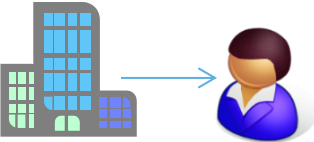
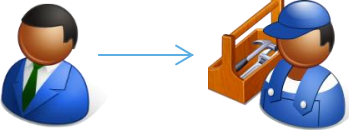






# Exploring Faster Payments Use Case Opportunities

August 4, 2015

The Clearing House is developing a real-time system is designed to address unmet customer needs across a number of targeted use cases

<p><b>Business to Person</b></p> 	<ul style="list-style-type: none"><li>• Temporary employee wages</li><li>• Emergency payroll</li><li>• Urgent B2C (e.g. disaster relief)</li></ul>
<p><b>Person to Person</b></p> 	<ul style="list-style-type: none"><li>• Non-commerce payments (e.g. rent payment to a roommate, emergency funds for a family member)</li><li>• Urgent Account-to-Account transfers (e.g. to fund investments or purchases)</li><li>• Informal services (e.g. babysitting, lawn care)</li></ul>
<p><b>Person to Business</b></p> 	<ul style="list-style-type: none"><li>• Immediate bill payments with acknowledgment</li><li>• Some e-commerce purchases</li></ul>
<p><b>Business to Business</b></p> 	<ul style="list-style-type: none"><li>• Just in time payments to suppliers</li><li>• Immediate bill payments with acknowledgment</li></ul>

# How do we define real-time payments?

## IMMEDIATE

- Ability to send or receive payments 24/7
- Real-time access to payment status information for senders and receivers
- Immediate availability of funds for receivers

## SAFE

- Credits only
- Payments are irrevocable
- Process to request return of erroneous payments
- Value limits on transactions
- Settlement approach that mitigates risk of loss
- Use of tokens to protect account data
- Requires minimum threshold level of security and privacy protection of participating financial institutions
- Support for anti-fraud, anti-money laundering and OFAC/sanctions compliance process

## USEFUL

- Extensive set of payment and non-payment messages
- Ability to initiate payments based on alias instead of an account number (Directory Services)
- Global compatibility to the extent it is consistent with domestic requirements



# The real-time payment system includes features that support product development by financial institutions

Feature	Real-time Platform Advantage
<b>“Credit Push” payments</b>	<ul style="list-style-type: none"><li>• Customers send payments directly from their existing accounts, providing greater customer engagement and transparency than alternative payment services</li></ul>
<b>Standard but extensible message formats</b>	<ul style="list-style-type: none"><li>• Supports independent product development by financial institutions through powerful, flexible standards while ensuring the end-to-end process is consistent and reliable</li><li>• Extensible standard messaging is the basis for payments/commerce integration</li></ul>
<b>Real-time messaging with “bank-grade” security</b>	<ul style="list-style-type: none"><li>• Gives financial institutions tools to create a superior customer experience in applications such as mobile banking, P2P transfers, bill payment, and just-in-time B2B transactions</li></ul>
<b>Integrated tokenization and directory services</b>	<ul style="list-style-type: none"><li>• Eliminates need for customers to share sensitive account information or know the routing details of recipients</li></ul>
<b>Global compatibility</b>	<ul style="list-style-type: none"><li>• Conformance to ISO 20022 payment formats and global conventions for its application to real-time payments</li><li>• Immediately allows FIs and customers to use the same formats, technology and processes across borders; eventually supports international payments through interoperable domestic payment systems</li></ul>



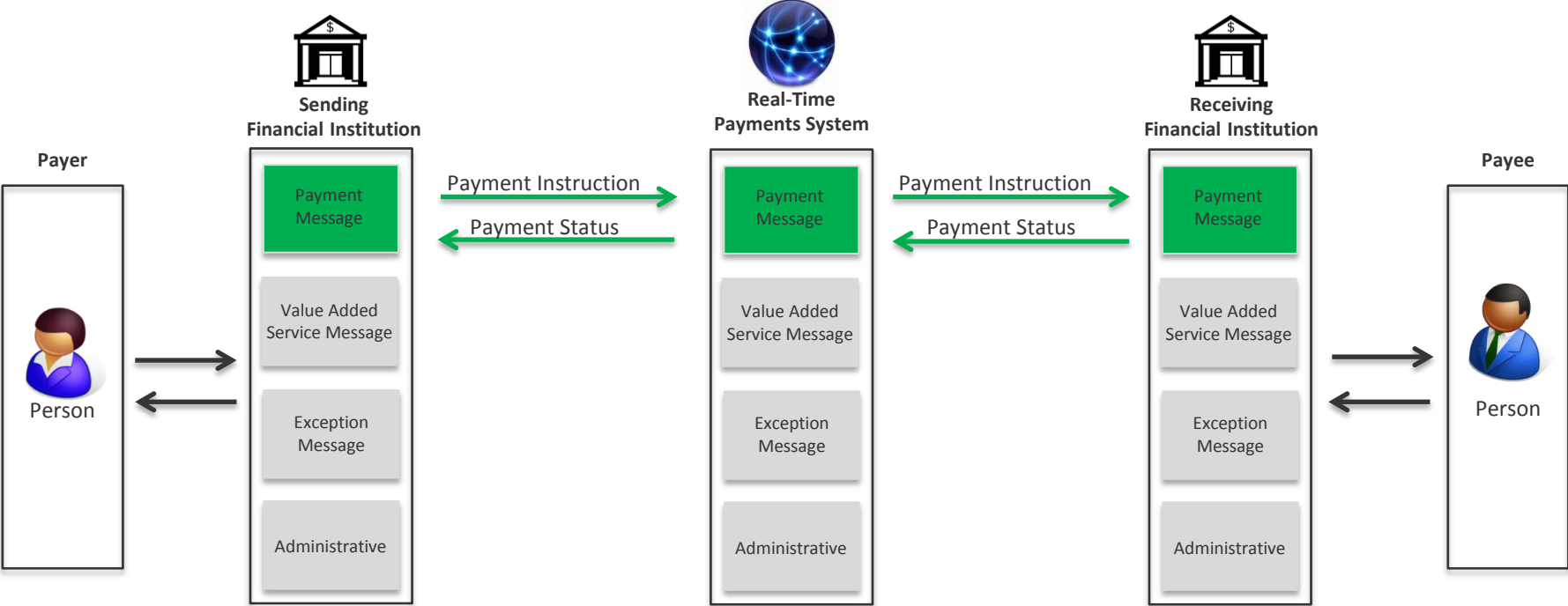
# Real-Time Payments – Messaging Toolkit

## Real-time exchange of financial and non-financial messages that support a variety of use cases

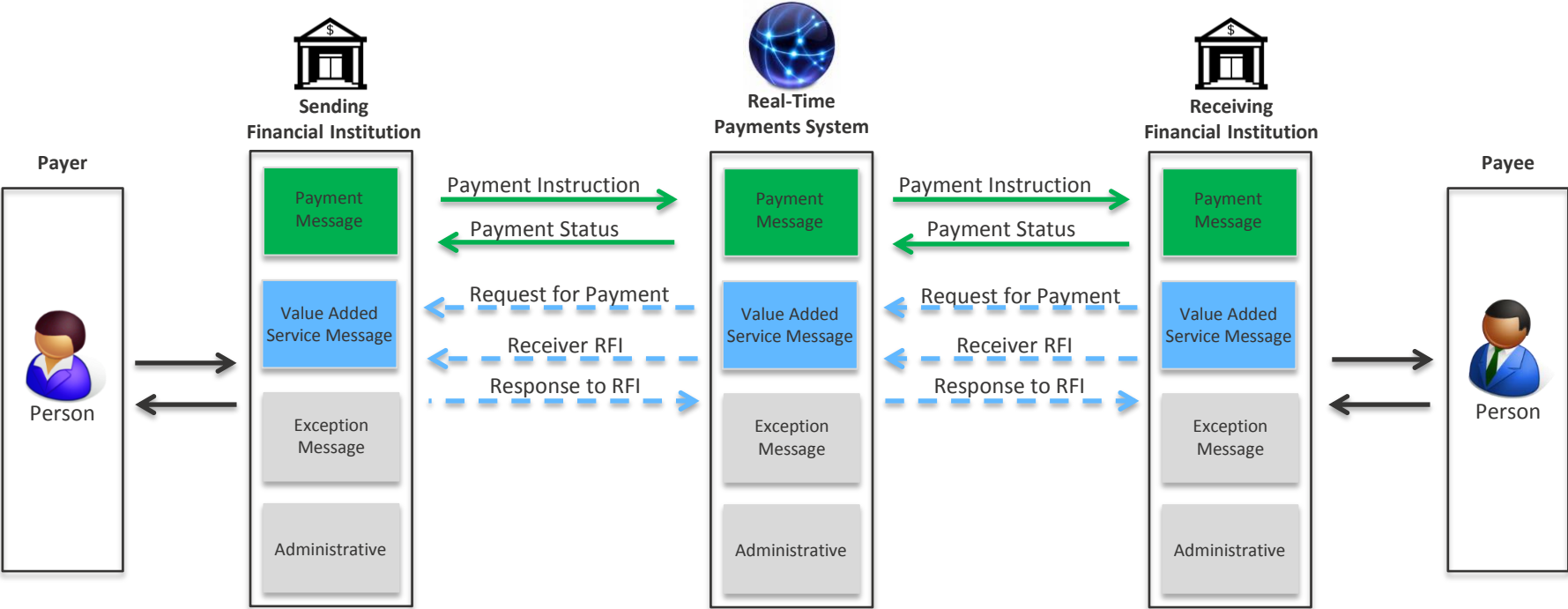
- The following messaging requirements have been defined to support real-time payments:
  - Real-time transmission of payment and non-payment messages
  - Non-payment messages support value-added services and administration
  - Related messages can be linked into complex transactions
  - Messages can carry remittance data and reference to external data and processes for extended functionality
- Message Types (not including status messages)
  - Credit Transfer – basic multi-purpose payment message
  - Request for Payment – to support P2P funds request, e-invoice or e-billing
  - Payment Acknowledgment By Receiver – message from the receiver to the sender regarding payment disposition (e.g. invoice paid, goods, shipped, etc.)
  - Request for Information & Response – receiver request for additional information about a payment (e.g. requesting customer account number, invoice number or purpose of payment)
  - Remittance Advice – extensive remittance detail not included in the Credit Transfer message



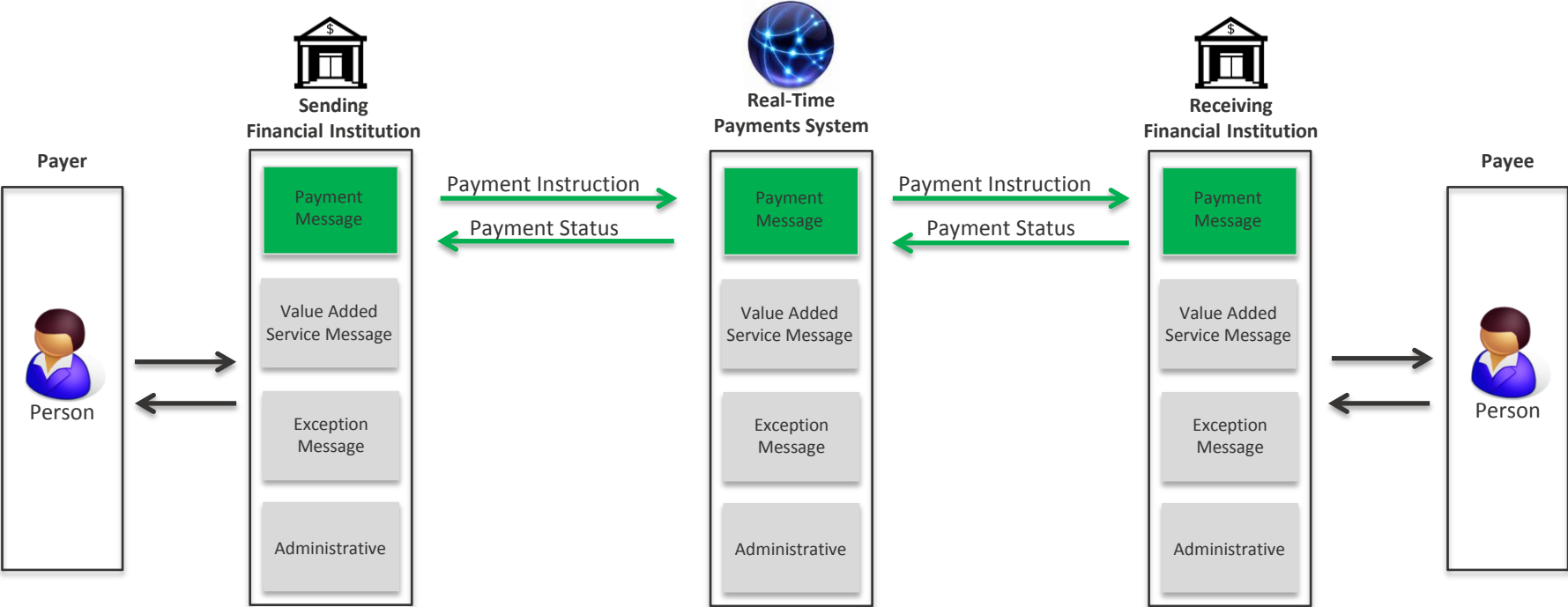
# Person to Person



# Person to Person – With request for information

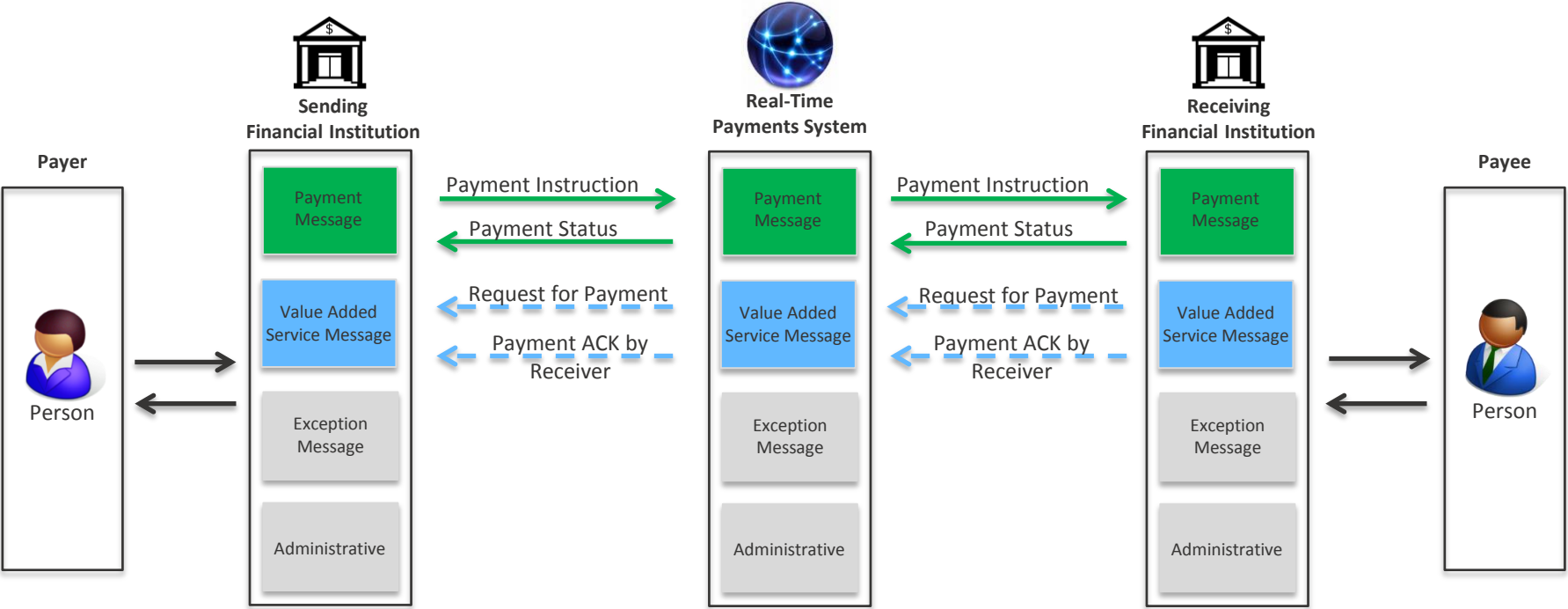


# Person to Person – Urgent Account-to-Account

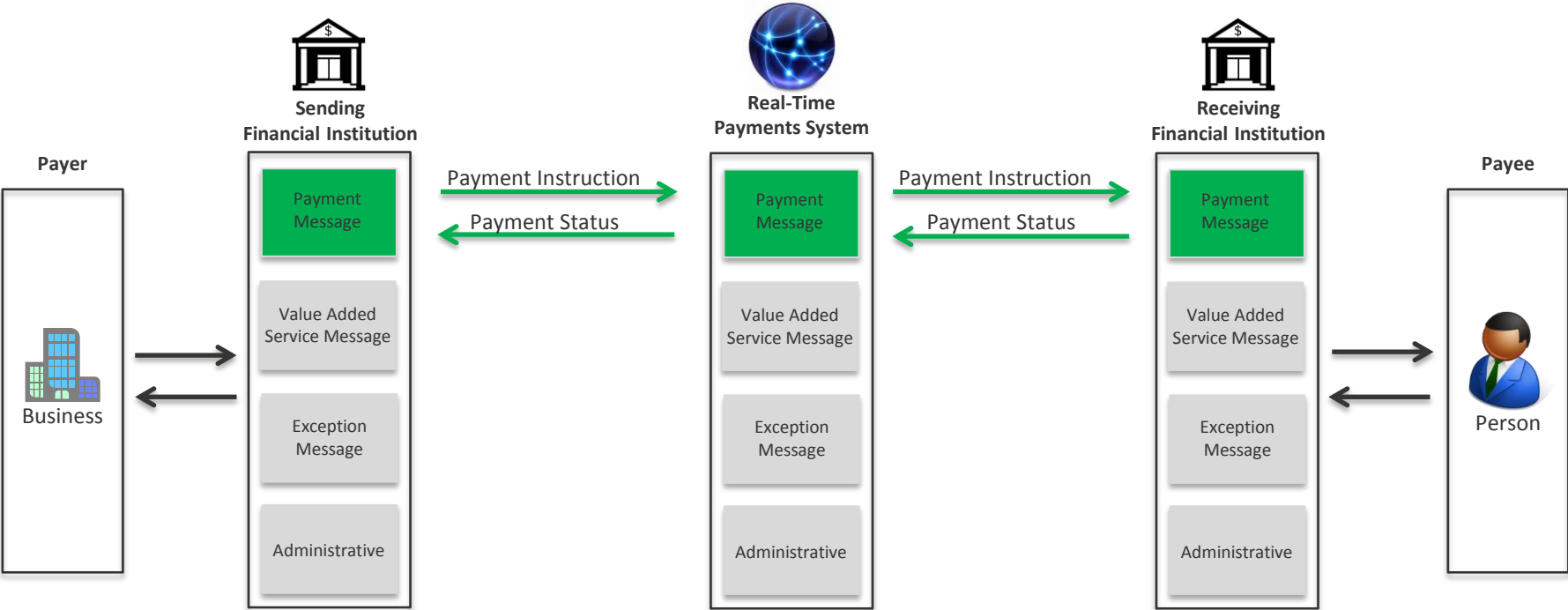




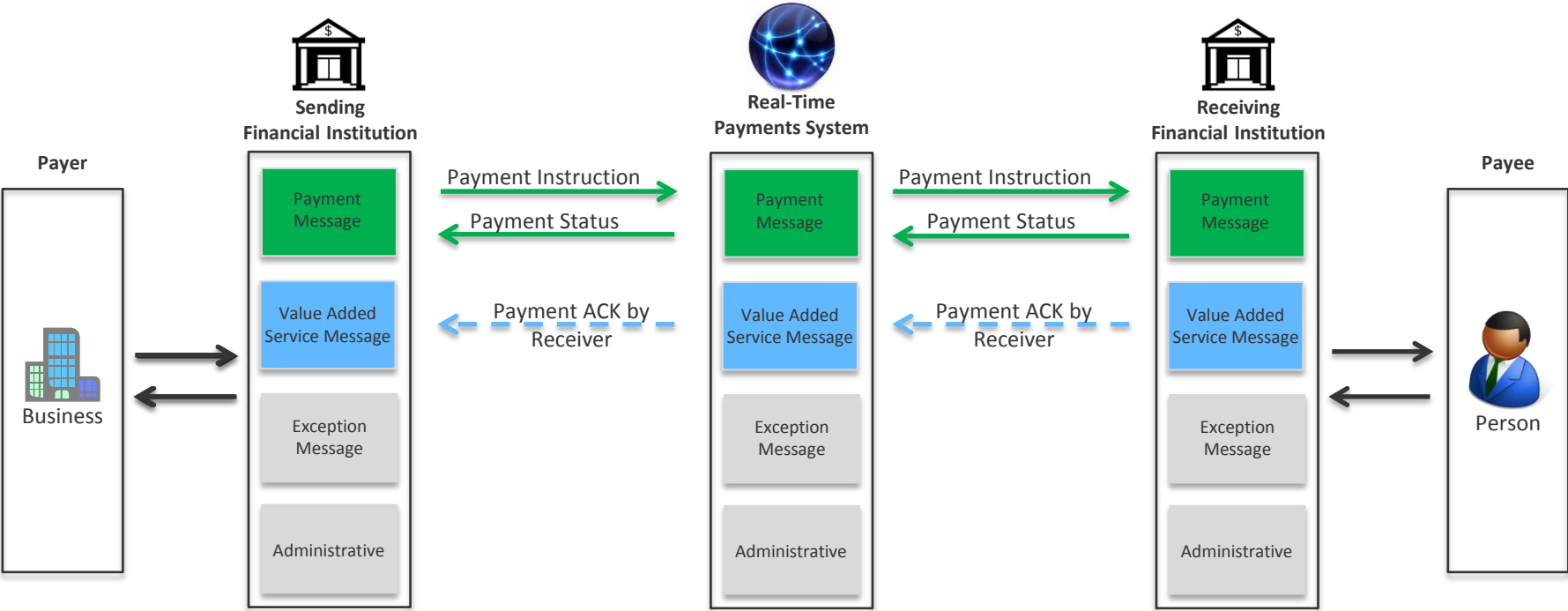
# Person to Person – Payment for Informal Service



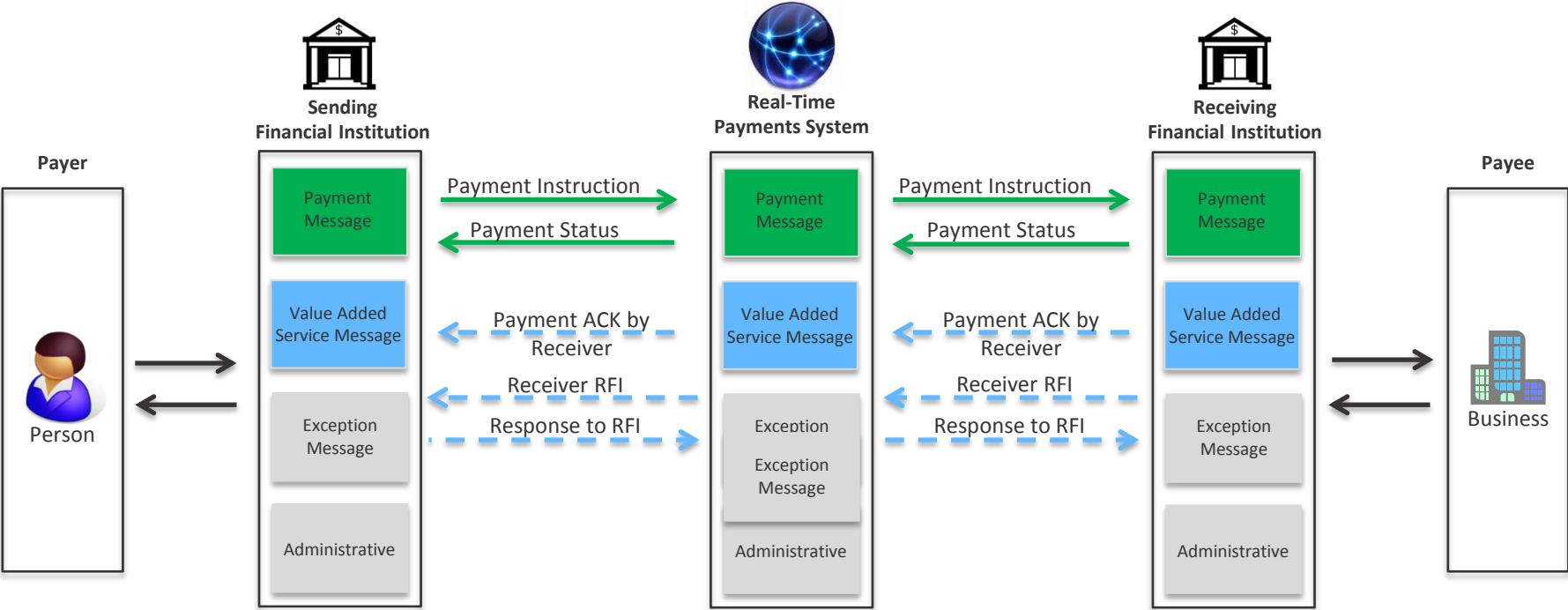
# Business to Person – Temporary Employee Wages



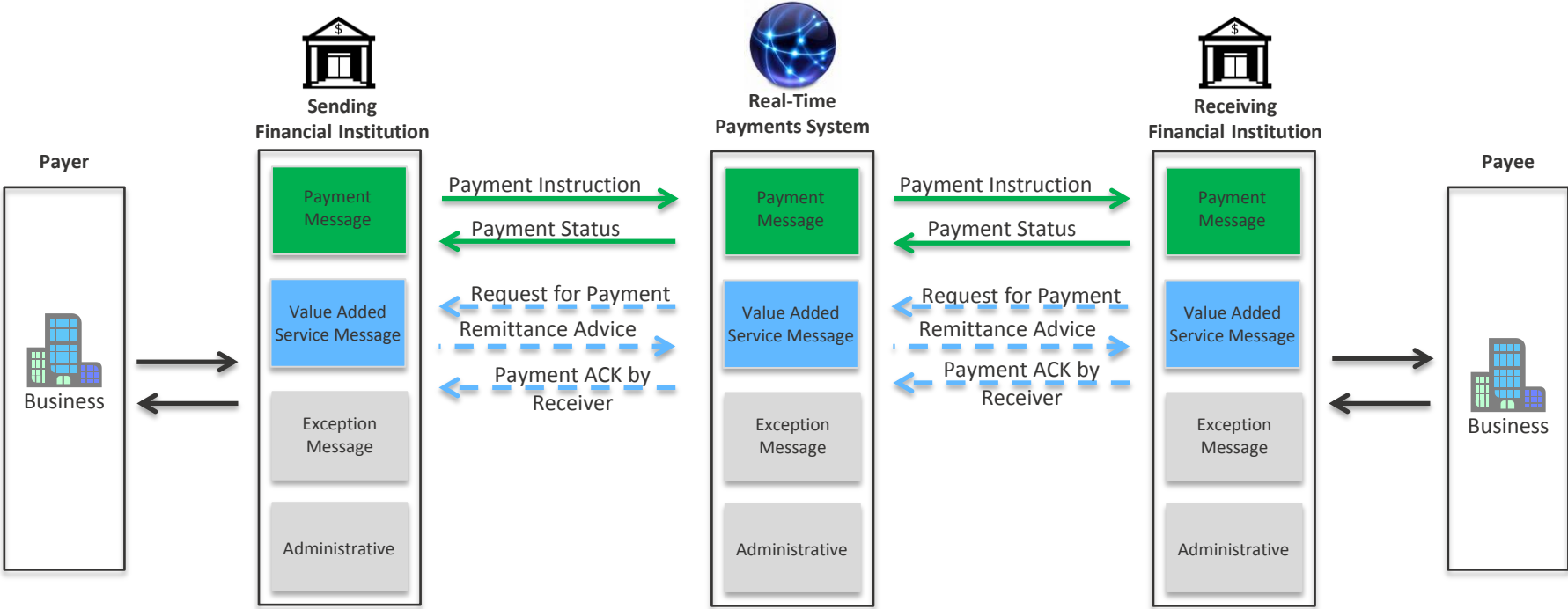
# Business to Person – Urgent B2C (e.g. Disaster Relief)



# Person to Business – Immediate Bill Payment



# Business to Business – Just in Time Payments to Suppliers



# Real-time payments are a flexible, extensible platform for innovation: B2B payment illustration

