MIDLANDS ENGINE OBSERVATORY ACADEMIC INSIGHTS
Future Uses of Blockchain

Theme:

Digital innovations like blockchain will change the way we track and pay for goods

Area of Focus:

Significant work has been taking place across the region's universities to understand how blockchain will change the way we do commerce.

Key Findings:

This Insight piece draws on three different research projects:

- Birmingham City's successful creation of a COVID-19 secure certificate

- Warwick Business School explores the many ways blockchain is being used to secure transactions

- University of Birmingham's suggestion of a blockchain system for train tickets, ensuring full interoperability

Blockchain is a secure way of creating unchangeable data and transactions, eliminating fraud. This is important to both consumers and businesses. The main benefits of using blockchain are:

- Security – for user details and transactions

- Traceability – especially for goods, ranging from fish to football tickets. It can also be used for tax stamps which allows for greater transparency.

- Interoperability – for example across train ticket providers, allowing users to have one ticket that works on any network

- Decentralsiation – Smart contracts are executed directly, ensuring greater efficiency with fewer intermediaries. The transactions are increasingly quick.

Blockchain is still being developed, with some uses being limited by slow uptake of technology in some sectors, but it has great potential.

Midlands Engine Impact:

- The Midlands is leading the way in developing new uses for blockchain in association with industry, ensuring that developments are useful and appropriate to real world needs. This positions the Midlands as a national and global leader in blockchain applications, opening further opportunities and funding.

- Blockchain requires stable and fast internet connections to be effective. The early roll out of 5G across the region makes the Midlands Engine makes the region a good place to test new applications. However, it also raises challenges about how everyone will benefit from the new technology, as the Midlands has a lower percentage of adults online than many other places across the UK.

- Universisties and industry continue to build connections which can support greater synergy and benefits.

For Further Information Contact:

Professor Peter Kawalek
Director of the Centre for Information Management, Loughborough University
P.Kawalek@lboro.ac.uk