



# UPU World Leaders Forum 2022

## Session 2

Game-changing emerging technologies to benefit the Postal Sector

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Frankfurt, October 2022



# UPU's Financial Inclusion Research



Trust in  
Postal Financial  
Services

Drivers of  
Postal DFS  
Innovations

Use of  
Cryptocurrency  
by Posts

Blockchains for  
the Postal  
Sector

Postal DFS for  
SMEs

Posts for women's  
financial  
inclusion





# **Innovating postal financial services**



# Postal digitization journey

## POSTAL AUTOMATION

Enhance the efficiency of postal operations through automation of operational processes.

## REVENUE-GENERATING DIGITAL SERVICES

Offer additional digital services such as online identity verification, secure electronic mailboxes, online payments, and governments services platforms.

## DIGITAL PRODUCTS AND SERVICES

Augment customer value proposition through digital enhancements to existing products and services.

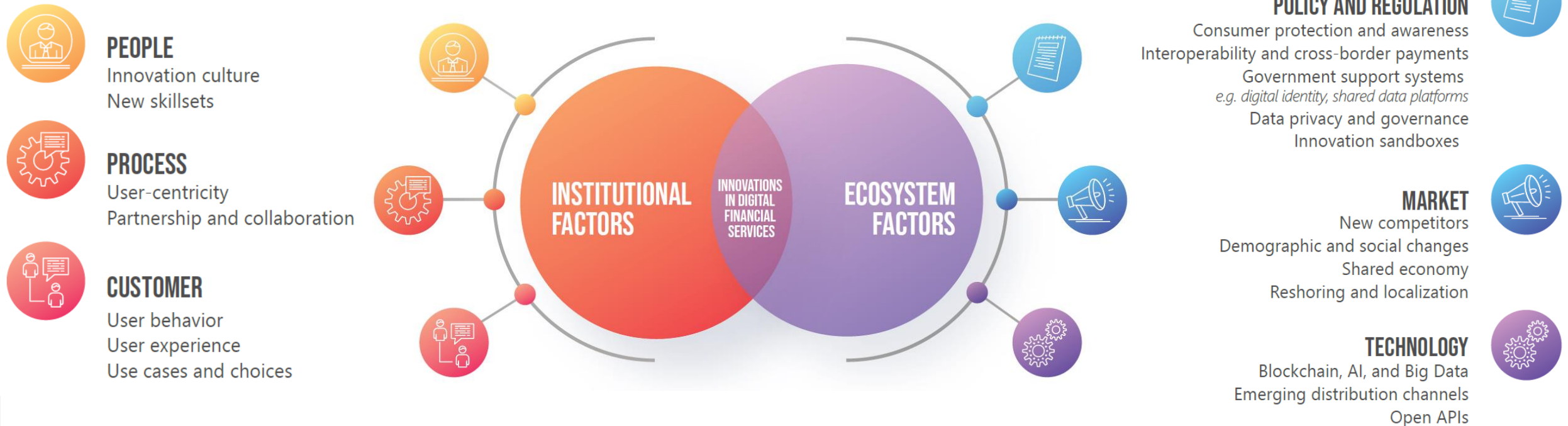
## DIGITAL TRANSFORMATION

Build and deliver a first-class user experience through digital products and services, digital channels, technology, and automated processes.





# Levers of Postal Innovations





# **Blockchains and DLTs for the Postal sector**





# DLTs in the postal sector

Since 2016, at least 7 Posts conducted 14 different pilots or projects using DLTs

Post	Year	Project summary
<a href="#">Australia Post</a>	2016	Research to store identities in a blockchain, to verify identity and registry accreditation functions
<a href="#">Australia Post</a>	2016	Piloted a solution for voting for state elections.
<a href="#">Swiss Post</a>	2018	Implemented, in collaboration with Swisscom, a private Swiss infrastructure for blockchain applications.
Egypt Post	2018	Studying how to implement a digital wallet with information and transaction data linked to a blockchain.
<a href="#">Austria PostAG</a>	2019	Creation and implementation of crypto stamps with NFC-enabled verification and authenticity.
<a href="#">Croatian Post</a>	2019	Successful trial of cryptocurrency sales and redemption services for tourists in Zadar.
<a href="#">Tunisian Post</a>	2019	Implemented the eDinar solution, acting like a central bank digital currency (CBDC), wholly controlled by Tunisian Post.
<a href="#">Swiss Post</a>	2019	Piloted blockchain and IOT to comply with EU guidelines of Good Distribution Practice for pharmaceutical logistics.
<a href="#">Egypt Post</a>	2019	Development of a logistics center at Cairo Airport, that uses blockchain technology to speed up customs and handling.
<a href="#">Croatian Post</a>	2020	Created a crypto stamp that is issued along with a digital 'Postereum' token on the Ethereum network.
<a href="#">Tunisian Post</a>	2020	Adoption of the SWIFT Global Payment Innovation (GPI) for international financial transfers.
<a href="#">USPS</a>	2020	Creation of a blockchain mail-in voting system for citizens using Ethereum.
<a href="#">Tunisian Post</a>	2021	Pilot for a CBDC payment platform and wallet on a private blockchain using Hyperledger.
USPS	n.d.	Exploration effort on the use of DLTs for a distributed identity use case.









# DLTs in Postal logistics?

## Potential Use Cases for DLTs in Postal Logistics



## Use case

## Objective

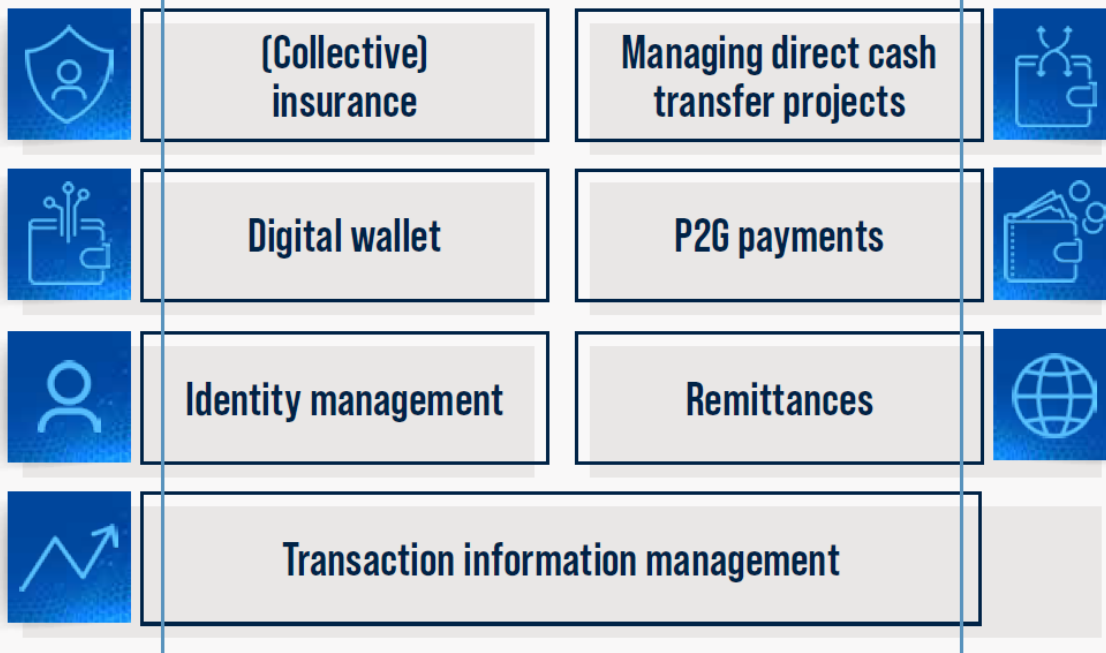
 <b>Certificates of origin</b>	Have a common digital platform for the creation and validation of certificates of origin.
 <b>Crypto stamps</b>	Automate bilateral postal settlements and keep reliable track of data regarding shipments and mailing history of post.
 <b>Customs and handling</b>	Accelerate customs and cross-border flows.
 <b>Digital post office box</b>	Ensure reliability for digital documents and increase convenience in mail delivery and document verification.
 <b>Reverse logistics for returns</b>	Decrease the time and effort spent on reverse logistics processes.
 <b>Track and trace</b>	Increase transparency among partners sending and receiving mail.





# DLTs in Postal financial inclusion?

## Potential Use Cases for DLTs in Postal Financial Inclusion



### Use case

### Objective

	(Collective) insurance	Lower the fees on insurance for a group of people living in the same area and trigger automatic payments.
	Digital wallet	Increase convenience in payments and monitor spending.
★	Identity management	Provide individuals with an accessible single digital identity acceptable to a broad range of service providers.
★	Managing direct cash transfer projects	Monitor the proper spending of vouchers given to people participating in cash transfer programmes (both conditional and unconditional).
	P2G payments	Ease person-to-government (P2G) payments and/or proof thereof (such as in tax payments and fine settlements).
★	Remittances	Lower fees and increase accessibility to remittances by leveraging the Post's network.
	Transaction information management	Access near real-time information on customer transactions for the monitoring of cash availability.



# Thank you

Download and read all our studies at

<https://www.upu.int/en/Universal-Postal-Union/Activities/Financial-Services/Research>

Contact us at: [financialinclusion@upu.int](mailto:financialinclusion@upu.int)

