Digital Transformation Flexible Fund

System Integration and Blockchain
Unlocking Seamless Connectivity and Transparency

What is System Integration?

System integration refers to the seamless connection of various systems, processes, and technologies within a business.

- **Horizontal Integration** links systems across departments or organisations to streamline operations and improve collaboration.
- **Vertical Integration** connects different levels of an organisation, from operational systems to strategic decision-making tools, ensuring end-to-end efficiency.

What is Blockchain?

Blockchain is a type of distributed ledger technology (DLT) that securely records transactions across a decentralised network of computers.

Known for its transparency and tamper-proof design, blockchain has applications beyond cryptocurrencies, including supply chain management, identity verification, and smart contracts.

How Can System Integration and Blockchain Help Your Business?

Streamlined Operations	• Integrate systems across departments to eliminate silos and improve communication. • Optimise workflows by automating data sharing between tools and platforms.
Enhanced Data Visibility	• Use blockchain to create a transparent and immutable record of transactions. • Enable real-time access to critical data for better decision-making.
Improved Security and Trust	• Ensure data integrity and prevent unauthorised changes with blockchain's cryptographic security. • Protect sensitive information with end-to-end encryption across integrated systems.
Cost Savings	• Reduce inefficiencies and duplication of effort through system integration. • Lower transaction costs with blockchain by eliminating intermediaries.
Scalability and Innovation	• Build a robust infrastructure that grows with your business. • Use integration and blockchain to explore new revenue streams or business models.

Northern Ireland Executive
www.northernireland.gov.uk

Department of Agriculture, Environment and Rural Affairs
www.daera-ni.gov.uk

UK Government

Invest Northern Ireland

Antrim and Newtownabbey Borough Council | Ards and North Down Borough Council | Armagh City Banbridge & Craigavon Borough Council | Belfast City Council | Causeway Coast & Glens Borough Council | Derry City & Strabane District Council | Fermanagh & Omagh District Council | LCCC Lisburn & Castlereagh City Council | Mid & East Antrim Borough Council | Comhairle Ceantair Lár Uladh Mid Ulster District Council | Newry, Mourne and Down District Council

Examples of Applications under DTFF Funding

Supply Chain Management	● Use horizontal integration to connect suppliers, manufacturers, and distributors for real-time inventory tracking. ● Leverage blockchain to ensure traceability and authenticity of products, from origin to consumer.
Healthcare	● Implement vertical integration to connect patient data across healthcare providers, labs, and insurers for a unified view. ● Use blockchain to secure medical records and facilitate patient data sharing with consent.
Finance	● Integrate accounting, invoicing, and payroll systems to streamline financial operations. ● Use blockchain for secure, transparent transactions and fraud prevention.
Manufacturing	● Connect production, quality control, and distribution systems with horizontal integration to reduce downtime. ● Use blockchain to verify compliance with industry standards and automate contract execution via smart contracts.
Retail	● Enable real-time data sharing between inventory, sales, and delivery systems for efficient operations. ● Use blockchain to build trust in sustainability claims by tracking product origins and certifications.

How DTFF Can Support Integration and Blockchain Adoption

The Digital Transformation Flexible Fund (DTFF) provides funding to help businesses implement system integration and blockchain solutions.

Whether it's connecting existing systems or deploying distributed ledger technologies, DTFF supports investments in hardware, software, and bespoke system development to drive transformation.

Key Benefits of System Integration and Blockchain for Your Business

Efficiency	● Automate and optimise workflows across the organisation.
Transparency	● Build trust with tamper-proof, decentralised data records.
Security	● Protect sensitive data with cutting-edge encryption and verification.
Growth	● Create scalable systems that evolve with your business.

For further support or more information on DTFF funding and how integration and blockchain technologies can benefit your business, visit dtff.co.uk or contact the DTFF team.