REAL-TIME ECONOMY

KEY FINDINGS FROM THE STUDY
“REAL-TIME ECONOMY: DEFINITIONS AND IMPLEMENTATION OPPORTUNITIES”

Real-time economy (RTE) is a digital ecosystem where transactions between diverse economic actors take place in or near real time. This means replacing paper-based business transactions and administrative procedures by automatic exchange of digital, structured and machine-readable data in standardized formats.

The resulting increase in the speed and quality of information helps:

- increase the speed of business processes
- save resources and transaction costs
- increase organizational efficiency and business competitiveness
- increase the speed and quality of decision-making
- improve transparency
- stimulate economic and social innovation

Examples of RTE solutions
- e-invoices
- e-receipts
- automated reporting
- e-CMR
- real-time e-procurement
- instant payments
- real-time supply chains
- real-time product information

Benefits for businesses
- Lower administrative burden
- Resource savings
- Supply chain optimization
- Increased productivity
- Real-time management
- New business models

Benefits for governments
- Increased efficiency
- Effective public services
- Data-driven predictions & early warnings
- Better decisions

Benefits for citizens
- Customized real-time products & services
- Product tracking & tracing
- Efficient use of taxpayer money
- Real-time public services
Building blocks & enablers

- Structured business data
- E-invoices, e-receipts
- Universal XML-based standards, e.g. XBRL GL
- Software & hardware for data collection
- Digital nervous systems & cross-organizational integration platforms
- Supporting ICT infrastructure (data exchange platform, unique identifiers, eID)
- Interoperability governance models
- Enabling legal framework

Benefits in numbers

- Processing e-invoices is up to 60-80% cheaper than processing paper invoices
- Finland estimates the shift to e-receipts to yield €900 million of savings for companies annually
- E-invoicing is expected to reduce carbon footprint by 63-99%
- Real-time supply chains are expected to lower companies’ operational costs up to 30% and reduce lost sales by 75%

Barriers & challenges

- Lack of understanding of RTE
- Unclear benefits
- Limited resources for investments
- Organizational resistance
- Problems with data quality
- Legacy systems
- Lack of uniform standards
- Legal issues in cross-border data sharing

Potential risks

- Cyber security
- Data leakages
- Excessive government control
- Over-standardization
- Creating digital islands

Three key opportunities

Real-time accounting and reporting reduces companies’ administrative burden and is an area where quick progress can be made in Estonia since many building blocks already exist. Key next steps include agreeing on common standards, taxonomies and classifications to expand automated reporting opportunities.

Real-time economic forecasting makes use of machine-readable financial data as input to models that analyze and predict the economic situation in real time. With the help of AI and machine-learning technologies, governments can make more accurate evidence-based estimations, detect risks and issue early warnings for companies facing risks of corporate failures.

Real-time supply chains is the most promising area where real-time solutions can create added value and spur innovation. Fully integrated supply chains and real-time data help improve companies' operational efficiency, productivity, inventory monitoring and planning, and enable quick response to changes in demand. Real-time supply chains also stimulate innovation in products, services and business models.

Recommendations for next steps

1. Develop a roadmap for RTE (vision, steps, timeline).
2. Pilot a technical platform to enable secure real-time data exchange among business partners.
3. Be among the early adopters of cross-border e-services through the EU Single Digital Gateway.
4. Prioritize supporting the digitalization of business and industry.
5. Focus on reaching a critical mass of RTE adopters.
6. Invest in new technological solutions that help generate value from real-time data, such as blockchain-based Smart Contracts.

This study was conducted by TAL TECH

This study was commissioned by Majandus- ja Kommunikatsiooni-ministeerium