste Italiane (Italy): Through its subsidiary, PosteMobile, Poste Italiane offers an MVNO on Vodafone's network. Since 2017, it has also offered fixed-line telephony and internet services under the "PosteMobile Casa" brand, providing fibre-optic broadband across Italy.

Turkish Post (PTT) (Türkiye): PTT operates "Pttcell," an MVNO utilizing Türk Telekom's infrastructure. The service provides prepaid and postpaid mobile plans, offering nationwide coverage and various data packages to meet customer demands.

Swiss Post (Switzerland): In partnership with Salt, Swiss Post launched "Post Mobile," an MVNO offering 5G mobile subscriptions. Customers can choose from plans that include unlimited calls, SMS, and high-speed internet, with support available online and at Swiss Post branches.

La Poste (France): La Poste operates "La Poste Mobile," an MVNO providing a range of prepaid and postpaid mobile plans, including options with 5G connectivity. The service also offers high speed home internet packages, catering to diverse customer needs.

POST Luxembourg: Under the "POP" brand, POST Luxembourg offers integrated mobile and fixed internet services. Customers can benefit from combined packages that include high-speed broadband, mobile data, and television services, enhancing connectivity options nationwide.

These initiatives demonstrate how postal operators are leveraging their extensive networks and customer trust to provide essential internet services, contributing to greater digital accessibility and convenience.

6.5 SUPPORTING AND SETTING UP NEW BROADBAND NETWORKS

In some countries, DOs are directly involved in expanding connectivity through the establishment and operation of broadband infrastructure, providing citizens and businesses with enhanced access to the internet. A small but notable minority of DOs (12%) report that their organization or a subsidiary acts as an internet service provider (ISP), delivering broadband access services to homes, businesses, and/or public places. Additionally, 7% of DOs report that their organization or one of their subsidiaries acts as a mobile network operator (MNO), meaning they own mobile network infrastructure on which they provide mobile services, while an equal proportion act as a mobile virtual network operator (MVNO), leasing capacity from MNOs to provide mobile services. While the direct impact of DOs on infrastructure expansion to underserved areas through these roles cannot be definitively confirmed from the survey data, their involvement in providing broadband services may at least contribute positively to market competition, which can help bring down prices.

Surprisingly, a significant percentage of DOs report supporting community networks (16%). This suggests that post offices may currently be hosting community networks or serving as nodes within community mesh networks, allowing nearby people, homes, government institutions (e.g., schools and hospitals) and businesses to access the internet from a distance without having to visit the post office. Community networks are especially valuable in rural or remote areas where profit-driven telecommunications companies find it economically unfeasible to operate owing to low population density, challenging terrain, or limited purchasing power (Global Information Society Watch, 2018). Thus, if our findings are accurate,[16] some DOs are helping overcome critical barriers to connectivity in places typically neglected by commercial providers, supporting more equitable internet access and advancing digital inclusion.

Table 31: **DO level of implementation and demand for setting up and operating broadband networks**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
COMMUNITY NETWORKS	16	21
ISP	12	10
MOBILE VIRTUAL NETWORK OPERATOR	7	8
MOBILE NETWORK OPERATOR	7	8

Detailed regional provision rates and data on broadband network support and implementation services are available in Appendix 1. The stickiness and sustainability of digital connectivity services are examined in the next subsection.

6.6 DIGITAL CONNECTIVITY SERVICES ARE SOMEWHAT STICKY

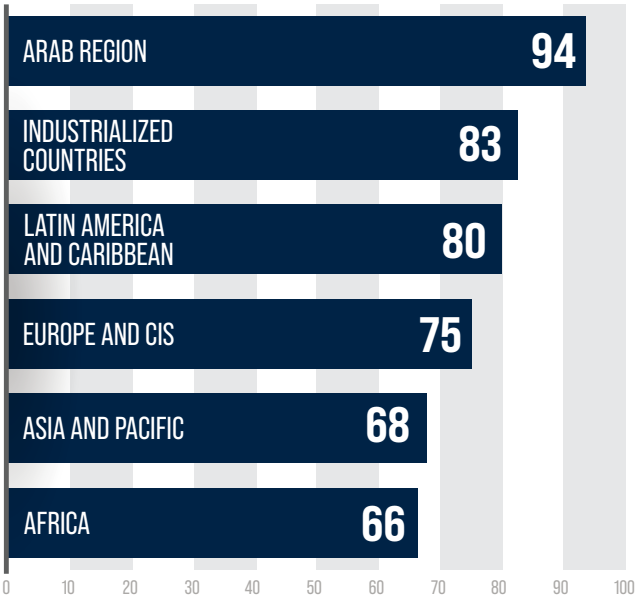
The sustainability of digital connectivity services, as indicated by their stickiness, shows varied outcomes. While certain services have demonstrated lasting value, others have struggled to maintain their relevance after implementation. Services such as free internet at post offices, spectrum monitoring, and community networks exhibit very high stickiness, suggesting consistent demand and ongoing value for communities and DOs. In contrast, the overall stickiness rate across digital connectivity services is mixed, averaging notably lower rates (76%) compared to other service categories (over 92%) in this report.

16 The wording in the survey was vague, and we are unsure whether DOs clearly understood what a community network is. The UPU International Bureau will conduct a validation exercise to verify which DOs have supported community networks and will produce case studies on examples uncovered.

Digital connectivity services include some of the least sticky offerings, with three of the four services having stickiness rates below 70% (internet for a fee, digital equipment sales, and SIM card registration). Among connectivity services, the practice of charging a small fee for internet usage at post offices demonstrates particularly low stickiness, with fewer than half of DOs continuing this service after adoption. This finding likely reflects difficulties in maintaining a viable customer base, as users may opt for mobile broadband instead when available. However, it should be noted that for several connectivity services, low stickiness rates may partly result from the relatively small number of DOs experimenting with these offerings, limiting the reliability of general conclusions. These low stickiness levels do not mean DOs should necessarily refrain from introducing these services, especially given the positive social and digital inclusion benefits for communities served by Posts. However, DOs and their partners should proceed with caution.

Significant regional disparities exist in the stickiness of connectivity services (see figure below). DOs in the Arab region (94%) report the highest success rates in sustaining connectivity services, suggesting that these services have consistently provided value in this context. Conversely, DOs in the Asia and Pacific and Africa regions face greater challenges, reporting stickiness rates of only 68% and 66% overall respectively. This regional disparity underscores the importance of context-specific strategies in deploying connectivity solutions, considering local infrastructure, consumer preferences, and socio-economic factors. More detailed regional data on the stickiness of digital connectivity services is available in the appendix.

Figure 40: **Overall stickiness of digital connectivity services by region (percentage)**



In summary, DOs are making significant contributions to meaningful connectivity by addressing barriers related to infrastructure reach, internet access, digital equipment affordability, and digital literacy, particularly in rural and underserved areas. Leveraging their extensive physical networks and trusted community presence, DOs effectively complement digital connectivity initiatives and bridge critical gaps that commercial providers often overlook. While some connectivity services have shown strong retention (stickiness), overall sustainability remains mixed, indicating a need for strategic and context specific deployment. Addressing regional disparities, broadening service offerings, and enhancing the effectiveness and sustainability of existing services will be essential for the postal sector to fully realize its potential as an enabler of digital inclusion. The next section explores the emerging role of DOs in supporting the expansion of digital health services.

SECTION 7

DIGITAL HEALTH SERVICES

Access to essential healthcare remains out of reach for over half of the global population – more than 4.5 billion people – as of 2021 (WHO, 2023). Moreover, billions of people experience financial hardship owing to out of pocket medical expenses. These challenges are most pronounced in developing countries, especially for rural households who tend to have less essential health coverage in their proximity (WHO, 2023). Moreover, rural areas struggle to attract and retain qualified doctors and healthcare professionals (Kumar and Clancy, 2021). It has been noted that "Even in countries where the majority of the population lives in rural areas, [health] resources are concentrated in cities" (Strasser, 2003). Moreover, geographical barriers such as non-existent or inadequate road infrastructure make it difficult for rural communities to access affordable healthcare in nearby towns or cities even when it exists (Garchitorena et al., 2021).

Digital health services and inclusive healthcare delivery

Digital health services are increasingly recognized as powerful tools for expanding access to healthcare, particularly in rural communities. Telemedicine and other digitally enabled services can significantly reduce geographic and logistical barriers, providing crucial healthcare access to communities located far from existing facilities or who are frequently isolated by seasonal weather disruptions (Arora et al., 2024). Digital solutions also have the potential to extend the reach of doctors, healthcare professionals, and specialists to remote and underserved areas, enhancing the quality and availability of medical care (Maita et al., 2024). Digital health platforms can facilitate timely consultations with specialists, enabling remote populations to receive expert medical care without extensive travel. Evidence also shows that remote disease monitoring in rural areas can help reduce hospitalization rates, improve medication adherence, and make patients more engaged in their care (Maita et al., 2024).

Offering digital health services through DOs presents a unique opportunity to improve accessibility and health equity, especially for individuals and communities with limited connectivity, mobility, or access to healthcare facilities. The global postal network, which consists of more than 650,000 post offices predominantly situated in rural areas, provides an extensive physical infrastructure that can be harnessed to bridge healthcare delivery gaps. By offering digital health services at post offices, DOs can help bring healthcare closer to underserved populations and help fill the coverage gap. Moreover, postal delivery staff can be leveraged to provide digital health services to the most remote communities as well as individuals who may be unable to make it to physical access points owing to a disability or infirmity.

Current provision rate and future potential of digital health services offered by DOs

Currently, digital health services are the least commonly provided digital service category offered among DOs, with **only 11% identifying as digital health service providers.**[17] DO interest in expanding these services also appears limited, with none of the 11 digital health services surveyed attracting interest from more than 13% of DOs that do not currently offer them. However, the fact that some DOs have already implemented digital health services suggests its potential is worth monitoring. These low levels of digital health provision and interest in adopting digital health services suggests that postal networks are unlikely to be leveraged to promote universal health coverage unless it comes at the request of external actors such as governments. The table below provides an overview of the current implementation of specific digital health services and the level of interest from DOs that do not yet offer them:

17 Throughout this report, "digital services" includes both fully online services and digitally enabled in-person services leveraging digital technology. This broader usage explicitly recognizes hybrid, multi-channel approaches as critical for inclusive service delivery, particularly in reaching underserved and less digitally connected communities.

BOX 30

CASE STUDY

ZimPost's telehealth project – Advancing inclusive healthcare

ZimPost, in collaboration with a range of national and international partners, has launched a telehealth pilot initiative aimed at enhancing access to healthcare services across Zimbabwe, particularly in rural and remote regions. This initiative aligns closely with Zimbabwe's broader public health policy objectives, notably the drive towards achieving universal health coverage and improving healthcare outcomes in underserved communities. Zimbabwe faces a challenging doctor-to-population ratio of just 1 doctor per 5,000 people, making telehealth especially promising for bridging this healthcare gap.

The project brings together multiple partners, including ZimSmart Villages; Samp Group; MedTech Africa; the Zimbabwe Investment and Development Agency; the Ministry of Health and Child Care; the Ministry of ICT, Postal and Courier Services; and the Zimbabwe National Geospatial and Space Agency. Each organization contributes a unique role – from funding and implementation to health system integration and technology deployment. Leveraging ZimPost's existing network of Digital Centers, which provide digital connectivity and access to digital services (see box 26), the telehealth initiative establishes telehealth kiosks in post offices, thereby bringing advanced medical consultations directly to rural populations. These kiosks, staffed by trained nurses, facilitate remote consultations with doctors situated hundreds of kilometres away, enabling prompt and efficient medical care without requiring patients to travel significant distances. The initiative employs a "hub and spoke" model, wherein each kiosk acts as a central hub surrounded by several smaller telehealth booths around 40 to 50 kms away, extending services even deeper into remote areas.

The telehealth centres offer advanced diagnostic capabilities through sophisticated remote monitoring equipment. Available tests include digital imaging for ophthalmology, rapid chemistry analysis for lipid and uric acid levels, breast cancer screening using AI-enhanced imaging with high accuracy, remote ultrasound scanning for internal organs, digital stethoscopy for cardiac assessments, and portable ECG devices. Patients benefit immensely from quicker diagnoses, reduced healthcare costs, and minimized travel burdens. ZimPost further supports the project by providing essential logistical services, including the transportation of medicines, blood samples, and other critical medical supplies, underscoring the unique value of delivering healthcare services through the postal network. Plans are underway to significantly scale this initiative, moving from an initial 10 telehealth kiosks to approximately 150 telehealth units nationwide, thanks to investment support from the Samp Group and other partners.

Sources: (Bulawayo24 News, n.d.; Mugadzikwa, 2024; TechMag.TV, 2024; ZimSmart villages, 2025; ZimSmart Villages, n.d.; Zinyuke, 2024)

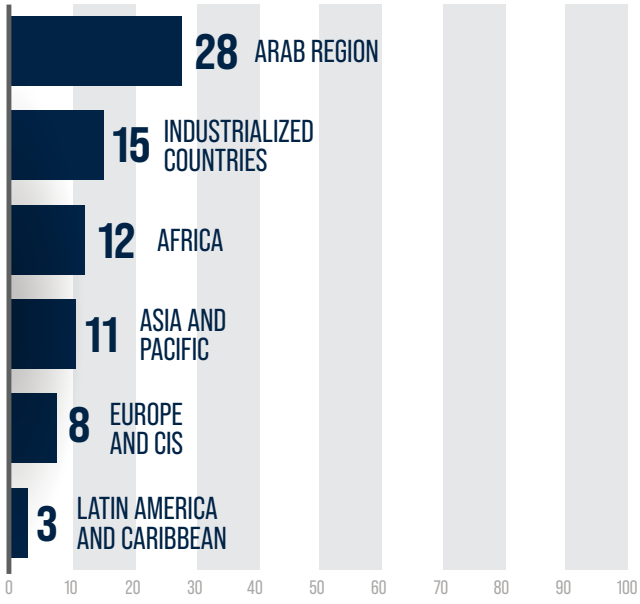
Table 32: **DO level of implementation and demand for digital health services**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
LAST-MILE VACCINE SERVICES	5.9%	12.5%
ONLINE HEALTH PORTAL	3.9%	12.3%
HOME TESTING KITS	3.3%	11.5%
SCHEDULE APPOINTMENT	2%	10.7%
DIGITAL HEALTH RECORDS	1.3%	10.6%
SCHEDULE VACCINE	1.3%	10.6%
TELEPHONE CONSULTATIONS	1.3%	8.0%
REMOTE DISEASE MONITORING	0.7%	7.9%
VIDEO CONSULTATIONS	0.7%	7.9%
DIGITAL HEALTH TRAINING	0%	11.8%

Detailed regional provision rates and data for each digital health service are available in Appendix 1.

Despite overall low provision rates, significant regional disparities already exist in the extent to which DOs currently offer digital health services. DOs in the Arab region lead in providing these services, followed by those in industrialized countries – both regions surpassing the global average. In contrast, digital health provision by DOs in Asia and the Pacific and in Africa aligns closely with global averages, while Europe and CIS and Latin America and the Caribbean trail behind (see figure 41).

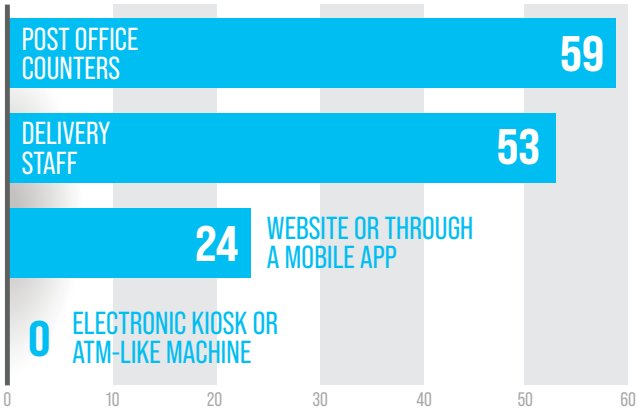
Figure 41: **Percentage of DOs who consider themselves providers of digital health services by region**



7.1 CHANNELS USED FOR DIGITAL HEALTH SERVICE DELIVERY

Although subject to limited sample size, there are signs that DOs are well placed to offer digital health services in a way that promotes social and health inclusion through multi-channel service delivery. In all, 59% of DOs offering digital health services provide the service at the post office counter. Over half of DOs offering digital health services also report offering them via the delivery staff. Only 24% of DOs offering digital health services do so via their website or mobile app, suggesting that DOs offering digital health services see their physical presence as their unique selling point in offering such services. Overall, it appears that DOs offering digital health services are strategically positioning themselves to bridge the gap for less digitally connected users who may otherwise have difficulty accessing these services. Given the small sample size, the blended service delivery analysis was skipped for this service type.

Figure 42: **Percentage of DOs offering digital health services by channel type (n = 17)**



7.2 STICKINESS OF DIGITAL HEALTH SERVICES

Owing to the limited number of DOs currently offering digital health services, it remains too early to adequately assess the stickiness of specific services or identify regional trends. However, when considered as a group, digital health services appear highly sticky – 92% (34 out of 37) of digital health services introduced by DOs have stuck around. This persistence suggests a strong potential for sustainability, though it is possible that many services were only recently launched, making long-term conclusions premature.

In summary, although DOs currently play a limited role in delivering digital health services, they demonstrate notable potential to enhance inclusive healthcare delivery, particularly for rural and underserved communities. Leveraging their trusted status, extensive physical networks, and multi channel delivery capabilities – especially via post office counters and delivery staff – DOs could significantly bridge gaps in healthcare access. The high retention rates (stickiness) observed so far, despite limited sample sizes, suggest promising sustainability. Nevertheless, fully realizing this potential will require increasing provision rates and expanding the range of digital health services offered. The following section examines how DOs are deepening their roles as enablers of inclusive communication by expanding digital postal services, further supporting inclusive digital societies.

SECTION 8

DIGITAL POSTAL SERVICES

As DOs continue to embrace digitalization, digital postal services have emerged as the most widely offered category of digital service. Globally, **74% of DOs identify as providers of digital postal services**,[18] underscoring their natural alignment with traditional postal activities and their strategic importance to postal sector modernization and sustainability efforts. For the purposes of this report, digital postal services refer to postal services that include a digital component in their delivery. This can include the full digitalization of traditional postal services (e.g., electronic mailboxes), digitalization of parts of the traditional postal value chain (e.g., digital stamps), or the introduction of new services that would not have been technically or economically feasible without an element of digitalization (e.g., pick-up requests and tracking notifications).

Although the postal sector has clearly begun to embrace digitalization, significant opportunities remain to deepen their digital transformation. Only three of the 10 digital postal services analyzed – each related to information provision, such as track and trace – are currently offered by more than 60% of DOs. Provision of other digital postal services remains limited, indicating substantial potential for further expansion. By broadening the range and provision rate of digital postal services, DOs can better serve their communities, strengthen their role as providers of essential infrastructure, and contribute more effectively to inclusive development. Without increasing the percentage of DOs offering these services, DOs will continue to struggle to compete against private companies, start-ups, and other competitors who are increasingly operating in the traditional postal sector as well as in the areas that show potential for DOs to expand into. Although the postal sector has clearly begun embracing digitalization, expanding and diversifying the range of digital postal services remains critical to fully realize their potential.

Without increasing the percentage of DOs offering these services, DOs will continue to struggle to compete against private companies, start-ups, and other competitors who are increasingly operating in the traditional postal sector as well as in the areas that show potential for DOs to expand into.

Portfolio expansion into digital postal services

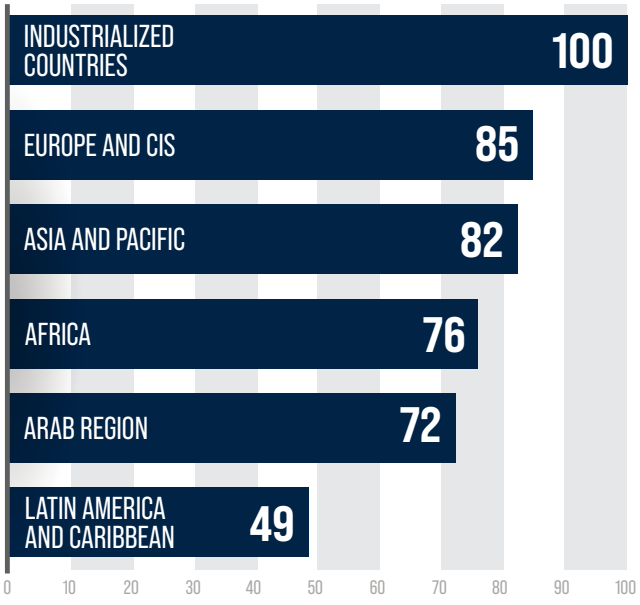
A closer look at current service offerings underscores the need for portfolio expansion. On average, DOs identifying as digital postal service providers offer fewer than half (4.9) of the 10 digital postal services analyzed by the survey. This indicates that many DOs are currently offering only a limited range of digital services, highlighting significant opportunities for further expansion to better meet customer needs, improve operational efficiency, and enhance overall postal relevance in the digital economy. Expanding the variety of digital services offered can help DOs become more customer centric and improve their ability to compete against private companies and start-ups.

18 Throughout this report, "digital services" includes both fully online services and digitally enabled in-person services leveraging digital technology. This broader usage explicitly recognizes hybrid, multi-channel approaches as critical for inclusive service delivery, particularly in reaching underserved and less digitally connected communities.

Regional disparities and opportunities

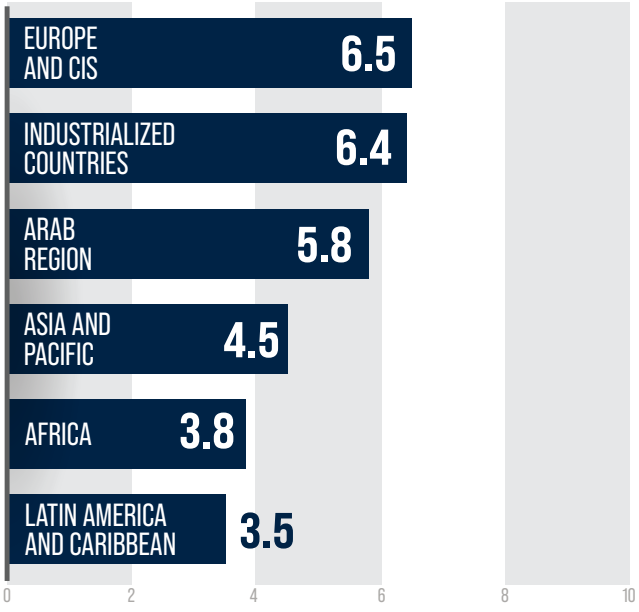
Moreover, provision rates vary considerably across regions. All DOs from industrialized countries offer digital postal services, and provision is also relatively high in Europe and CIS (85%) and Asia and the Pacific (82%). However, fewer than half of DOs in Latin America and the Caribbean provide these services. These regional disparities indicate a significant untapped potential for DOs to enhance their contribution to digital inclusion and customer-centric service delivery, particularly in regions where digital postal services provision currently lags behind.

Figure 43: **Percentage of DOs who consider themselves providers of digital postal services by region**



Significant regional disparities also exist in the range of digital postal services offered by DOs. DOs from Europe and CIS and from industrialized countries offer the broadest portfolios, while DOs from the Arab region are not far behind. In contrast, providers in the Asia and Pacific, Africa, and Latin America and Caribbean regions trail behind the global average. As a result, DOs in developing regions are not only less likely to offer digital postal services but also tend to offer a narrower range when they do. Unless these trends are reversed, DOs in developing regions will continue to fall behind in competitiveness and operational efficiency, increasing the risk of losing further market share to private DOs and start-ups.

Figure 44: **Average number digital postal services offered by region (n = 113, only DOs who consider themselves providers of digital postal services)**



The table below summarizes regional disparities in the provision and diversification of digital connectivity services by DOs.

Table 33: **Regional summary of digital postal service provision by DOs**

REGION	PROVISION LEVEL	AVERAGE NUMBER OF SERVICES OFFERED (OUT OF 10)	KEY OBSERVATIONS
INDUSTRIALIZED COUNTRIES	Highest (100%)	High (6.4)	All DOs provide digital postal services, broad service diversity
EUROPE AND CIS	High (85%)	High (6.5)	High provision rates, extensive service portfolios
ASIA AND PACIFIC	High (82%)	Moderate (4.5)	High provision rates, but narrower range of digital postal services
ARAB REGION	Moderate (72%)	Moderate–high (5.8)	Moderate provision level and service diversity
AFRICA	Moderate (76%)	Low (3.8)	Lower provision rates and service diversity, significant room for expansion
LATIN AMERICA AND CARIBBEAN	Very low (46%)	Lowest (3.5)	Lowest provision rates and service diversity

For regional analyses, including detailed data tables on specific digital postal services, please refer to Appendix 1. Having provided an overview of the DO digital postal service landscape, the rest of this section covers DO provision and demand for specific digital postal services.

8.1 INFORMATION-BASED DIGITAL POSTAL SERVICES

Digitalizing postal networks enhances the flow of data, providing real-time visibility into every letter, parcel, vehicle, staff member, and asset within the network. Beyond improving internal decision making for DOs, sharing real-time tracking information directly with customers enhances transparency, reduces anxiety around lost or delayed deliveries, and increases overall customer satisfaction and loyalty (Spring GDS, 2025). Track and trace has become particularly central to postal operations, emerging as the most widely adopted digital service analyzed in this survey. Notably, 84% of DOs globally reported offering track and trace, surpassing even the overall percentage of DOs identifying as digital postal service providers. This underscores that track and trace is increasingly viewed not merely as an optional digital service but as an essential requirement for a modern postal operation.

Track and trace has become particularly central to postal operations, emerging as the most widely adopted digital service analyzed in this survey.

Nearly two-thirds of DOs have enhanced their track-and-trace services by providing customers with proactive tracking notifications, including updates on the status and location of their deliveries. These notifications further reduce customer anxiety by eliminating the need for customers to actively monitor shipment status, ultimately saving time and improving the overall delivery experience. Additionally, over 60% of DOs offer online address validation and address lookup tools, helping to reduce input errors, speed up transaction processes, and improve accuracy of deliveries. These information-based digital postal services provide clear benefits, particularly by ensuring packages reach the correct destination efficiently and reliably, thus reinforcing the postal

sector's role as a trusted facilitator of e-commerce and communication. These services also show very high levels of demand, with two-thirds of DOs that do not currently offer them either considering or developing them.

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
TRACK AND TRACE	84%	88%
TRACKING NOTIFICATIONS	63%	67%
ONLINE LOOKUP	61%	66%
PICK-UP REQUEST	44%	62%
POSTAL ELECTRONIC MAILBOX	22%	43%

Detailed regional provision rates and data on information-based digital postal services are available in Appendix 1. The following subsection discusses delivery-based digital postal services.

8.2 DELIVERY-BASED DIGITAL POSTAL SERVICES

Digitalization enables innovative postal delivery services that would not otherwise be economically or technically feasible. These services attract postal customers by providing convenience and cost savings associated with avoiding visits to post offices for sending and receiving parcels or letters. One such service is the pick-up request, a service currently offered by 44% of DOs, which enables customers to order a pick-up service for mail or parcels through a website, app, or SMS. Unmet demand for pick-up requests is high, with 62% of DOs not currently offering the service either considering or developing it.

Over one in five DOs are offering customers a postal electronic mailbox, providing them with the flexibility and convenience of viewing and managing their mail remotely while reducing clutter in their physical mailboxes and the need to travel to post offices. Unmet demand is high for postal electronic services, with over 40% of DOs not currently offering the service either considering or developing it.

Detailed regional provision rates and data on delivery-based digital postal services are available in Appendix 1. Next, we examine record-keeping based digital postal services.

8.3 RECORDKEEPING-BASED DIGITAL POSTAL SERVICES

Leveraging their trusted status within communities, DOs are uniquely positioned to diversify into digital services that involve secure recordkeeping and certification. Offering these services not only strengthens the role of DOs as trusted intermediaries but also enhances customer convenience and administrative efficiency. In all, 41% of DOs report offering e-invoicing services. Meanwhile, electronic certification is offered by nearly one in five DOs and helps postal customers prove the legal validity of transactions or documents with time- and date-stamped evidence of when the event occurred, helping ensure regulatory and contractual compliance without customers having to acquire physical paperwork.

Table 34: **DO level of implementation and demand for recordkeeping-based digital postal services**

E-INVOICING	41%	47%
ELECTRONIC CERTIFICATION	19%	32%

Detailed regional provision rates and data on recordkeeping-based digital postal services are available in Appendix 1. The subsequent subsection covers postal shopping portals.

8.4 POSTAL SHOPPING PORTAL

Postal online shopping portals are emerging as an effective means for DOs to expand their customer reach, enhance convenience, and adapt to evolving consumer expectations in the digital era. These portals reduce travel costs and save time for customers who would otherwise need to visit physical post offices. Additionally, online portals allow DOs to offer an expanded range of products and services beyond the capacity of physical retail locations, thereby increasing customer choice and revenue potential. Online shopping portals are currently being offered by nearly 40% of DOs, and a majority of DOs (60%) who do not currently offer such marketplaces are either considering or developing them.

Table 35: **DO level of implementation and demand for postal shopping portals**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
POSTAL SHOPPING PORTAL	38%	60%

Detailed regional provision rates and data on postal shopping portal services are available in Appendix 1. Digital philatelic services are explored in the next subsection.

8.5 DIGITAL PHILATELIC SERVICES

Digital philatelic services have the potential to enhance postal operations by streamlining processes, reducing costs, and expanding the market reach of philatelic products.[19] These services address the growing customer demand for digital solutions while offering a unique opportunity to engage both traditional collectors and new audiences with an interest in digital assets, thereby broadening the appeal of stamp collecting.

Currently, almost a third of DOs (30%) offer digital stamps (e.g., QR codes or barcode stamps), and only around one in 10 DOs (11%) offer crypto stamps. Unmet demand is significant: 51% of non-offering DOs are considering or developing digital stamps, while 34% are exploring the introduction of crypto stamps.

Table 36: **DO level of implementation and demand for digital philatelic services**

SERVICE	OFFERING	DEMAND FROM NON-OFFERING DOs
DIGITAL STAMPS (E.G., QR CODES OR BARCODES)	30%	51%
CRYPTO STAMPS	11%	34%

Detailed regional provisional rates and data on digital philatelic services are available in Appendix 1. The following subsection examines the channels used by DOs to deliver digital postal services.

8.6 CHANNELS USED FOR DIGITAL POSTAL SERVICES DELIVERY

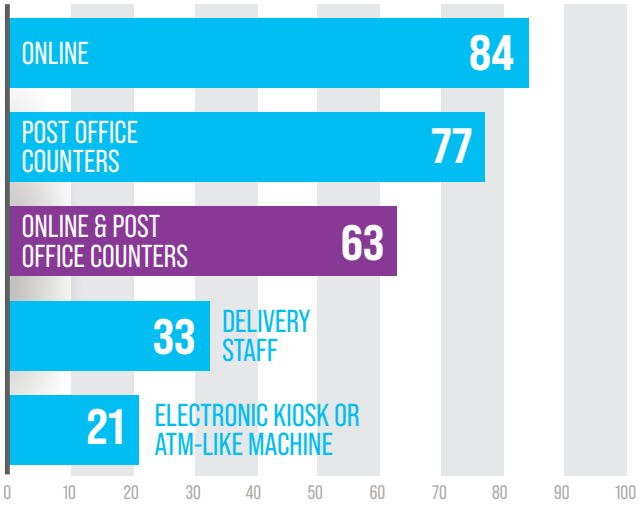
DOs that offer digital postal services are widely leveraging digitalization to extend their postal product offerings into the digital sphere, reaching broader audiences and enhancing customer convenience. Interestingly, digital postal services are the only service type captured by the survey that is more likely to be offered online than at post office counters. Among DOs offering digital postal services, 84% provide them online via a website or mobile app, while 77% offer them at post office counters. Notably, a majority (63%) of DOs combine both online and in-person service delivery at post office counters, reflecting a hybrid service model. Hybrid service delivery provides DOs with significant customer acquisition and retention potential: the digital modality allows DOs to reach customers they may otherwise not have reached, while the physical modality ensures that less connected customers can also access these services.

19 Note. – The digital philatelic services included in this report represent only a limited subset of the broader digital philately landscape. Although numerous additional products and services could have been considered, the scope of the survey was restricted owing to the report already encompassing 90 digital services across six sectors.

Hybrid service delivery provides DOs with significant customer acquisition and retention potential: the digital modality allows DOs to reach customers they may otherwise not have reached, while the physical modality ensures that less connected customers can also access these services.

Additionally, one-third of DOs extend digital postal services through their delivery staff, and over one in five (21%) utilize electronic kiosks or ATM-like machines at post offices to deliver these services without requiring customers to interact with postal staff.

Figure 45: **Percentage of DOs offering digital postal services by channel type (n = 113)**



The delivery channels used for digital postal services vary significantly by region. In industrialized countries, as well as in the Europe and CIS and the Arab regions, DOs are more likely to offer these services online. Conversely, DOs in Africa and in Latin America and the Caribbean tend to rely more heavily on post office counters. DOs in the Asia and Pacific region are equally likely to utilize either online or counter-based delivery methods. Hybrid service models that combine both online and in person delivery are most prevalent in the Asia and Pacific region, followed by the Arab region, and Europe and CIS. For a detailed regional breakdown of delivery channels, refer to the figure 46.

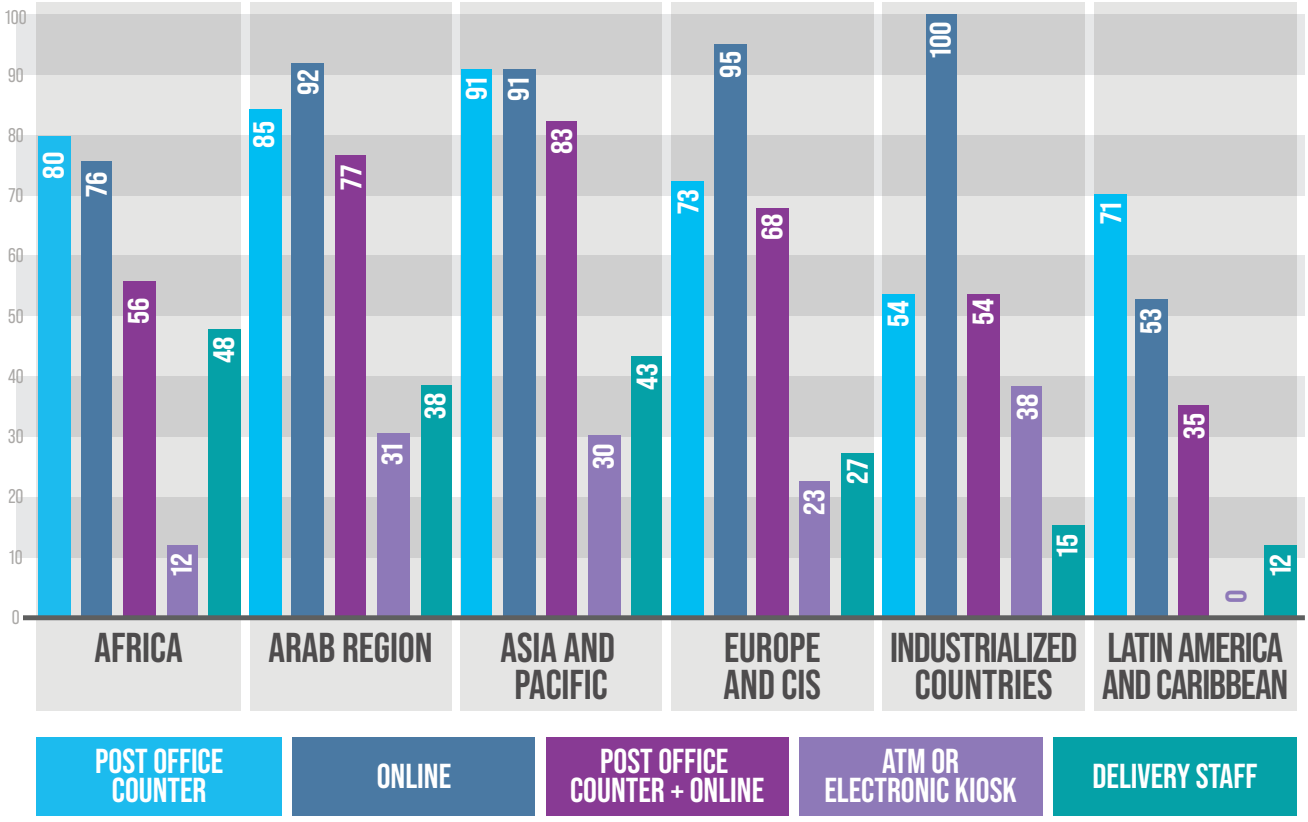
8.7 Digital postal services are sticky

Our analysis of digital postal services reveals not only their widespread provision but also their enduring value for DOs. Digital postal services are rarely abandoned. Digital postal services stick 96% of the time, suggesting that they add substantial value both for DOs and for their implementation partners. Moreover, digital postal services are not just sticky as a category; each individual service captured in the survey demonstrated high levels of stickiness. Four digital postal services – track and trace, tracking notifications, online lookup, and digitally requested pick-ups – were shown to stick 100% of the time. At least 88% of DOs offering each digital postal service have also retained them. The only exceptions to this trend are postal electronic mailboxes, which, while relatively low in provision rates, are retained by only around 80% of DOs that have offered them.

Digital postal services are sticky across all regions, with stickiness rates ranging from 94% in industrialized countries to 100% in Latin America and the Caribbean. For a complete breakdown of the stickiness of each digital postal service type by region, refer to Appendix 1.

In summary, DOs are successfully embracing digitalization through diverse digital postal services that significantly enhance operational efficiency, customer satisfaction, and market competitiveness. There is potential to further expand these services, particularly by addressing unmet DO demand in underserved regions. Moreover, substantial opportunities remain to increase their provision rates and diversify DO digital postal service portfolios.

Figure 46: **Percentage of DOs offering digital postal services through each delivery service channel by region**



SECTION 9

THE UPU'S ROLE IN SUPPORTING DIGITAL TRANSFORMATION AND INCLUSION

As the United Nations specialized agency for the postal sector, the UPU has long supported member countries and designated postal operators in modernizing infrastructure, strengthening operations, and strategically leveraging postal networks to advance sustainable development. In recent years, this mandate has expanded to include support for digital transformation – helping postal operators diversify into digital services and integrate more deeply into the digital economy and society. The UPU offers a growing range of programmes and technical assistance initiatives focused on digital inclusion, innovation, and diversification into digital services. Below is an illustrative – but non-exhaustive – list of UPU projects and tools providing ongoing support for postal digital transformation:

Connect.post: The UPU's flagship initiative to connect every post office to the internet by 2030 and transform them into one-stop service centres promoting economic, social, financial, and digital inclusion. The project supports governments and postal operators in leveraging connected post offices to deliver essential digital services – such as e-government, e-commerce, and digital financial services – in underserved communities.

Digital Transformation Assessment (DTA): The DTA is a comprehensive evaluation aimed at supporting governments and postal operators in modernizing their postal services through digital technologies. These assessments help identify gaps, opportunities, and strategic pathways for improving digital postal infrastructure, customer experience, and operational efficiency across postal networks, maximizing their contribution to national digitalization objectives and overall socio economic development.

.POST: A secure and trusted sponsored top-level domain (sTLD) managed by the UPU and available exclusively to postal stakeholders. It enhances the authentication, security, and interoperability of digital postal, financial, and government services, while enabling Posts to operate within a trusted, internationally governed environment.

Secure.post: A UPU web-based portal designed to help the postal sector build cybersecurity awareness and resilience. It offers access to global resources, expert guidance, and training content to help postal stakeholders manage cyber risks, respond to threats, and maintain trust.

POST-ISAC (information sharing and analysis centre): A centralized information-sharing platform established by the UPU to enhance security and resilience within the global postal sector. POST-ISAC facilitates real-time exchange of critical security intelligence, threat assessments, incident reports, and best practices among postal operators and stakeholders. By improving communication and coordination, POST-ISAC strengthens the postal sector's capacity to anticipate, mitigate, and respond effectively to security incidents and cyber threats, ensuring secure and trusted postal services globally.

TradePost: A collaborative initiative led by the UPU, in partnership with the World Trade Organization (WTO), UN Trade and Development (UNCTAD), the Global Alliance for Trade Facilitation, and the International Trade Centre (ITC), that promotes trade inclusion and SME empowerment through the postal network, with an emphasis on e-commerce. Activities include the annual TradePost Forum, a global awards programme, and a webinar series exploring the role of Posts in inclusive cross-border trade.

Financial Inclusion Technical Assistance: Through its technical assistance projects in partnership with various private sector partners (Visa, Gates Foundation, AXA, CNP, etc.), the UPU helps postal operators digitize financial services to expand access for unbanked and marginalized populations, particularly women, youth, farmers and elderly people. Such initiatives provide assessments, software support, and capacity building to help Posts launch inclusive, innovative digital financial services tailored to national financial inclusion strategies.

Payment Readiness for E-commerce (PRE): PRE helps DOs leverage key existing payment service providers and solutions and identify possible additional future capacity needed to ensure that online shoppers and MSMEs have suitable e-commerce payment infrastructure to develop their business through Posts.

Operational Readiness for E-commerce (ORE): The ORE project helps postal operators evaluate and strengthen their capacity to support inclusive, cross-border e-commerce. It improves logistics, delivery, returns, and digital integration to better serve MSMEs and consumers in domestic and international markets.

Postal Social Services Project: This initiative supports the development and promotion of postal services that contribute to social service delivery, health, education, and community well-being, often through partnerships with governments and communities. Many featured projects include a digital component – such as platforms, tools, or service delivery innovations – highlighting how postal networks can be leveraged to advance social goals in a connected world.

Environmental sustainability and the twin transitions: Building on its longstanding work in postal sustainability, the UPU is expanding efforts to support the postal sector's role in national and global twin transitions – digital and green transformations. This includes not only reducing the sector's environmental footprint, but also enabling postal operators to contribute to national and global sustainability and inclusivity goals through digitalization, digital solutions, and digital services.

Participation in global digital governance fora: The UPU actively engages in global digital governance discussions, including the World Summit on the Information Society, the Internet Governance Forum, and the United Nations Group on the Information Society. It advocates for the strategic use of digitally upgraded postal infrastructure to advance inclusive and sustainable development worldwide.

This support is only expected to grow and deepen in the years ahead. The UPU welcomes collaboration with all stakeholders committed to ensuring that no one is left behind in the digital age. Are you looking to digitally connect postal infrastructure – or to leverage connected infrastructure to deliver inclusive, citizen-centred services? If so, we'd love to hear from you. Please contact us at eservices@upu.int.

SECTION 10

RECOMMENDATIONS

Building on the findings of this report, targeted recommendations are provided below for key stakeholders. Fully unlocking the postal sector's potential as a driver of inclusive digital transformation cannot be achieved by any individual organization or by stakeholders acting in isolation. Instead, it requires coordinated and integrated actions, carefully tailored to reflect local contexts, priorities, capacities, and constraints. Cross-cutting themes of connectivity, partnerships, diversification, and inclusivity clearly emerge from this report's findings, underpinning all recommendations provided below. Each stakeholder group has a critical role in achieving the postal sector's full potential. While many DOs have made strides, they may not always independently prioritize connecting post offices to the internet or delivering inclusive digital services via their infrastructure – highlighting the need for targeted incentives, policy guidance, and cross-sectoral engagement to catalyze action. Sustained commitment, cooperation, proactive engagement, and regular adaptation based on emerging insights will be essential for driving inclusive digital transformation effectively. Continuous monitoring, evaluation, and knowledge sharing among stakeholders will further ensure that actions remain relevant, adaptive, and responsive to emerging challenges and opportunities.

National governments

Adopt "inclusion by design" as a foundational principle for national digital transformation strategies, explicitly prioritizing the proactive design and delivery of digital services to reach marginalized communities and those least digitally connected.

Fully leverage your national postal networks to drive inclusive digital transformation. Owing to their universal service mandates, DOs have an unparalleled physical presence, particularly in rural and remote areas. This report demonstrates that DOs can effectively leverage this presence to deliver non-postal digital services, facilitating participation for less connected citizens and MSMEs in the digital economy and society.

Explicitly integrate postal infrastructure into national Digital Public Infrastructure (DPI) frameworks and strategies, recognizing and enhancing postal networks' unique capability as inclusive "phygital" infrastructure promoting digital inclusion.

Prioritize investment in digital connectivity for post offices. Universal internet access across all post offices – especially in rural and underserved areas – is an essential precondition for enabling DOs to fulfil their potential as inclusive digital service providers. Such investments will significantly enhance the delivery and reach of digital services and promote the achievement of development objectives.

Safeguard and strategically expand national post office networks – particularly in rural and underserved areas – to maximize their potential for inclusive digital service delivery. An extensive postal network is a prerequisite for inclusive, multi-channel service delivery, and strategic expansion – especially in underserved regions – can significantly enhance the sector's ability to reach marginalized groups with essential digital services.

Avoid cost-cutting measures that reduce the physical postal footprint in ways that undermine multi-channel and inclusion-by-design strategies. While fiscal efficiency is important, reducing post offices without assessing the impact on rural and marginalized communities risks removing infrastructure that could be leveraged for economic, social, financial, and digital inclusion.

Develop enabling regulatory frameworks and supportive policy environments to encourage innovation and facilitate DOs' diversification into new digital services. Clear regulatory guidance and supportive policies will reduce barriers and encourage private-sector partnerships, further unlocking the postal sector's full digital transformation potential.

Facilitate cross-sectoral partnerships between DOs and other public and private entities, including governmental ministries responsible for digital transformation, ICT agencies, and private service providers. Such partnerships can broaden the range and improve the quality of digitally enabled services delivered through postal infrastructure.

Integrate postal networks explicitly into national digital transformation strategies and national development agendas, ensuring their strategic role is recognized, supported, and leveraged across all relevant ministries and agencies.

Postal regulators

Develop and promote regulatory frameworks that enable and encourage DOs to diversify their services beyond traditional postal activities. This includes explicitly allowing and facilitating the provision of essential non-postal digital services, such as digital financial services, e-government, e commerce, and digital connectivity solutions.

Facilitate DOs' access to Universal Service and Access Funds (USAFs/USFs), where these exist. Postal regulators should collaborate proactively with telecommunications regulators to enable DOs to secure funding from these sources. Leveraging USAFs can significantly enhance DOs' capacity to deliver essential digital connectivity services, particularly in underserved regions.

Explicitly incorporate "inclusion by design" principles into regulatory frameworks and universal service mandates, encouraging DOs to proactively prioritize underserved communities when implementing digital services.

Incorporate inclusivity and multi-channel service delivery as explicit goals within postal regulatory frameworks, ensuring DOs prioritize reaching underserved populations and leveraging their unique physical infrastructure to bridge digital divides.

Encourage regulatory environments that foster innovation and partnerships between DOs, government entities, and the private sector. Regulators can streamline processes for establishing partnerships and remove unnecessary regulatory barriers, enabling DOs to efficiently expand their service portfolios.

Telecommunications regulators (where distinct from postal regulators)

Coordinate proactively with postal regulators and DOs to facilitate access to Universal Service and Access Funds (USAFs/USFs). Explicitly include postal networks as eligible recipients, particularly emphasizing the role of postal infrastructure in expanding connectivity and digital services in underserved areas.

Promote regulatory frameworks that incentivize collaboration between telecommunications companies and DOs, supporting innovative partnerships aimed at jointly expanding digital connectivity, particularly in rural and underserved communities.

Designated postal operators

Explicitly integrate "inclusion by design" principles into your strategic planning and service delivery, proactively addressing the specific needs and realities of marginalized and less digitally connected communities through your postal networks.

Collaborate proactively with national governments and international donors to connect currently unconnected post offices, prioritizing rural and underserved areas. Securing internet connectivity for all post offices is fundamental to realizing your full potential as inclusive digital service providers.

Actively diversify beyond traditional postal and logistics services. Explore opportunities to provide digital financial services, e-commerce solutions, e-government services, digital health, and connectivity services, aligning these new offerings closely with the evolving needs of your communities.

Deepen service offerings within existing digital service categories, providing a comprehensive and complementary range of digital solutions within each category. Expanding the diversity and depth of digital service portfolios will enable DOs to better meet community needs and significantly advance economic, financial, social, and digital inclusion.

Leverage your physical networks to implement multi-channel digital service delivery approaches. The unique advantage of DOs lies in your extensive physical infrastructure. Offering digital services through multiple channels – including in person at post offices, via delivery staff, and through digital portals – ensures accessibility and inclusion, especially for less connected communities.

Maintain and strategically expand the physical network – including in rural areas – based on social and economic value, pairing locations with locally relevant digital services to advance inclusivity and revenue generation. Posts should assess both the social and economic value of their physical presence, ensuring community needs are considered when deciding whether to maintain or expand the network. In some cases, these needs can be met through the introduction of new digital services that also generate additional revenue for Posts.

Engage proactively in international cooperation, knowledge exchange, and capacity-building initiatives with other DOs. Sharing experiences, innovative solutions, and lessons learned will help DOs overcome common challenges and accelerate digital transformation of the sector globally.

Develop sustainable business models and strategic partnerships, working closely with private sector actors, government agencies, and technology providers to ensure long-term financial sustainability and maximize the impact of new digital service offerings.

Invest in comprehensive staff training to ensure consistent, high-quality service delivery across all channels. Counter and delivery personnel involved in digital service provision should be equipped with the necessary digital tools and trained to confidently use the devices and software required. As the range of digital services expands, all postal staff should also receive cyber-hygiene training to safeguard customer and partner data

International donors and development actors

Recognize and actively advocate for the postal sector's potential role in helping achieve the SDGs and inclusive national-level digital transformations, including the sector's unique position to offer inclusive digital services through multi-channel service delivery, particularly in rural and underserved communities.

Advocate for the recognition and integration of postal networks as core Digital Public Infrastructure (DPI) components in national and global digital policy frameworks, emphasizing their strategic importance as inclusive infrastructure capable of promoting inclusivity.

Provide targeted financial and technical assistance to support digital connectivity and infrastructure upgrades of postal networks, prioritizing developing countries and rural areas. Such investments will empower DOs to expand their delivery of digital services, significantly advancing economic, financial, social, and digital inclusion objectives.

Encourage and support partnerships between DOs, national governments, and the private sector by funding pilot projects, feasibility studies, and knowledge-exchange initiatives that highlight successful models of inclusive digital service provision through postal infrastructure.

Integrate postal-sector initiatives explicitly into broader digital development and digital inclusion programmes, ensuring postal networks are fully leveraged as critical infrastructure in global and national digital development strategies.

Support data collection, mapping, and research initiatives to document the postal sector's contributions and identify opportunities and challenges.

Universal Postal Union

Support governments in creating an enabling environment through forward-looking policies, investment in digital infrastructure and the fostering of public-private partnerships to drive innovation.

Provide digital transformation technical assistance to governments and designated operators to help them increase their contribution towards socio-economic development.

Raise awareness, through advocacy and expert policy briefing and reporting, of the role of the postal sector in achieving national, regional and global digital transformation goals.

Collaborate with other United Nations entities and development partners to mobilize resources and foster synergies for delivering essential digital services via the connected postal network. This should be pursued holistically across organizations to ensure coordinated, sustainable, and high-impact investments.

Deliver capacity building and training activities to postal staff, regulators and policymakers on issues relating to digital transformation through the postal sector.

Other international organizations and UN agencies

Explicitly recognize and advocate for the inclusion of postal networks in global digital policy frameworks, such as the Global Digital Compact and the post-2030 agenda. Highlight the postal infrastructure's unique capability to enhance global connectivity, digital inclusion, and equitable access to essential digital services.

Support and fund targeted initiatives that strengthen the digital capabilities of national postal networks, particularly in developing and least developed countries, maximizing the postal sector's contribution to inclusive digital transformation globally.

Private-sector players

Actively pursue collaboration opportunities with DOs, leveraging the strong demand identified in this report among DOs for introducing new digital services. Technology companies and digital solution providers can partner with DOs to co-develop, implement, and scale digital service offerings, expanding their market presence and delivering solutions tailored to local community needs.

Leverage the unique reach of postal networks to extend market coverage. DOs offer extensive infrastructure, especially in rural and underserved regions that are typically challenging or commercially unviable for private companies to serve independently. Digital service providers should proactively explore partnerships with DOs to enter these underserved markets, using existing postal infrastructure and multi-channel delivery capabilities.

Identify complementary strengths between the private sector and DOs – such as innovation capacity, technical expertise, and local logistical reach – to develop mutually beneficial business models.

Pilot innovative digital service delivery models in collaboration with DOs, documenting and sharing lessons learned to encourage broader industry engagement and facilitate replication of successful initiatives.

Civil society organizations and community-based organizations

Collaborate closely with DOs to ensure digital services reflect genuine community needs and priorities. Leverage your local expertise and trusted relationships to facilitate digital literacy programmes, digital skills training, and community outreach initiatives, ensuring maximum inclusivity and uptake of digitally enabled postal services.

Advocate actively to policymakers and postal regulators about the importance of integrating postal networks into broader national and community-level digital development strategies, ensuring the needs of underserved and marginalized communities are fully represented and addressed.

Monitor and provide feedback on the effectiveness, accessibility, and inclusiveness of digital services offered via postal networks, helping DOs continually refine and improve their service offerings.

Academia and research institutions

Conduct applied research and rigorous impact evaluations on digital services delivered through postal infrastructures, highlighting evidence of the postal sector's contributions to digital inclusion, economic empowerment, and progress towards achieving the SDGs.

Partner with DOs and governments to collect relevant data, including mapping post office locations, connectivity status, service availability, and user experiences. This information will enable informed policymaking, targeted investments, and improved service delivery.

Facilitate knowledge exchange and dissemination of research findings across regions and among postal sector stakeholders to help scale successful initiatives and inform strategic decisions on digital transformation.

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APPENDIX

APPENDIX 1: REGIONAL ANALYSES OF SERVICES OFFERED

E-COMMERCE

Regional trends in overall e-commerce service provision and the breadth of services offered by DOs are discussed in section 3 of the main report. This appendix provides a more detailed regional analysis of the status and uptake of each of the 17 individual e-commerce services included in the survey.

Delivery services facilitating e-commerce

Regional disparities are evident in the provision of e-commerce delivery services by DOs. These services are most widely offered in industrialized countries and Europe and CIS, with lower levels of provision in other developing regions. A detailed regional breakdown is provided in the table below.

Table 37: **Detailed regional breakdown of e-commerce delivery services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	PARCEL LOCKERS	77	0	0	8	15	0	83	0	23	0
Europe and CIS		65	15	12	4	0	4	100	27	35	78
Asia and Pacific		39	7	18	0	4	32	92	25	61	41
Arab region		28	22	33	0	6	11	83	56	72	77
Latin America & Caribbean		14	6	20	3	9	49	63	26	86	30
Africa		12	24	45	0	0	18	100	70	88	79

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	PUDO POINTS	85	0	8	8	0	0	100	8	15	50
Europe and CIS		65	12	23	0	0	0	100	35	35	100
Asia and Pacific		50	4	21	0	0	25	100	25	50	50
Africa		33	18	30	0	3	15	92	48	67	73
Arab region		33	17	33	0	0	17	100	50	67	75
Latin America & Caribbean		17	9	26	3	0	46	100	34	83	41
Industrialized countries	RETURNS SOLUTIONS	92	8	0	0	0	0	100	8	8	100
Europe and CIS		77	15	4	0	0	4	100	19	23	83
Arab region		39	17	17	0	0	28	100	33	61	55
Asia and Pacific		29	18	25	0	0	29	100	43	71	60
Africa		24	9	33	3	0	30	100	42	76	56
Latin America & Caribbean		9	9	23	0	0	60	100	31	91	34
Industrialized countries	SMART LOCKERS	69	0	0	8	8	15	90	0	31	0
Europe and CIS		42	15	27	12	0	4	100	42	58	73
Asia and Pacific		32	4	25	0	0	39	100	29	68	42
Arab region		22	22	33	0	0	22	100	56	78	71
Latin America & Caribbean		11	6	23	3	3	54	80	29	89	32
Africa		3	18	48	0	0	30	100	67	97	69

Warehousing solutions

Significant regional disparities exist in DO provision of e-commerce warehousing solutions. Provision rates are higher among DOs in industrialized countries, Europe and CIS, and the Arab region, while Asia and Pacific, Africa, and Latin America and the Caribbean report lower levels. Detailed regional data is provided in the table below.

Table 38: **Detailed regional breakdown of e-commerce warehousing services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	E-COMMERCE FULFILMENT	54	0	15	8	8	15	88	15	46	33
Europe and CIS		42	23	19	0	0	15	100	42	58	73
Arab region		39	28	17	0	6	11	88	44	61	73
Africa		30	18	36	0	0	15	100	55	70	78
Asia and Pacific		29	11	29	0	0	32	100	39	71	55
Latin America & Caribbean		26	11	17	3	0	43	100	29	74	39
Industrialized countries	ON-DEMAND WAREHOUSING	46	0	15	8	8	23	86	15	54	29
Arab region		28	22	22	0	6	22	83	44	72	62
Europe and CIS		27	19	27	0	0	27	100	46	73	63
Asia and Pacific		18	7	36	0	4	36	83	43	82	52
Latin America & Caribbean		11	0	31	0	0	57	100	31	89	36
Africa		3	12	48	3	0	33	100	61	97	63

E-commerce financing solutions

Regional disparities in DO provision of e-commerce financing solutions are evident. Payment on delivery is relatively common, particularly in Europe and CIS, with moderate uptake in other regions. Escrow services, by contrast, remain limited across all regions. A detailed regional breakdown is provided in the table below.

Table 39: **Detailed regional breakdown of e-commerce financing services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	ESCROW	23	0	8	0	0	69	100	8	77	10
Arab region		17	11	28	0	11	33	60	39	83	47
Europe and CIS		12	8	35	4	0	42	100	42	88	48
Latin America & Caribbean		11	0	14	0	0	74	100	14	89	16
Africa		9	9	39	6	0	36	100	48	91	53
Asia and Pacific		4	18	29	4	0	46	100	46	96	48
Europe and CIS	PAYMENT ON DELIVERY	92	0	8	0	0	0	100	8	8	100
Industrialized countries		46	0	0	15	0	38	100	0	54	0
Asia and Pacific		39	14	18	0	4	25	92	32	61	53
Arab region		39	11	28	0	6	17	88	39	61	64
Africa		30	12	36	6	0	15	100	48	70	70
Latin America & Caribbean		26	3	17	6	3	46	90	20	74	27

Merchant support and intelligence

Significant regional disparities exist in DO provision of merchant support and intelligence services. Provision is highest in industrialized countries and Europe and CIS, while Africa, Asia and Pacific, the Arab region, and particularly Latin America and the Caribbean report lower levels. A detailed regional breakdown is provided in the table below.

Table 40: **Detailed regional breakdown of e-commerce merchant support services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	INTEGRATION OF POSTAL WEB SERVICES WITH E-MERCHANT'S WEBSITE	69	0	15	0	0	15	100	15	31	50
Europe and CIS		58	8	31	0	0	4	100	38	42	91
Africa		33	24	30	3	0	9	100	55	67	82
Arab region		33	28	17	0	0	22	100	44	67	67
Asia and Pacific		32	11	29	0	0	29	100	39	68	58
Latin America & Caribbean		6	14	37	3	0	40	100	51	94	55
Industrialized countries	INVENTORY FORECASTING	31	8	8	0	8	46	80	15	69	22
Arab region		28	6	22	0	6	39	83	28	72	39
Asia and Pacific		21	4	36	7	0	32	100	39	79	50
Latin America & Caribbean		20	6	11	0	0	63	100	17	80	21
Europe and CIS		19	23	27	4	0	27	100	50	81	62
Africa		12	21	36	3	0	27	100	58	88	66

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	ONLINE MAN-AGEMENT OF DOCUMENTS/ MERCHANDISE DELIVERY OPTIONS	77	0	8	0	8	8	91	8	23	33
Arab region		39	17	17	0	6	22	88	33	61	55
Europe and CIS		35	23	19	4	0	19	100	42	65	65
Asia and Pacific		29	14	21	4	0	32	100	36	71	50
Africa		27	9	42	3	0	18	100	52	73	71
Latin America & Caribbean		14	6	31	0	0	49	100	37	86	43
Industrialized countries	PERFORMANCE REPORTS	62	0	15	0	0	23	100	15	38	40
Europe and CIS		46	19	15	4	0	15	100	35	54	64
Arab region		44	17	17	0	6	17	89	33	56	60
Asia and Pacific		36	11	25	0	0	29	100	36	64	56
Africa		12	18	39	3	0	27	100	58	88	66
Latin America & Caribbean		3	3	23	0	0	71	100	26	97	27

Merchant support for international e-commerce

Regional disparities exist in DO provision of cross-border e-commerce support services. Industrialized countries and Europe and CIS lead in offering services such as online customs declarations and landed cost calculations, while provision rates are significantly lower in Asia and Pacific, Africa, Latin America and the Caribbean, and particularly the Arab region. Detailed regional data is provided below.

Table 41: **Detailed regional breakdown of e-commerce international support services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Europe and CIS	CALCULATION OF ESTIMATED TOTAL LANDED COSTS	65	4	8	12	0	12	100	12	35	33
Industrialized countries		54	0	23	8	0	15	100	23	46	50
Asia and Pacific		36	11	21	0	0	32	100	32	64	50
Arab region		33	17	17	0	6	28	86	33	67	50
Africa		24	12	36	3	0	24	100	48	76	64
Latin America & Caribbean		20	9	26	0	0	46	100	34	80	43
Europe and CIS	ONLINE CUSTOMS DECLARATION	77	15	8	0	0	0	100	23	23	100
Industrialized countries		77	8	8	0	0	8	100	15	23	67
Asia and Pacific		64	18	7	0	0	11	100	25	36	70
Africa		64	15	9	0	0	12	100	24	36	67
Latin America & Caribbean		57	6	23	3	0	11	100	29	43	67
Arab region		44	22	22	0	0	11	100	44	56	80

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Arab region	VIRTUAL INTERNATIONAL ADDRESS SERVICE	33	17	17	0	6	28	86	33	67	50
Industrialized countries		23	8	15	0	0	54	100	23	77	30
Africa		12	24	42	0	0	21	100	67	88	76
Europe and CIS		12	15	15	12	4	42	75	31	88	35
Latin America & Caribbean		11	3	14	3	3	66	80	17	89	19
Asia and Pacific		7	11	32	0	0	50	100	43	93	46

Virtual marketplace or online store

Regional provision of virtual marketplaces and online stores by DOs varies significantly. Rates are highest in Europe and CIS and industrialized countries, near the global average in Africa and the Arab region, and lower in Latin America and the Caribbean and in Asia and Pacific. Detailed regional data is provided below.

Table 42: **Detailed regional breakdown of virtual marketplace or online store (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Africa	VIRTUAL MARKETPLACE OR ONLINE STORE	18	33	27	6	0	15	100	61	82	74
Arab region		22	33	17	0	0	28	100	50	78	64
Asia and Pacific		11	21	25	0	7	36	60	46	89	52
Europe and CIS		35	8	27	4	4	23	90	35	65	53
Industrialized countries		31	0	8	0	15	46	67	8	69	11
Latin America & Caribbean		14	20	17	3	3	43	83	37	86	43

DIGITAL FINANCIAL SERVICES

Regional trends in overall digital financial service provision and the breadth of services offered by DOs are discussed in section 4 of the main report. This appendix provides a more detailed regional analysis of the status and uptake of each of the 14 individual digital financial services included in the survey.

Digital financial account services and management

Global provision rates for digital financial account services among DOs are significantly lowered by limited implementation in Latin America and the Caribbean, which trails behind other regions across all surveyed services. Detailed regional provision data is provided in the table below.

Table 43: **Detailed regional breakdown of digital financial account services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	DEPOSITS AND WITHDRAWALS FOR DIGITAL PAYMENT ENABLED ACCOUNTS	62	0	0	8	8	23	89	0	38	0
Europe and CIS		42	4	15	4	0	35	100	19	58	33
Arab region		39	17	6	0	6	33	88	22	61	36
Asia and Pacific		36	0	21	0	4	39	91	21	64	33
Africa		33	24	27	3	0	12	100	52	67	77
Latin America & Caribbean		6	3	14	6	3	69	67	17	94	18
Europe and CIS	FINANCIAL ACCOUNT CAPABLE OF MAKING DIGITAL PAYMENTS	58	4	12	4	0	23	100	15	42	36
Industrialized countries		54	0	8	0	8	31	88	8	46	17
Arab region		50	11	6	0	6	28	90	17	50	33
Asia and Pacific		43	4	18	0	4	32	92	21	57	38
Africa		42	30	18	3	0	6	100	48	58	84
Latin America & Caribbean		17	11	11	6	0	54	100	23	83	28

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Africa	MOBILE MONEY DEPOSITS AND WITHDRAWALS	55	15	21	3	0	6	100	36	45	80
Industrialized countries		54	0	8	8	8	23	88	8	46	17
Arab region		50	17	6	0	0	28	100	22	50	45
Asia and Pacific		32	4	14	0	0	50	100	18	68	26
Europe and CIS		31	0	19	8	0	42	100	19	69	28
Latin America & Caribbean		6	3	17	3	3	69	67	20	94	21
Arab region	MOBILE WALLET	39	28	6	0	0	28	100	33	61	55
Africa		30	27	33	3	0	6	100	61	70	87
Asia and Pacific		25	0	18	4	0	54	100	18	75	24
Europe and CIS		23	0	27	12	0	38	100	27	77	35
Industrialized countries		15	0	23	0	8	54	67	23	85	27
Latin America & Caribbean		3	3	14	11	0	69	100	17	97	18
Industrialized countries	ONLINE FINANCIAL ACCOUNT MANAGEMENT	46	0	8	0	8	38	86	8	54	14
Arab region		33	22	11	0	0	33	100	33	67	50
Africa		27	18	24	3	0	27	100	42	73	58
Asia and Pacific		25	0	29	0	0	46	100	29	75	38
Europe and CIS		19	0	23	4	0	54	100	23	81	29
Latin America & Caribbean		0	3	9	6	0	83	NaN	11	100	11

Digital payment services

Provision of digital payment services by DOs varies significantly across regions. Africa, Europe and CIS, and the Arab region generally lead in offering these services, while Latin America and the Caribbean consistently lags behind. Detailed regional data is provided in the table below.

Table 44: **Detailed regional breakdown of digital payment services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Africa	ELECTRONIC REMITTANCES	64	9	18	3	0	6	100	27	36	75
Europe and CIS		58	0	0	4	0	38	100	0	42	0
Arab region		50	17	6	0	0	28	100	22	50	45
Industrialized countries		46	0	8	0	15	31	75	8	54	14
Asia and Pacific		43	7	11	0	4	36	92	18	57	31
Latin America & Caribbean		11	6	11	9	0	63	100	17	89	19
Africa	ONLINE BILL PAYMENT	48	12	27	0	0	12	100	39	52	77
Asia and Pacific		46	4	18	0	0	32	100	21	54	40
Europe and CIS		46	4	15	0	0	35	100	19	54	36
Industrialized countries		46	0	8	8	8	31	86	8	54	14
Arab region		39	28	17	0	0	17	100	44	61	73
Latin America & Caribbean		6	9	26	3	0	57	100	34	94	36

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	ONLINE PAY-MENT OF POSTAL SERVICES	69	0	0	0	8	23	90	0	31	0
Asia and Pacific		57	7	14	0	0	21	100	21	43	50
Arab region		50	22	11	0	0	17	100	33	50	67
Africa		48	9	36	0	0	6	100	45	52	88
Europe and CIS		46	4	31	0	0	19	100	35	54	64
Latin America & Caribbean		23	23	17	3	0	34	100	40	77	52
Europe and CIS	TOP-UP MOBILE CREDIT	50	4	15	0	0	31	100	19	50	39
Asia and Pacific		39	0	11	0	0	50	100	11	61	18
Industrialized countries		38	0	8	0	8	46	83	8	62	13
Africa		36	12	39	0	6	6	86	52	64	81
Arab region		22	22	6	0	0	50	100	28	78	36
Latin America & Caribbean		20	3	14	6	11	46	64	17	80	21

Digital payment instruments

Regional disparities in DO provision of digital payment instruments are pronounced, with Asia and Pacific, Africa, and Latin America and the Caribbean significantly trailing other regions. Detailed regional data is provided in the table below.

Table 45: **Detailed regional breakdown of digital payment instruments (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	ATMs	54	0	0	0	8	38	88	0	46	0
Arab region		33	17	11	0	0	39	100	28	67	42
Europe and CIS		31	0	12	4	0	54	100	12	69	17
Asia and Pacific		14	0	11	4	0	71	100	11	86	13
Africa		12	18	33	3	6	27	67	52	88	59
Latin America & Caribbean		3	0	6	9	6	77	33	6	97	6
Industrialized countries	CREDIT CARD	46	0	8	0	8	38	86	8	54	14
Arab region		22	17	17	0	0	44	100	33	78	43
Africa		18	18	36	6	0	21	100	55	82	67
Asia and Pacific		14	4	11	0	0	71	100	14	86	17
Europe and CIS		8	4	15	12	4	58	67	19	92	21
Latin America & Caribbean		6	14	9	6	0	66	100	23	94	24

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	DEBIT CARD	54	0	8	0	8	31	88	8	46	17
Arab region		33	17	17	0	0	33	100	33	67	50
Europe and CIS		27	4	8	8	0	54	100	12	73	16
Africa		24	21	30	3	0	21	100	52	76	68
Asia and Pacific		21	4	11	0	0	64	100	14	79	18
Latin America & Caribbean		9	14	9	9	3	57	75	23	91	25

Digital social and insurance financial services

Regional disparities in the provision of digital social and insurance financial services via the Post are significant, with Latin America and the Caribbean notably lagging behind other regions and with industrialized countries leading the way. Detailed regional data is provided in the table below..

Table 46: **Detailed regional breakdown of digital insurance services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	DIGITAL ACCESS TO INSURANCE	38	0	8	0	8	46	83	8	62	13
Africa		30	6	21	3	0	39	100	27	70	39
Asia and Pacific		29	7	11	0	0	54	100	18	71	25
Europe and CIS		27	4	19	0	8	42	78	23	73	32
Arab region		17	28	11	0	0	44	100	39	83	47
Latin America & Caribbean		3	3	9	6	0	80	100	11	97	12

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Industrialized countries	DIRECT CREDIT FOR SOCIAL PROGRAMMES	38	0	0	0	8	54	83	0	62	0
Arab region		33	17	6	0	0	44	100	22	67	33
Europe and CIS		31	0	12	0	0	58	100	12	69	17
Asia and Pacific		29	0	21	0	0	50	100	21	71	30
Africa		27	9	33	3	6	21	82	42	73	58
Latin America & Caribbean		6	0	17	9	3	66	67	17	94	18

DIGITAL GOVERNMENT SERVICES

Regional trends in overall digital government service provision and breadth of services offered by DOs are discussed in section 5 of the main report. This appendix provides a more detailed regional analysis of the status and uptake of each of the 23 individual digital government services included in the report.

Digital payments to government and utility companies

Regional disparities exist in DO provision of digital government and utility payment solutions. Europe and CIS and industrialized countries generally lead, while Africa and Latin America and the Caribbean lag. Detailed regional data is provided in the table below.

Table 47: **Detailed regional breakdown of digital government payment services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Europe and CIS	PAY GOVERNMENT FEES	58	4	15	4	0	19	100	19	42	46
Industrialized countries		54	0	0	0	8	38	88	0	46	0
Arab region		39	11	11	0	0	39	100	22	61	36
Asia and Pacific		36	0	14	0	0	50	100	14	64	22
Africa		21	9	30	3	3	33	88	39	79	50
Latin America & Caribbean		17	3	11	3	0	66	100	14	83	17

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Demand	Not offering	Unmet demand
Europe and CIS	PAY UTILITIES	69	4	8	4	0	15	100	12	31	38
Asia and Pacific		50	0	7	0	4	39	93	7	50	14
Industrialized countries		46	0	0	0	8	46	86	0	54	0
Africa		42	6	33	3	9	6	82	39	58	68
Latin America & Caribbean		29	3	11	3	6	49	83	14	71	20
Arab region		28	11	17	0	11	33	71	28	72	39

Digital identification services

Significant regional disparities exist in DO provision of digital identification services. The Arab region, Europe and CIS, and industrialized countries currently lead, while Africa and Latin America and the Caribbean notably lag. Detailed regional data is provided in the table below.

Table 48: **Detailed regional breakdown of digital identification services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	BIRTH CERTIFICATE	44	17	17	0	0	22	100	60
Asia and Pacific		18	0	14	0	0	68	100	17
Industrialized countries		15	0	0	0	0	85	100	0
Africa		15	3	45	3	3	30	83	57
Latin America & Caribbean		9	0	9	3	6	74	60	9
Europe and CIS		8	0	23	8	0	62	100	25

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Industrialized countries	CREDENTIALING SERVICES	23	8	0	0	0	69	100	10
Arab region		22	17	17	0	0	44	100	43
Asia and Pacific		18	7	18	0	0	57	100	30
Europe and CIS		15	0	19	4	8	54	67	23
Africa		6	6	45	3	0	39	100	55
Latin America & Caribbean		6	3	9	6	0	77	100	12
Arab region	DIGITAL IDENTITY SERVICES	33	17	11	0	6	33	86	42
Europe and CIS		31	4	23	12	0	31	100	39
Industrialized countries		23	15	0	8	8	46	75	20
Asia and Pacific		14	4	21	4	4	54	80	29
Africa		9	12	45	3	3	27	75	63
Latin America & Caribbean		6	3	11	0	0	80	100	15
Arab region	ID CARD	33	22	17	0	0	28	100	58
Africa		15	6	42	6	0	30	100	57
Asia and Pacific		14	4	7	0	4	71	80	13
Europe and CIS		8	0	23	15	0	54	100	25
Industrialized countries		8	8	0	0	0	85	100	8
Latin America & Caribbean		6	0	11	0	0	83	100	12

Family and personal status

Regional disparities are notable in DO provision of digitally enabled family and personal status services. The Arab region leads significantly, especially in digitally supported death certificate services, while Latin America and the Caribbean and Europe and CIS notably lag. Detailed regional data is provided below.

Table 49: **Detailed regional breakdown of digital government services related to family status updates (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Industrialized countries	CHANGE ADDRESS	23	0	0	0	8	69	75	0
Arab region		22	11	11	0	0	56	100	29
Asia and Pacific		18	0	25	0	0	57	100	30
Europe and CIS		15	0	23	8	0	54	100	27
Latin America & Caribbean		11	0	9	3	0	77	100	10
Africa		9	9	36	9	0	36	100	50
Arab region	DEATH CERTIFICATE	28	17	17	0	0	39	100	46
Industrialized countries		15	0	0	0	0	85	100	0
Asia and Pacific		14	0	7	0	0	79	100	8
Africa		12	3	45	3	0	36	100	55
Latin America & Caribbean		9	0	6	3	3	80	75	6
Europe and CIS		8	0	23	12	0	58	100	25

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	MARRIAGE CERTIFICATE	17	17	22	0	0	44	100	47
Asia and Pacific		11	0	11	0	0	79	100	12
Africa		9	6	45	6	0	33	100	57
Industrialized countries		8	0	8	0	0	85	100	8
Latin America & Caribbean		6	3	6	3	3	80	67	9
Europe and CIS		4	0	19	12	0	65	100	20
Europe and CIS	SUBMIT INCOME TAX	12	0	15	8	0	65	100	17
Arab region		11	11	17	0	0	61	100	31
Industrialized countries		8	0	0	0	0	92	100	0
Asia and Pacific		7	4	14	0	0	75	100	19
Africa		6	6	33	6	0	48	100	42
Latin America & Caribbean		3	0	9	3	0	86	100	9

International travel facilitation

Regional disparities exist in DO provision of digitally enabled travel-related services. Passport application services are most common in the Arab region, industrialized countries, and Asia and the Pacific, while visa application services show distinct provision patterns, being most prevalent in Latin America and the Caribbean and in Asia and Pacific. Detailed regional data is provided in the table below.

Table 50: **Detailed regional breakdown of digital government international travel facilitation services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	PASSPORT	33	11	11	0	0	44	100	33
Industrialized countries		23	0	0	0	0	77	100	0
Asia and Pacific		18	7	18	0	4	54	83	30
Latin America & Caribbean		11	3	14	3	0	69	100	19
Africa		9	9	42	6	6	27	60	57
Europe and CIS		8	0	27	12	0	54	100	29
Latin America & Caribbean	VISA APPLICATION	11	0	6	3	3	77	80	6
Asia and Pacific		11	4	14	0	4	68	75	20
Arab region		6	17	22	0	0	56	100	41
Africa		3	9	33	6	3	45	50	44
Europe and CIS		0	0	15	4	0	81	N/A	15
Industrialized countries		0	0	0	0	0	100	N/A	0

Social protection

Regional disparities exist in DO provision of digitally enabled social protection application services. Europe and CIS, industrialized countries, and the Arab region lead, surpassing the global average, while Africa, Latin America and the Caribbean, and Asia and Pacific significantly lag. Detailed regional data is provided in the table below.

Table 51: **Detailed regional breakdown of digital social protection services**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Europe and CIS	SOCIAL PROTECTION	23	0	19	4	0	54	100	25
Industrialized countries		15	0	0	0	0	85	100	0
Arab region		11	11	22	0	0	56	100	38
Africa		6	6	39	0	0	48	100	48
Latin America & Caribbean		6	0	9	3	0	83	100	9
Asia and Pacific		4	0	11	4	0	82	100	11

Vehicle and transportation

Regional disparities exist in DO provision of digitally enabled vehicle and transportation services. The Arab region leads in digitally enabled driver's licence applications, while motor vehicle registration services are most prevalent in industrialized countries, the Arab region, and Europe and CIS. Africa, Asia and Pacific, and particularly Latin America and the Caribbean notably lag behind. Detailed regional data is provided below.

Table 52: **Detailed regional breakdown of digital vehicle and transportation services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	DRIVING LICENCE	44	11	17	0	0	28	100	50
Asia and Pacific		11	0	14	0	0	75	100	16
Europe and CIS		8	0	23	15	0	54	100	25
Industrialized countries		8	0	0	0	0	92	100	0
Africa		3	6	52	6	0	33	100	59
Latin America & Caribbean		3	0	14	0	0	83	100	15
Industrialized countries	REGISTER A MOTOR VEHICLE	23	0	0	0	0	77	100	0
Arab region		17	6	17	0	6	56	75	27
Europe and CIS		12	0	15	8	0	65	100	17
Africa		9	9	33	6	0	42	100	47
Asia and Pacific		7	0	14	0	4	75	67	15
Latin America & Caribbean		3	0	9	3	0	86	100	9

Property and construction

Regional DO offering of digitally enabled property and construction services remains minimal, with only DOs in the Arab region exceeding 10%. Detailed regional data is provided in the table below.

Table 53: **Detailed regional breakdown of digital property and construction services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	BUILDING PERMIT	11	17	17	0	0	56	100	38
Latin America & Caribbean		6	3	9	3	0	80	100	12
Europe and CIS		4	0	27	8	0	62	100	28
Asia and Pacific		4	0	14	4	0	79	100	15
Africa		0	6	42	6	0	45	N/A	49
Industrialized countries		0	0	0	0	0	100	N/A	0
Industrialized countries	ENVIRONMENTAL PERMIT	8	0	0	0	0	92	100	0
Arab region		6	17	17	0	0	61	100	35
Europe and CIS		4	0	19	4	0	73	100	20
Africa		3	6	36	3	0	52	100	44
Asia and Pacific		0	0	14	0	0	86	N/A	14
Latin America & Caribbean		0	0	9	3	0	89	N/A	9

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	LAND TITLE REGISTRATION	6	17	28	0	0	50	100	47
Asia and Pacific		4	0	11	0	0	86	100	11
Latin America & Caribbean		3	0	9	3	0	86	100	9
Africa		0	6	42	6	0	45	N/A	49
Europe and CIS		0	0	27	8	0	65	N/A	27
Industrialized countries		0	0	0	0	0	100	N/A	0

Digital government services tailored to businesses

DO provision of digital government services tailored to businesses is generally low. Nonetheless, significant regional disparities exist, with the Arab region clearly leading. Provision remains considerably lower in Africa, Asia and Pacific, Europe and CIS, industrialized countries, and especially Latin America and the Caribbean. Detailed regional data is provided in the table below.

Table 54: **Detailed regional breakdown of digital services tailored to businesses (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	ASSISTANCE WITH E PROCUREMENT	17	22	17	0	0	44	100	47
Latin America & Caribbean		11	0	9	3	0	77	100	10
Asia and Pacific		11	0	11	0	0	79	100	12
Industrialized countries		8	0	8	0	0	85	100	8
Africa		6	9	30	6	0	48	100	42
Europe and CIS		0	4	15	4	0	77	N/A	19

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	BUSINESS LICENCE	39	11	11	0	6	33	88	36
Europe and CIS		12	0	23	8	0	58	100	26
Africa		9	6	36	3	0	45	100	47
Asia and Pacific		7	0	25	0	0	68	100	27
Latin America & Caribbean		3	3	9	3	3	80	50	12
Industrialized countries		0	0	0	0	0	100	N/A	0
Arab region	REGISTER A BUSINESS	39	11	11	0	0	39	100	36
Africa		15	0	36	3	0	45	100	43
Europe and CIS		12	0	23	4	0	62	100	26
Asia and Pacific		4	4	21	0	0	71	100	26
Latin America & Caribbean		3	6	9	3	3	77	50	15
Industrialized countries		0	0	0	0	0	100	N/A	0
Arab region	SUBMIT BUSINESS TAX	11	11	17	0	0	61	100	31
Europe and CIS		8	0	15	8	0	69	100	17
Industrialized countries		8	0	0	0	0	92	100	0
Asia and Pacific		7	4	14	0	0	75	100	19
Africa		6	6	33	6	0	48	100	42
Latin America & Caribbean		3	0	9	3	0	86	100	9

DIGITAL CONNECTIVITY SERVICES AND SOLUTIONS

Regional trends in overall digital connectivity service and solution provision and the breadth of services offered by DOs are discussed in section 6 of the main report. This appendix provides a more detailed regional analysis of the status and uptake of each of the 15 individual digital connectivity services and solutions included in the survey.

Extending the reach and promoting the functioning of digital infrastructure

Significant regional disparities exist in how DOs leverage their infrastructure to support digital connectivity. The Arab region notably leads in providing co-location and spectrum monitoring services, with Africa also prominent in co-location offerings. Other regions align closely with global averages, though industrialized countries notably lag in co-location. Detailed regional data is provided below.

Table 55: **Detailed regional breakdown of digital connectivity services supporting the expansion and functioning of digital infrastructure (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	CO-LOCATION	50	6	6	0	0	39	100	22
Africa		36	9	12	3	6	33	86	33
Asia and Pacific		29	0	0	4	4	64	89	0
Europe and CIS		27	4	8	8	12	42	70	16
Latin America & Caribbean		23	3	6	3	0	66	100	11
Industrialized countries		0	0	0	0	8	92	0	0
Arab region	SPECTRUM MONITORING	28	6	11	0	0	56	100	23
Europe and CIS		15	4	15	12	0	54	100	23
Industrialized countries		15	15	8	0	0	62	100	27
Latin America & Caribbean		14	6	6	0	0	74	100	13
Asia and Pacific		11	11	14	7	0	57	100	28
Africa		3	12	24	0	3	58	50	38

Providing access to the internet

Regional disparities exist in the provision of internet access at post offices. DOs in the Arab region and industrialized countries lead in offering free internet access, while Europe and CIS notably lag. Meanwhile, DOs from industrialized countries and Africa lead in offering free Wi-Fi to their communities beyond the post offices. African DOs more commonly charge for internet access, highlighting unique regional challenges. Detailed regional data is provided in the table below.

Table 56: **Detailed regional breakdown of digital access services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Industrialized countries	FREE COMMUNITY WI-FI	23	0	0	15	0	62	100	0
Africa		21	15	21	9	0	33	100	46
Europe and CIS		19	0	12	8	0	62	100	14
Arab region		17	0	6	22	0	56	100	7
Latin America & Caribbean		11	3	9	9	3	66	80	13
Asia and Pacific		4	0	18	7	7	64	33	19
Arab region	FREE INTERNET	44	0	6	11	0	39	100	10
Industrialized countries		38	0	0	15	0	46	100	0
Asia and Pacific		29	4	11	7	4	46	89	20
Africa		24	12	33	6	0	24	100	60
Latin America & Caribbean		23	6	11	11	3	46	89	22
Europe and CIS		15	8	12	12	8	46	67	23

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Africa	INTERNET FOR FEE	30	6	24	6	27	6	53	44
Arab region		22	11	6	6	6	50	80	21
Asia and Pacific		11	0	14	11	21	43	33	16
Latin America & Caribbean		9	3	14	11	14	49	38	19
Industrialized countries		8	0	0	23	0	69	100	0
Europe and CIS		4	0	12	15	19	50	17	12

Digital equipment provision

Significant regional disparities exist in DO provision of digital equipment services. The Arab region leads in public computer access, followed by Africa, while Europe and CIS and industrialized countries notably lead in digital equipment and SIM card sales. Latin America and the Caribbean significantly trails in most areas. Detailed regional data is provided in the table below.

Table 57: **Detailed regional breakdown of digital equipment services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Industrialized countries	DIGITAL EQUIPMENT SALES	38	0	0	0	15	46	71	0
Europe and CIS		27	4	8	4	12	46	70	16
Africa		21	0	12	3	15	48	58	15
Asia and Pacific		11	4	14	0	7	64	60	20
Arab region		6	11	22	0	0	61	100	35
Latin America & Caribbean		3	3	9	3	3	80	50	12

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	PUBLIC COMPUTER EQUIPMENT	44	0	11	0	6	39	89	20
Africa		30	3	24	6	18	18	63	39
Latin America & Caribbean		26	11	11	11	9	31	75	31
Asia and Pacific		21	11	14	7	11	36	67	32
Europe and CIS		19	4	15	23	4	35	83	24
Industrialized countries		8	0	0	15	8	69	50	0
Arab region	SIM CARD REGISTRATION	39	0	6	0	6	50	88	9
Industrialized countries		31	0	0	0	0	69	100	0
Europe and CIS		23	4	4	8	4	58	86	10
Asia and Pacific		18	7	4	7	11	54	63	13
Africa		12	9	15	3	21	39	36	28
Latin America & Caribbean		3	3	6	0	0	89	100	9
Europe and CIS	SIM CARD SALES	62	0	0	8	12	19	84	0
Industrialized countries		38	0	0	0	15	46	71	0
Arab region		28	6	6	0	6	56	83	15
Africa		24	9	15	0	18	33	57	32
Asia and Pacific		21	4	4	11	14	46	60	9
Latin America & Caribbean		6	3	9	0	6	77	50	12

Digital skills training

Significant regional disparities exist in DO provision of digital skills training. Industrialized countries lead in training for both citizens and businesses. Other regions align near global averages, while Latin America and the Caribbean notably lags behind. Detailed regional data is provided in the table below.

Table 58: **Detailed regional breakdown of digital skills training (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Industrialized countries	DIGITAL SKILLS TRAINING FOR BUSINESSES	31	0	0	0	0	69	100	0
Arab region		17	11	17	0	0	56	100	33
Asia and Pacific		14	4	14	0	7	61	67	21
Africa		9	6	15	3	3	64	75	23
Europe and CIS		8	8	4	12	4	65	67	13
Latin America & Caribbean		3	3	6	0	0	89	100	9
Industrialized countries	DIGITAL SKILLS TRAINING FOR CITIZENS	23	0	8	0	0	69	100	10
Asia and Pacific		18	4	14	4	11	50	63	22
Arab region		17	6	33	0	6	39	75	47
Africa		15	6	15	6	6	52	71	25
Europe and CIS		12	0	12	8	4	65	75	13
Latin America & Caribbean		9	6	3	0	0	83	100	9

Supporting and setting up new broadband networks

Regional disparities exist in DO support for broadband infrastructure. DOs from industrialized countries lead in acting as internet service providers (ISPs) and mobile virtual network operators, while DOs from the Arab region lead in operating as mobile network operators and supporting community networks. Africa and other regions notably lag behind. Detailed regional data is provided in the table below.

Table 59: **Detailed regional breakdown of DOs supporting and setting up new broadband networks (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	COMMUNITY NETWORKS	39	11	17	6	0	28	100	46
Europe and CIS		19	0	12	4	4	62	83	14
Industrialized countries		15	0	0	0	0	85	100	0
Asia and Pacific		14	7	11	4	0	64	100	21
Latin America & Caribbean		11	3	6	3	3	74	80	10
Africa		9	12	21	6	0	52	100	37
Industrialized countries	ISP	31	0	0	0	0	69	100	0
Arab region		22	6	6	0	0	67	100	14
Africa		21	9	18	3	6	42	78	35
Europe and CIS		8	0	0	12	4	77	67	0
Asia and Pacific		4	0	7	4	0	86	100	7
Latin America & Caribbean		3	0	0	3	0	94	100	0

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	MOBILE NETWORK OPERATOR	17	11	6	6	0	61	100	20
Latin America & Caribbean		9	0	6	0	0	86	100	6
Europe and CIS		8	0	0	12	0	81	100	0
Industrialized countries		8	0	0	0	8	85	50	0
Africa		3	6	9	6	6	70	33	16
Asia and Pacific		0	0	4	4	0	93	N/A	4
Industrialized countries	MOBILE VIRTUAL NETWORK OPERATOR	23	0	0	0	15	62	60	0
Arab region		17	0	11	11	0	61	100	13
Latin America & Caribbean		9	0	3	0	0	89	100	3
Europe and CIS		4	0	0	12	4	81	50	0
Africa		3	12	12	9	3	61	50	25
Asia and Pacific		0	0	4	7	0	89	N/A	4

DIGITAL HEALTH SERVICES

Regional trends in overall digital health service provision and the breadth of services offered by DOs are discussed in section 7 of the main report. This appendix provides a more detailed regional analysis of the status and uptake of each of the 11 individual digital health services included in the survey. A detail breakdown can be found below.

Table 60: **Detailed regional breakdown of digital health services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Africa	DIGITAL HEALTH TRAINING	0	3	12	3	0	82	N/A	15
Arab region		0	11	17	0	0	72	N/A	28
Asia and Pacific		0	0	11	0	0	89	N/A	11
Europe and CIS		0	0	12	8	0	81	N/A	12
Industrialized countries		0	0	8	0	0	92	N/A	8
Latin America & Caribbean		0	0	3	3	0	94	N/A	3
Arab region	E-PRESCRIPTION	11	6	11	6	0	67	100	19
Africa		3	0	18	6	0	73	100	19
Asia and Pacific		0	0	11	0	0	89	N/A	11
Europe and CIS		0	0	12	12	0	77	N/A	12
Industrialized countries		0	0	0	0	0	100	N/A	0
Latin America & Caribbean		0	0	3	3	0	94	N/A	3

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Asia and Pacific	HEALTH RECORDS	4	0	11	0	0	86	100	11
Africa		3	3	9	6	0	79	100	13
Arab region		0	17	6	0	0	78	N/A	22
Europe and CIS		0	0	12	12	0	77	N/A	12
Industrialized countries		0	0	8	0	0	92	N/A	8
Latin America & Caribbean		0	0	3	3	0	94	N/A	3
Industrialized countries	HOME TESTING KITS	8	0	0	8	0	85	100	0
Asia and Pacific		7	0	7	0	0	86	100	8
Arab region		6	11	6	6	0	72	100	18
Europe and CIS		4	0	8	4	0	85	100	8
Africa		0	0	24	3	0	73	N/A	24
Latin America & Caribbean		0	0	6	3	3	89	0	6
Africa	LAST-MILE VACCINE SERVICES	18	0	12	0	0	70	100	15
Arab region		6	11	11	0	0	72	100	24
Europe and CIS		4	4	12	8	0	73	100	16
Latin America & Caribbean		3	0	6	3	0	89	100	6
Asia and Pacific		0	4	11	0	0	86	N/A	14
Industrialized countries		0	0	0	0	8	92	0	0

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	ONLINE HEALTH PORTAL	11	11	11	0	0	67	100	25
Industrialized countries		8	0	0	8	0	85	100	0
Europe and CIS		4	0	8	4	0	85	100	8
Asia and Pacific		4	0	11	0	0	86	100	11
Africa		3	0	24	0	0	73	100	25
Latin America & Caribbean		0	0	3	3	0	94	N/A	3
Africa	REMOTE DISEASE MONITORING	3	0	9	6	0	82	100	9
Arab region		0	11	11	0	0	78	N/A	22
Asia and Pacific		0	0	7	0	0	93	N/A	7
Europe and CIS		0	0	8	12	0	81	N/A	8
Industrialized countries		0	0	0	0	0	100	N/A	0
Latin America & Caribbean		0	0	3	3	0	94	N/A	3
Africa	SCHEDULE APPOINTMENT	6	0	18	6	0	70	100	19
Arab region		6	17	0	6	0	72	100	18
Asia and Pacific		0	0	11	0	0	89	N/A	11
Europe and CIS		0	0	12	4	0	85	N/A	12
Industrialized countries		0	0	0	0	0	100	N/A	0
Latin America & Caribbean		0	0	3	3	0	94	N/A	3

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Arab region	SCHEDULE VACCINE	6	17	0	6	0	72	100	18
Africa		3	0	18	3	0	76	100	19
Asia and Pacific		0	0	11	0	0	89	N/A	11
Europe and CIS		0	0	12	4	0	85	N/A	12
Industrialized countries		0	0	0	0	0	100	N/A	0
Latin America & Caribbean		0	0	3	3	0	94	N/A	3
Africa	TELEPHONE CONSULTATIONS	6	0	12	6	0	76	100	13
Arab region		0	11	6	6	0	78	N/A	17
Asia and Pacific		0	0	7	4	0	89	N/A	7
Europe and CIS		0	0	8	4	0	88	N/A	8
Industrialized countries		0	0	0	0	0	100	N/A	0
Latin America & Caribbean		0	0	3	3	0	94	N/A	3
Africa	VIDEO CONSULTATIONS	3	0	9	6	0	82	100	9
Arab region		0	11	6	6	0	78	N/A	17
Asia and Pacific		0	0	11	0	0	89	N/A	11
Europe and CIS		0	0	8	8	0	85	N/A	8
Industrialized countries		0	0	0	0	8	92	0	0
Latin America & Caribbean		0	0	3	3	0	94	N/A	3

DIGITAL POSTAL SERVICES

Regional trends in overall digital postal service provision and the breadth of services offered by DOs are discussed in section 8 of the main report. This appendix provides a more detailed regional analysis of the status and uptake of each of the 10 individual digital postal services included in the survey.

Information-based digital postal services

DO provision rates of information-based digital postal services vary by region. Track and trace is widely available in most regions, while tracking notifications and online look-ups show greater disparity – they are particularly less likely to be offered in Latin America and the Caribbean and in Africa. Detailed regional data is provided in the table below.

Table 61: **Detailed regional breakdown of information-based digital postal services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Industrialized countries	ONLINE LOOK UP	92	8	0	0	0	0	100	100
Europe and CIS		88	0	8	0	0	4	100	67
Asia and Pacific		57	7	18	0	0	18	100	58
Latin America & Caribbean		57	14	14	0	0	14	100	67
Arab region		56	17	11	0	0	17	100	63
Africa		39	18	24	0	0	18	100	70
Europe and CIS	TRACK AND TRACE	100	0	0	0	0	0	100	N/A
Asia and Pacific		93	4	4	0	0	0	100	100
Industrialized countries		92	0	0	0	0	8	100	0
Latin America & Caribbean		80	6	11	0	0	3	100	86
Arab region		72	17	11	0	0	0	100	100
Africa		70	6	21	0	0	3	100	90

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Europe and CIS	TRACKING NOTIFICATIONS	96	0	4	0	0	0	100	100
Industrialized countries		92	0	0	0	0	8	100	0
Asia and Pacific		75	4	14	0	0	7	100	71
Arab region		67	6	22	0	0	6	100	83
Africa		55	18	21	3	0	3	100	87
Latin America & Caribbean		23	20	20	3	0	34	100	52

Delivery-related digital postal services

Regional disparities are evident in the provision of delivery-based digital postal services. Provision of pick-up requests and postal electronic mailboxes is highest in industrialized countries and Europe and CIS, while much lower in Africa, Asia and Pacific, and especially Latin America and the Caribbean. Detailed regional data is provided in the table below.

Table 62: **Detailed regional breakdown of information-based digital postal services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Industrialized countries	PICK UP REQUEST	77	8	8	0	0	8	100	67
Europe and CIS		73	8	15	0	0	4	100	86
Arab region		50	17	22	0	0	11	100	78
Africa		33	12	45	3	0	6	100	86
Asia and Pacific		32	11	21	0	0	36	100	47
Latin America & Caribbean		26	9	20	0	0	46	100	39

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Industrialized countries	POSTAL ELECTRONIC MAILBOX	46	0	0	8	23	23	67	0
Arab region		39	22	17	0	6	17	88	64
Europe and CIS		31	0	35	8	12	15	73	50
Africa		18	15	45	6	0	15	100	74
Asia and Pacific		18	11	18	7	7	39	71	35
Latin America & Caribbean		6	0	20	6	0	69	100	21

Recordkeeping-based digital postal services

Regional disparities exist in the provision of recordkeeping services such as electronic certification and e invoicing. Industrialized countries and Europe and CIS lead, followed by the Arab and the Asia and Pacific regions, while Africa and Latin America and the Caribbean lag behind. Detailed regional data is provided in the table below.

Table 63: **Detailed regional breakdown of recordkeeping-based digital postal services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Europe and CIS	E-INVOICING	58	4	15	4	0	19	100	46
Arab region		50	11	17	0	0	22	100	56
Industrialized countries		46	0	0	8	0	46	100	0
Africa		39	9	30	6	0	15	100	65
Asia and Pacific		32	7	29	0	4	29	90	53
Latin America & Caribbean		31	6	20	3	0	40	100	38

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Europe and CIS	ELECTRONIC CERTIFICATION	31	4	15	12	0	38	100	28
Industrialized countries		31	0	8	8	0	54	100	11
Arab region		22	17	11	0	6	44	80	36
Asia and Pacific		21	7	14	0	4	54	86	27
Africa		12	6	39	9	6	27	67	52
Latin America & Caribbean		9	3	20	3	0	66	100	25

Postal shopping portal

Nearly 40% of DOs offer postal shopping portals, with many others considering or developing them. Provision is highest in industrialized countries and Europe and CIS, but significantly lower in the Arab region, Asia and Pacific, Africa, and Latin America and the Caribbean. Detailed regional data is provided in the table below.

Table 64: **Detailed regional breakdown of postal shopping portals (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Europe and CIS	POSTAL SHOPPING PORTAL	58	4	15	4	0	19	100	46
Industrialized countries		50	11	17	0	0	22	100	56
Arab region		46	0	0	8	0	46	100	0
Asia and Pacific		39	9	30	6	0	15	100	65
Africa		32	7	29	0	4	29	90	53
Latin America & Caribbean		31	6	20	3	0	40	100	38

Digital philatelic services

Significant regional disparities exist in the provision of digital philately. Digital stamps are most common in industrialized countries and Europe and CIS, while Latin America and Africa lag behind. Crypto stamps remain mostly limited to industrialized countries. Detailed regional data is provided below.

Table 65: **Detailed regional breakdown of digital social protection services (percentage)**

Region	Service	Offering	Under development	Considering	Decided against	Discontinued	Never considered	Stickiness	Unmet demand
Industrialized countries	CRYPTO STAMPS	46	0	0	8	0	46	100	0
Europe and CIS		15	0	19	12	4	50	80	23
Arab region		11	17	39	0	0	33	100	63
Asia and Pacific		7	0	21	4	0	68	100	23
Africa		6	9	33	3	0	48	100	45
Latin America & Caribbean		3	3	29	3	0	63	100	32
Industrialized countries	DIGITAL STAMPS (E.G., QR CODES OR BARCODES)	54	8	8	0	0	31	100	33
Europe and CIS		50	0	31	4	0	15	100	62
Arab region		39	11	22	0	0	28	100	55
Asia and Pacific		32	4	25	0	4	36	90	42
Latin America & Caribbean		17	3	31	0	0	49	100	41
Africa		12	24	30	0	0	33	100	62

APPENDIX 2: **THE 49 MOST PROMISING DIGITAL SERVICES**

Our analysis of stickiness for the 90 individual services captured by the survey reveals compelling insights. More than half of services exhibit respectable levels of both provision rates and high retention rates. Specifically, 49 services were implemented by at least 10 DOs – a deliberately low threshold chosen to spotlight emerging and promising offerings – and maintained a stickiness rate exceeding 90%. This combination of at least modest implementation and outstanding retention makes these services particularly promising for DOs looking to expand their digital portfolios and for public and private stakeholders seeking to leverage postal infrastructure to facilitate inclusive digital transformations.

Service	Service type	Offering (%)	Stickiness rate (%)
Social protection	E-government	10	100
Returns solutions	E-commerce	38	100
Driving licence	E-government	10	100
Online customs declaration	E-commerce	63	100
Assistance with e-procurement	E-government	9	100
Submit income tax	E-government	7	100
Submit business tax	E-government	7	100
Integration of postal web services with e-merchant's website	E-commerce	34	100
Tracking notifications	Digital postal services	63	100
Pick-up request	Digital postal services	44	100
Online look-up	Digital postal services	61	100
Track and trace	Digital postal services	84	100
Online payment of postal services	Digital finance	46	99
PUDO points	E-commerce	42	99

Service	Service type	Offering (%)	Stickiness rate (%)
E-invoicing	Digital postal services	41	98
Online bill payment	Digital finance	37	98
Calculation of estimated total landed costs	E-commerce	36	98
Digital postage	Digital postal services	30	98
Digital stamps (e.g., QR codes or barcodes)	Digital postal services	30	98
Performance reports	E-commerce	28	98
Online financial account management	Digital finance	22	97
Mobile wallet	Digital finance	22	97
Mobile money deposits and withdrawals	Digital finance	35	96
Pay government fees	E-government	34	96
E-commerce fulfilment	E-commerce	34	96
On-demand delivery	E-commerce	31	96
Online management of documents/ merchandise delivery options	E-commerce	31	96
Change address	E-government	15	96
Electronic remittances	Digital finance	44	96
Payment on delivery	E-commerce	44	96
Financial account capable of making digital payments	Digital finance	41	96
Death certificate	E-government	13	95
ID card	E-government	13	95
Spectrum monitoring	Connectivity	13	95

Service	Service type	Offering (%)	Stickiness rate (%)
Smart lockers	E-commerce	25	95
Debit card	Digital finance	24	95
Crypto stamps	Digital postal services	11	95
Register a business	E-government	11	95
Inventory forecasting	E-commerce	20	94
Marriage certificate	E-government	9	93
Community networks	Connectivity	16	93
Deposits and withdrawals for digital payment enabled accounts	Digital finance	32	93
Credit card	Digital finance	16	92
Digital access to insurance	Digital finance	22	92
Free internet	Connectivity	27	91
Credentialing services	E-government	13	91
Direct credit for social programmes	Digital finance	25	91
On-demand warehousing	E-commerce	18	90

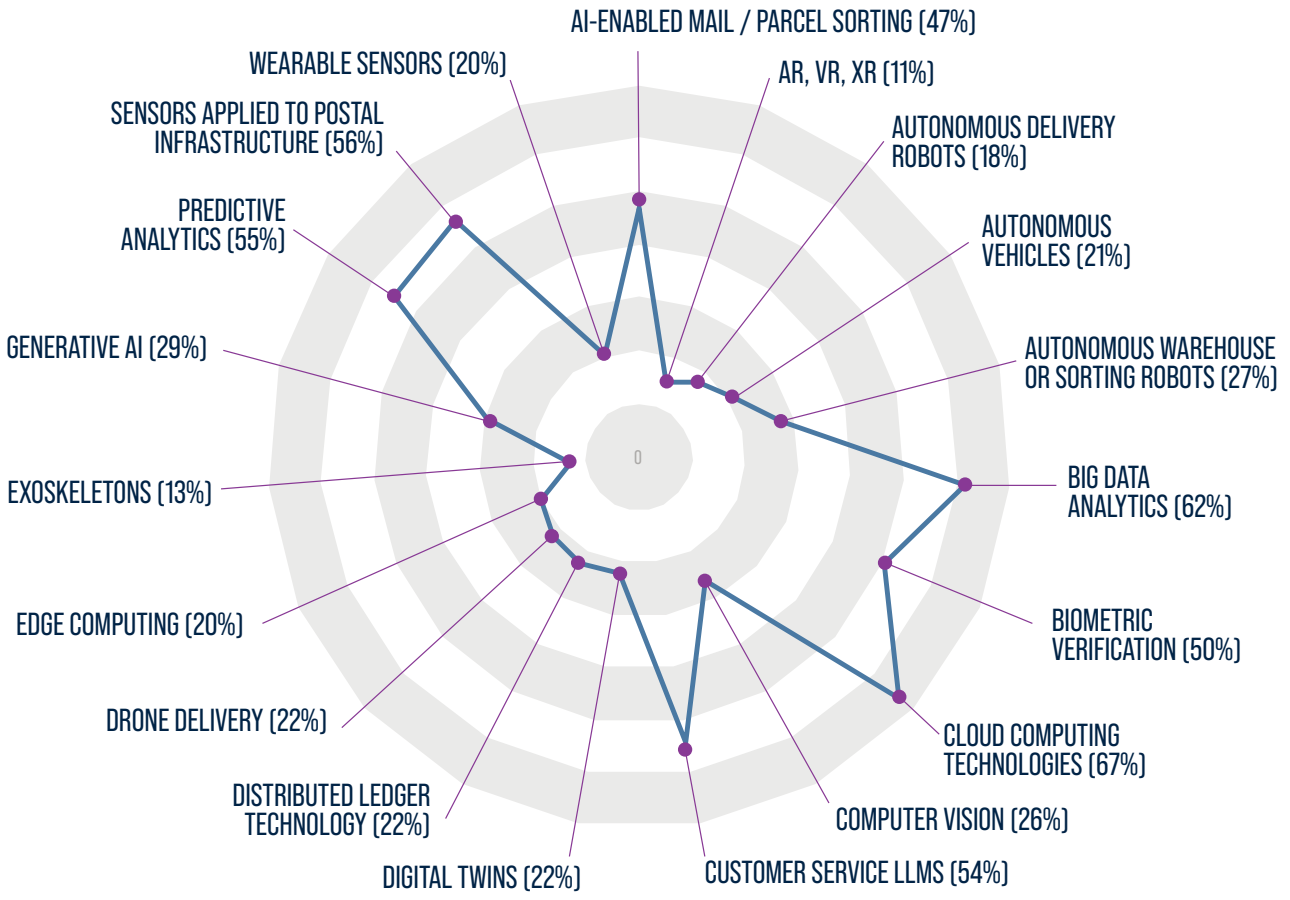
APPENDIX 3: **TECHNOLOGY RADAR**

Previous editions of the UPU digital panorama report included a technology radar illustrating the perceived importance of emerging technologies according to DOs. This edition's shift in focus from measuring digitalization of the sector to illustrating the sector's potential role in the digital economy and society did not allow us to include such a technology radar in the main body of the report.

Nonetheless, the survey informing the report included questions regarding DO level of implementation of emerging technologies. Rather than asking DOs about the perceived importance (from 1 to 5) as in previous surveys, this edition included questions on the current stage of the adoption journey that DOs were on with regard to each emerging technology, similar to the questions for the 90 individual services included in the body of the report. While this does not allow us to create a traditional radar, it allows us to gauge the sector's adoption and demand for emerging technologies. To illustrate each technology's perceived importance, we have combined the percentage of DOs already deploying these technologies with that of DOs developing use cases or considering their introduction (see figure below).

We will not delve into these trends in detail, but six emerging technologies seem to be particularly high on the radar for 50% or more of DOs: biometric verification, customer service LLMs, predictive analytics, sensors applied to postal infrastructure, big data analytics, and cloud computing technologies. Interestingly, all of these emerging technologies are already being deployed by at least one DO, suggesting that the future has already arrived for the sector.

Figure 47: **Percentage of DOs deploying, developing or considering emerging technologies**



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