

CUSTOMER NAME

Instant Payments Ecosystem

V. 2.00 2023-11-10 C:BUSINESS USE ONLY| I:H | A:M





MONTRAN

**We Unify the World
Financially**





We are a **FinTech** company that specializes in developing **Payment System and Capital Market Solutions.**

Through our various Products and Services, we create **End-to-End Solutions** that our Banking Customers love.



Montran | Who We Are

We Are Leaders

Over 40 years in advancing technology in payments, clearing and settlement.

We Are Global

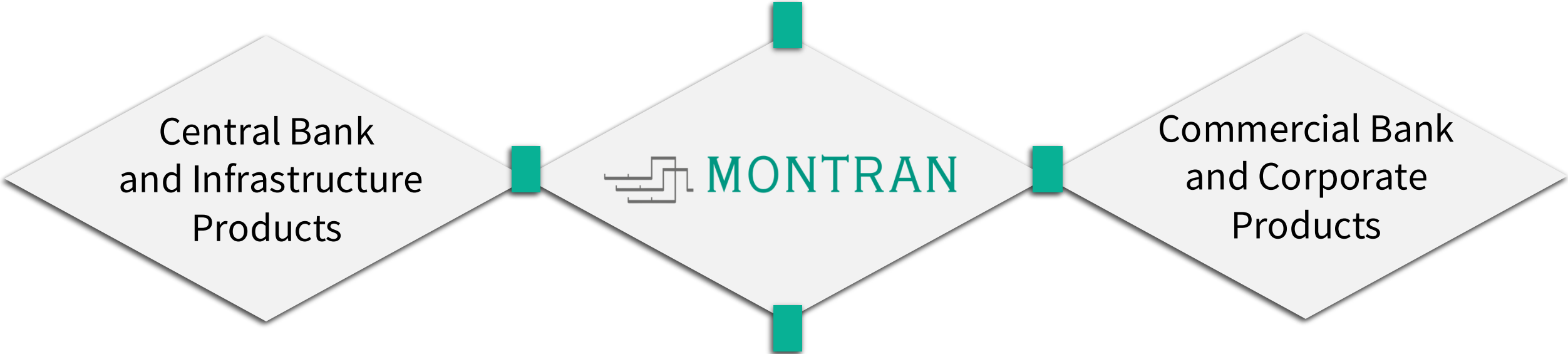
Our products service financial markets in 80+ countries, on 5 continents.

We Are Experienced

Our team consists of 500+ engineers with international experience in payment systems.

Montran | Who We Are

WE BRING VALUE TO OUR CLIENTS



Montran | Solutions

CENTRAL BANK AND INFRASTRUCTURE PRODUCTS

RTGS Real-Time Gross Settlement System	MMS Mandate Management System
ATS Automated Transfer System	DMS Dispute Management System
ACH Automated Clearing House	IFT Instant Funds Transfer System
CSD Central Securities Depository	IPS Instant Payments System (Central)
TS Trading System (Securities)	GPS Global Payments System

Trusted by Financial Institutions Worldwide

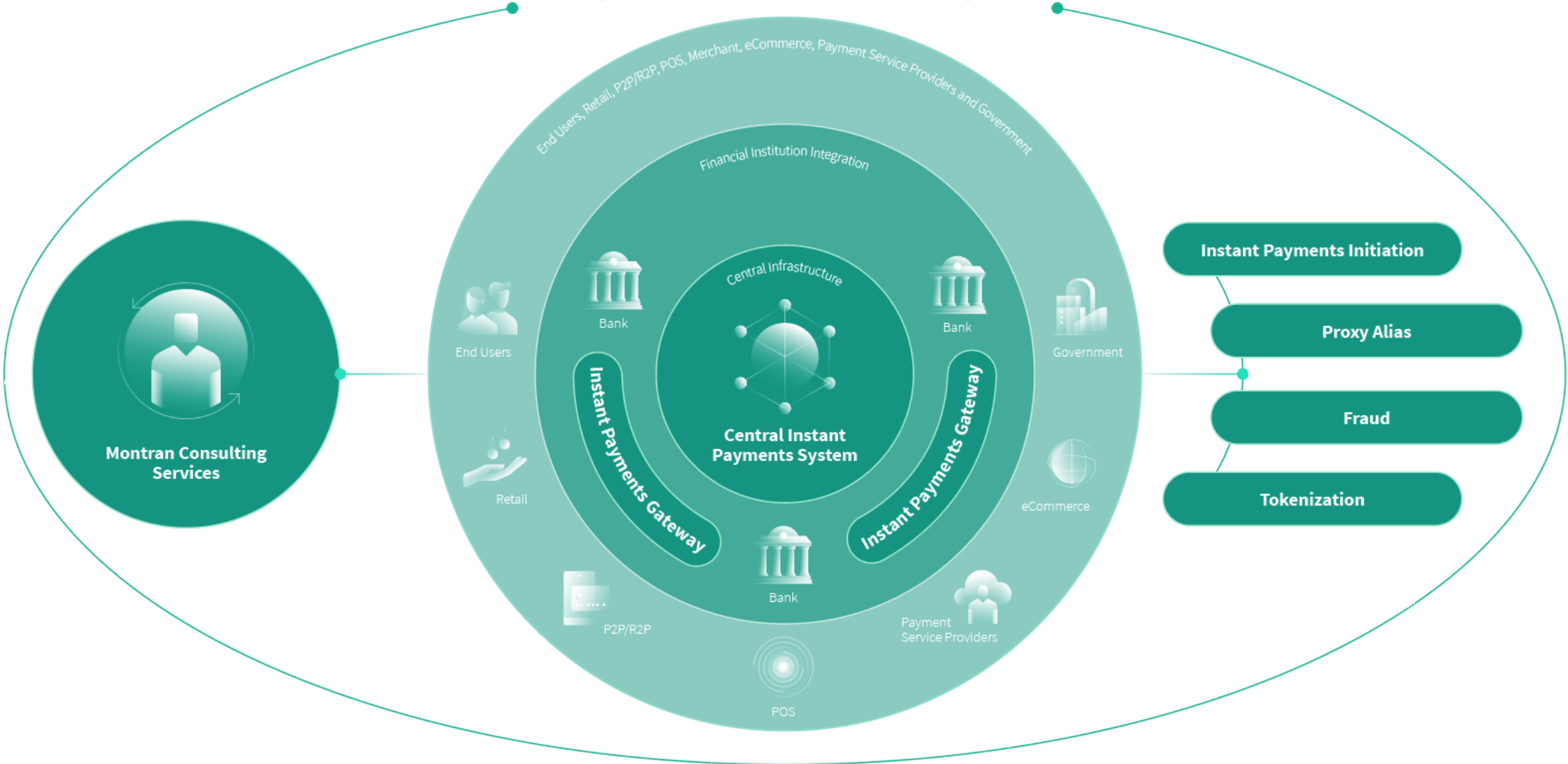


Instant Payments Use Cases

INSTANT PAYMENTS CENTRAL SYSTEM

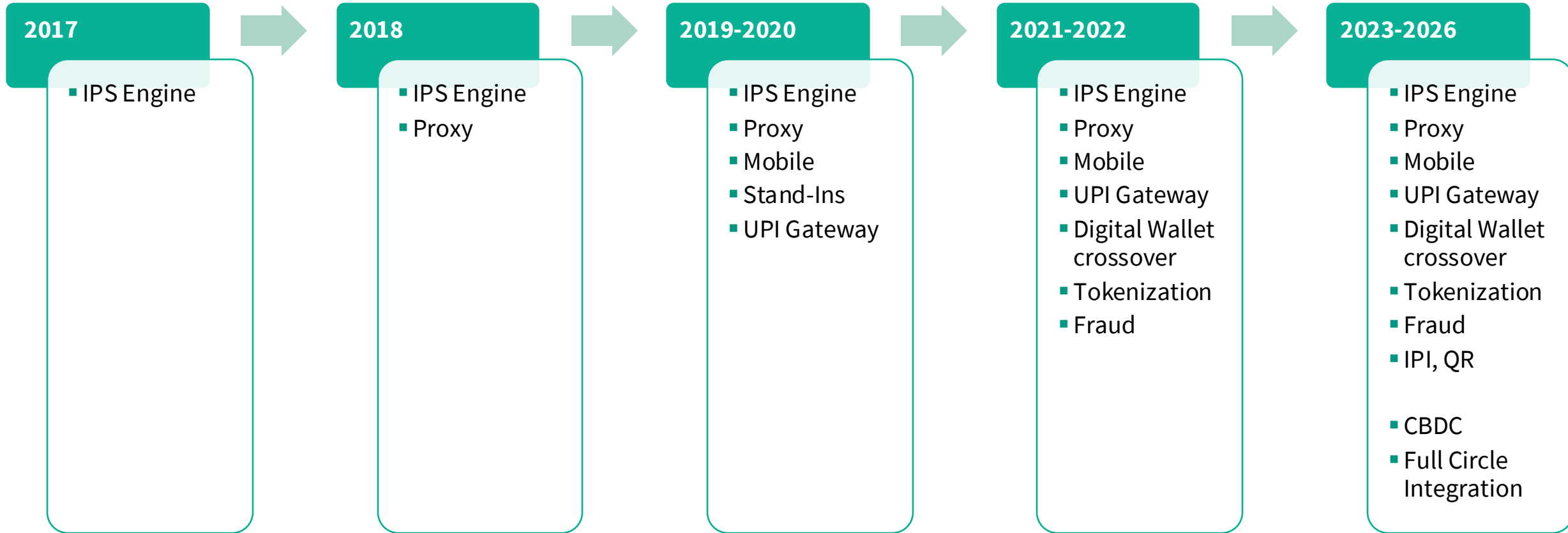


Instant Payments Ecosystem



Montran Instant Payments

INSTANT PAYMENTS SYSTEM EVOLUTION



Montran Instant Payments

CURRENT GLOBAL ROLLOUT

Romania 1
TRANSFOND
Live

Angola 5
EMIS
Live

Bank of Mongolia 2
Live

Bulgaria 6
BORICA
Live

Pan-African Cross Border 3
Live

Trinidad Tobago 7
InfoLink
Pilot

Panama 4
TELERED
Live

Palestine Monetary Authority 8
UAT

Georgia 9
IMPLEMENTATION



Montran's Instant Payments

Case Study: TRANSFOND (Romania)

Overview


TRANSFOND is the Automated Clearing House System Operator in Romania. It is a National Bank and Commercial Bank owned entity responsible for the Interbank Payment System in Romania. Montran implemented the SCT Inst Scheme Compliant, Push Credit Transfer System to supplement Montran's Automated Clearing House System operated by TRANSFOND. The Instant Payment System operates 24/7/365 and has transaction latency requirements of under 10 seconds using ISO20022 message standards.

Transfond Instant Payments Service

- Based on a comparative study: IPS vs Local Card Switch – IPS a better investment, future proof solution
- Project Start June 2017 / Project Operationally Accepted June 2018
 - UAT with Participants Started Q2 2018
 - Live April 2019
 - National Bank of Romania and Romanian Banking Association Audit Approval SCTInst compliance November 2018
- Participant Rollout
 - Limited Number of Participants Initially – Five (5) Romanian Banks to start including Romania's largest Retail Bank - Banca Transilvania (Operating Montran's Instant Payments Gateway),
 - Currently, 11 banks have joined the service, with further Gradual Participation Expected
- QR-Code, Instant Payments Initiation through Mobile Devices



Payment in lei

Mark the beneficiary as safe 


Amount Lei

Instant payment 

Commission 

Details (optional)

Write payment details

Execution date 

Add supporting document

[Choose File](#) no file selected

Maximum size allowed: 4MB
Allowed files: images, pdf and excel files.

PO copy by email

I authorize Libra to send a copy of this PO by email to the following addresses:

Montran's Instant Payments Case Study: Bank of Mongolia (BOM)

Overview

Bank of Mongolia is Mongolia's operator of all non cards settlement and clearing systems and is the Central Bank of Mongolia. Bank of Mongolia has selected Montran to implement a complete clearing environment comprised of our latest ACH offering, our Instant Payments System SCTInst based and a suite of value-added services, which include Proxy/Alias Directory, Mandate Management and Dispute Management Systems. The infrastructure has replaced Bank of Mongolia's existing ACH and card switch based IPS platform and is integrated with the bank's mobile platform.

BOM Instant Payments Service

- IPS replaces existing instant payments service based on card switch: transition from ISO8583 to ISO20022
- Project kickoff August 2018
 - Customization and first Installation was in November 2018
- Live August 2019
- Participant Rollout
 - All banks (18) were required to participate in the IPS system from Day-1
 - Replaced a previous instant payment solution based on card rail
- 750.000 daily transactions
- End-to-end latency: 1.1 seconds

QR Code Standard Use Cases

- **QR Code for Payment Intents**

- » Person to Person (Payee Presented QR)

[HTTPS://qr.ropay.ro/1/p/ROP/ust34jkw](https://qr.ropay.ro/1/p/ROP/ust34jkw)

- » Person to Merchant (Payee Presented, POS)

[HTTPS://qr.ropay.ro/1/m/ROP/ust34jkw](https://qr.ropay.ro/1/m/ROP/ust34jkw)

- » Person to Merchant, e-commerce (Payee Presented, QR)

[HTTPS://qr.ropay.ro/1/e/ROP/ust34jkw](https://qr.ropay.ro/1/e/ROP/ust34jkw)

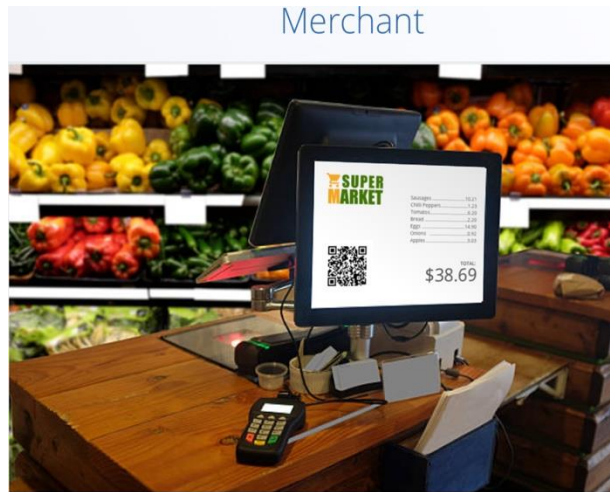
- » Person to Merchant, e-commerce (Payee Presented, Deep-link, with Payer Bank specified)

[HTTPS://qr.ropay.ro/1/e/ROP/ust34jkw](https://qr.ropay.ro/1/e/ROP/ust34jkw)

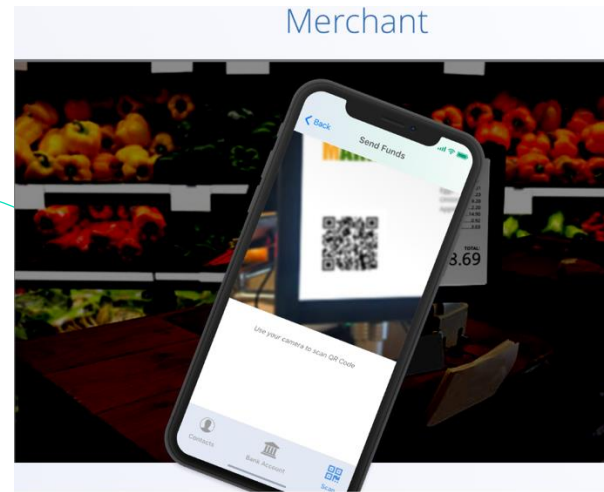


Montran Mobile Payment Solution

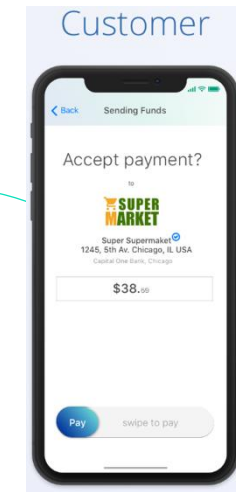
Customer to Merchant / Government / Business Walkthrough



1. Merchant equipment QR code generator tablet/pc



2. Customer uses bank mobile app to scan

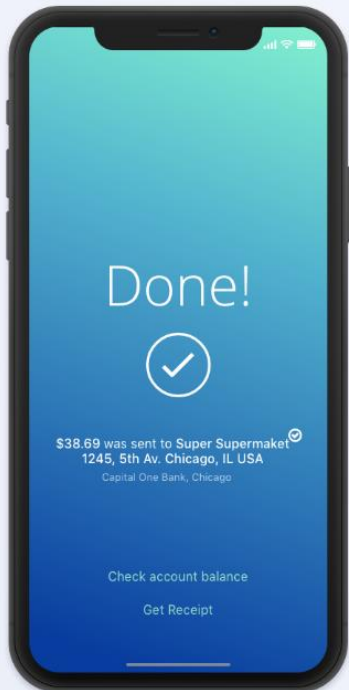


3. Payment initiation and authorization

Montran Mobile Payment Solution

Customer to Merchant / Government / Business Walkthrough

Customer



Merchant



4. Final checkout
5. Payment confirmed at both end user/merchant

MPS

Merchant Registry

- Register of initiating and non-initiating merchants
- Participants → functions (API) for managing the merchants with whom they have a banking relationship.
- Registered merchants are assigned a unique identifier (Token) and a list of bank details.

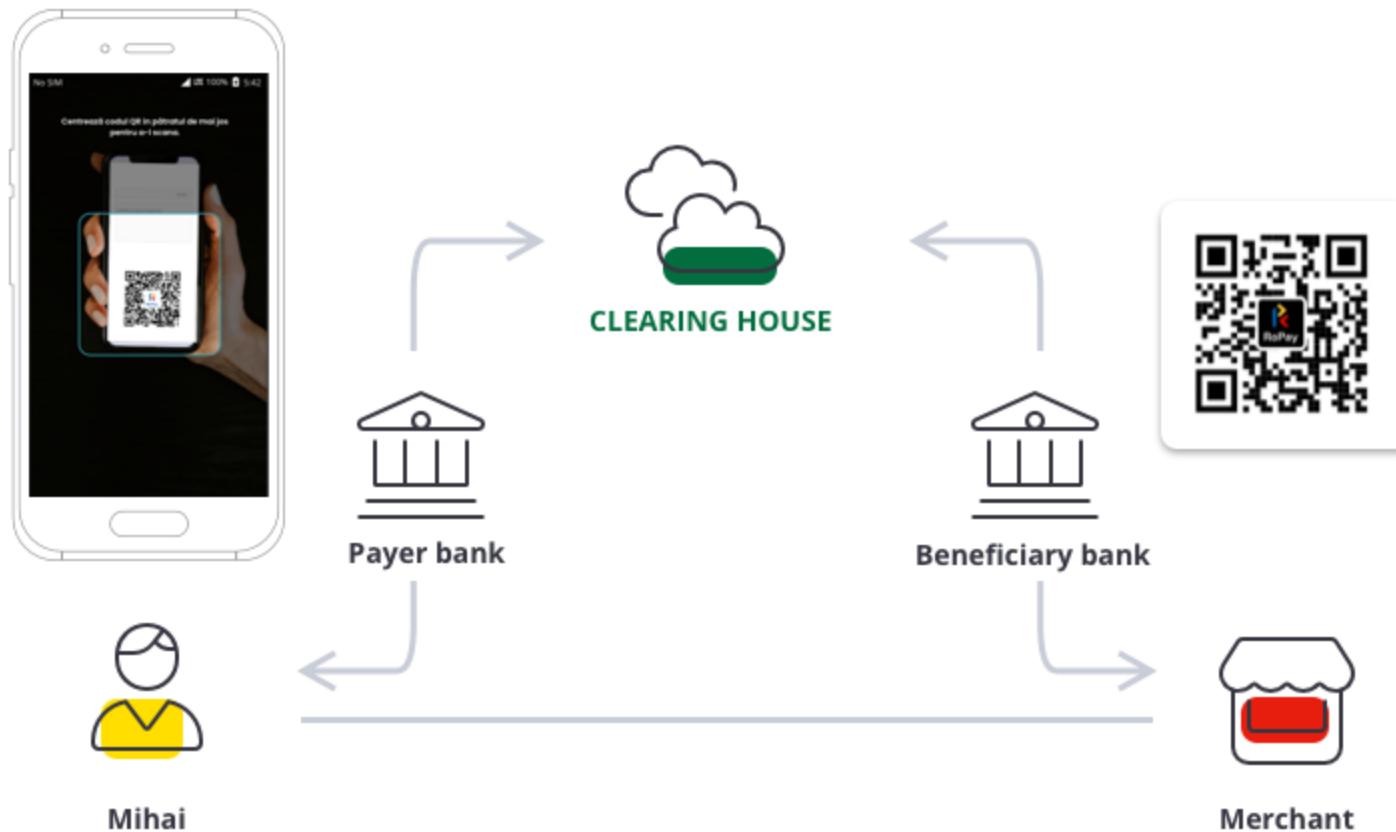
- Merchant validated by a participant in the MPS
 - » payer to authorize the payment
 - » reduces fraud situations such as beneficiary impersonation.

E-commerce Checkout

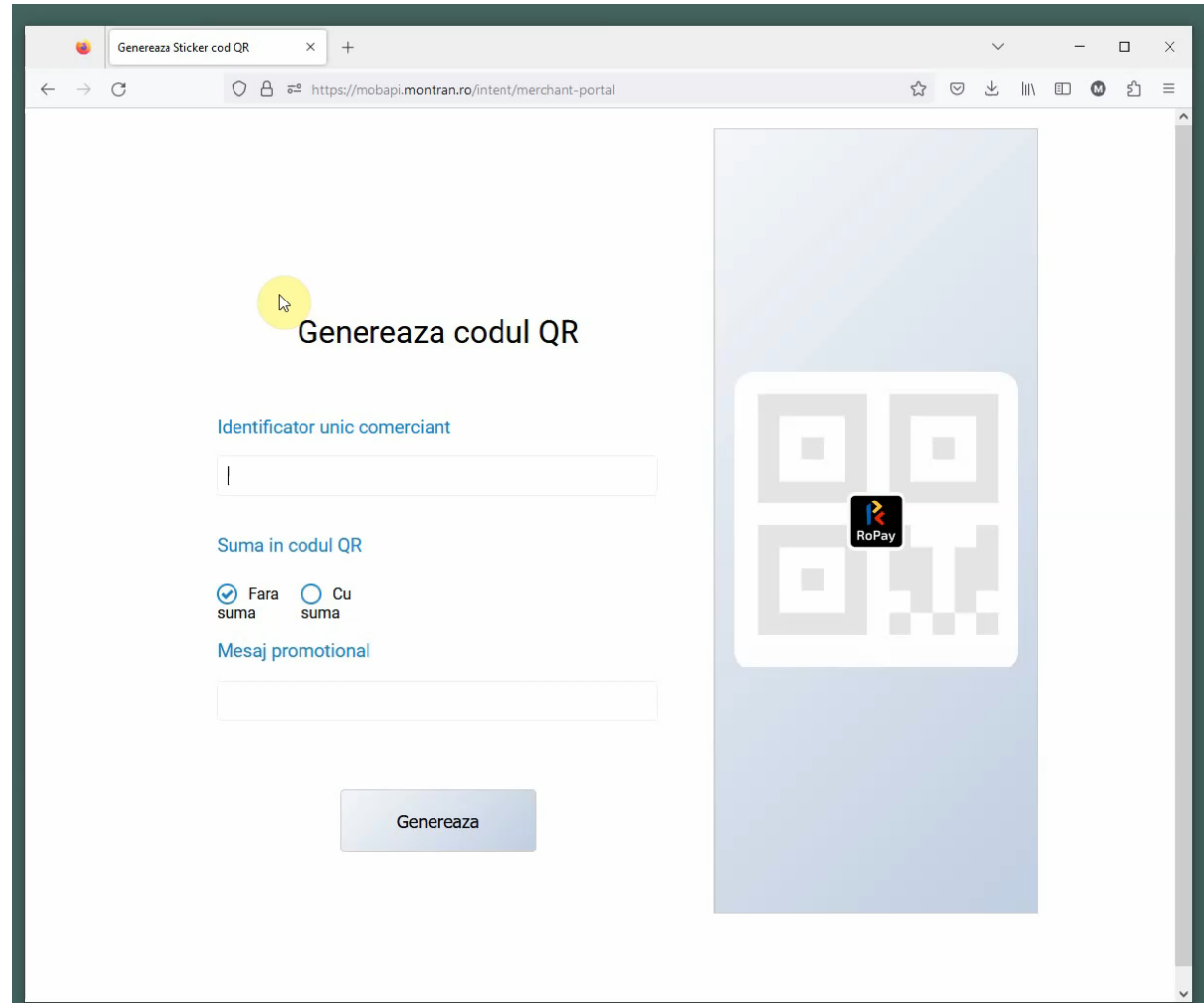
- **The payer can initiate a payment through:**
 - » QR code scan
 - › Two devices scenario:
Laptop for browsing, showing QR code, then mobile device for scanning and paying, using preferred bank application
 - » Deep-link – click on the payment URL and open it in the preferred banking application
 - › One device scenario:
Mobile device for browsing, initiate checkout, select paying bank, redirect to preferred bank application (deep-links association)

MPS

Use case – P2B, QR code sticker



P2P – QR Code Sticker, No Amount Specified



The screenshot shows a web browser window with the title 'Generareza Sticker cod QR' and the URL 'https://mobapi.montran.ro/intent/merchant-portal'. The main heading is 'Generareza codul QR'. Below the heading are four input fields: 'Identificator unic comerciant', 'Suma in codul QR', 'Mesaj promotional', and a 'Generareza' button. The 'Suma in codul QR' section has two radio buttons: 'Fara suma' (checked) and 'Cu suma'. To the right of the form is a large vertical preview area showing a QR code sticker with the RoPay logo in the center.

Generareza codul QR

Identificator unic comerciant

Suma in codul QR

Fara suma Cu suma

Mesaj promotional

Generareza

P2P – QR Code Sticker, With Amount Specified

Genereaza codul QR

Identificator unic comerciant

LnzELWDz

Suma in codul QR

Fara suma Cu suma

10

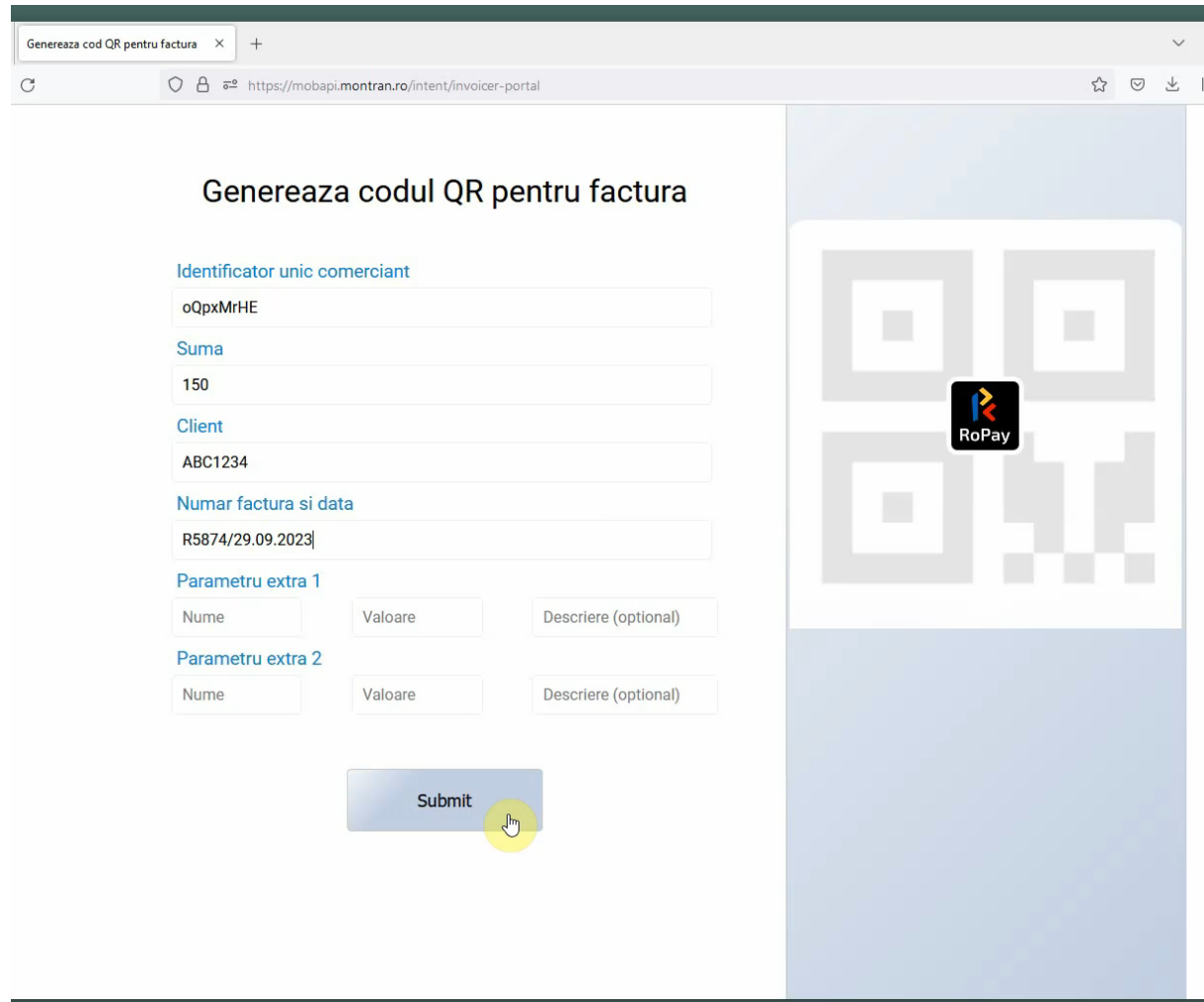
RON

Mesaj promotional

Scaneaza si plateste

Genereaza

P2B – QR Code, Invoice



Generareza cod QR pentru factura

Identificator unic comerciant
oQpxMrHE

Suma
150


Client
ABC1234

Numar factura si data
R5874/29.09.2023

Parametru extra 1
Nume Valoare Descriere (optional)

Parametru extra 2
Nume Valoare Descriere (optional)

Submit



P2M – E-commerce, QR Code, one device



Continue the Dialogue with Us!

PLEASE REACH OUT WITH ANY QUESTIONS

mromantan@montran.com

