

# Case Study

## Citizens' Trust in Central Bank Digital Currency (CBDC) Ecosystems

### Ontology Instantiation

#### 1. PRIVACY

INTENTION	
INT1	Citizens trust the CBDC ecosystem to preserve their privacy
BELIEF	
BEL1.1	The CBDC ecosystem safeguards citizens' privacy
CAPABILITY	
CAP1.1	Comply with the General Data Protection Regulation (GDPR) <sup>1</sup> and other privacy laws and regulations

<sup>1</sup> <https://gdpr-info.eu/>

#### 2. SECURITY

INTENTION	
INT2	Citizens trust the ecosystem to safely make transactions using CBDCs
BELIEF	
BEL2.1	The ecosystem is safe
BEL2.2	The ecosystem will be able to prevent security breaches
CAPABILITY	
CAP2.1	Has security mechanisms
CAP2.2	Able to react quickly to risk events on security
VULNERABILITY	
VUL2.1	Security breaches
TRUSTWORTHINESS EVIDENCE	
TE2.1	The existence of a cybersecurity policy

### 3. UsABILITY

INTENTION	
INT3	Citizens trust the CBDC ecosystem to make transactions using CBDCs easily
BELIEF	
BEL3.1	The ecosystem is easy to access and use
BEL3.2	It is easy to onboard the CBDC ecosystem
CAPABILITY	
CAP3.1	Meets minimum usability criteria
TRUST-WARRANTING SIGNAL	
TS3.1	The establishment of a universal brand to create visual identity
TS3.2	Advertising campaigns in the media and social networks using everyday examples
TS3.3	Documentation available
TRUSTWORTHINESS EVIDENCE	
TE3.1	The existence of a manual with minimum usability requirements, which must be followed by all participants of the ecosystem

### 4. Low Cost

INTENTION	
INT4	Citizens trust the CBDC ecosystem to make transactions using CBDCs at a low cost
BELIEF	
BEL4.1	It will be offered at a low cost to its users
BEL4.2	Citizens will not need to buy a new device to make transactions in the CBDC ecosystem
CAPABILITY	
CAP4.1	Has low costs for consumers and merchants
CAP4.2	Operates using existing, accessible technology

## 5. LOCATION

INTENTION	
INT5	Citizens trust the CBDC ecosystem to make transactions wherever they need
BELIEF	
BEL5.1	Citizens will be able to access the system from any place
CAPABILITY	
CAP5.1	Supports offline transactions

## 6. AVAILABILITY

INTENTION	
INT6	Citizens trust the CDDC ecosystem to make transactions instantly on a 24/7 basis
BELIEF	
BEL6.1	The CBDC ecosystem is able to make instantaneous transactions
BEL6.2	The CBDC ecosystem will be available when citizens need
CAPABILITY	
CAP6.1	Meets high availability parameters and processing time limits
UNCERTAINTY SIGNAL	
UN6.1	Information about instability
UN6.2	Information about low response times
TRUSTWORTHINESS EVIDENCE	
TE6.1	The existence of a service level agreement that establishes high availability parameters and processing time limits
TE6.2	Statistics on the functioning of the ecosystem showing that the service level agreement has being fulfilled

## 7. CURRENCY ACCEPTANCE

INTENTION	
INT7	Citizens trust the CDBDC ecosystem to make transactions using a widely accepted currency
BELIEF	
BEL7.1	The CBDC ecosystem operates with a digital currency widely accepted
CAPABILITY	
CAP7.1	Operates using a legal tender currency

## 8. CURRENCY STABILITY

INTENTION	
INT8	Citizens trust the CDBDC ecosystem to make transactions using a stable currency
BELIEF	
BEL8.1	The CBDC purchasing power has stability
CAPABILITY	
CAP8.1	Has proper mechanisms to ensure stability of CBDC purchasing power

## 9. PRODUCT AND SERVICE OFFERING

INTENTION	
INT9	citizens trust the CBDC ecosystem to have access to better financial products and services offerings
BELIEF	
BEL9.1	Citizens will have access to more product and service offers customized to their needs
CAPABILITY	
CAP9.1	Provides better customized services and products offerings

INFLUENCE	
INF1	Citizens' trust in a country's monetary system
INF2	Citizens' trust in the central bank