Local, state and federal public entities provide a variety of entitlements to citizens including one-time benefits (i.e., relief checks), food stamps, utility reimbursements, community support programs, etc. A variety of issues can arise with these programs including fraud, recipients converting targeted benefits to cash, personal data security, high program costs, and slow cash redemption. Here are six ways blockchain technology can mitigate those challenges and, in the process, help to reduce costs, improve compliance, effectively monitor programs, and provide data for analysis.

01 TOKENIZATION
Instead of checks, gift cards or other forms of vouchers, funds can be distributed digitally to wallets on mobile devices. Merchants or government agencies can specifically accept only certain types of tokens thus ensuring there is no misuse of the entitlement.

02 SMART CONTRACTS
With multiple entitlements that have varied qualification requirements, smart contracts can manage the distribution and use of different tokens within the same ecosystem (wallets, apps, etc.).

03 PROOF OF IDENTITY
Citizens can have complete control over the information they share with service providers. Zero-knowledge proof systems allow the government to vouch for the identity of the citizen (where required) without the citizen having to show any actual proof of identity other than a QR code in an app.

04 IDENTITY PROTECTION
Transactions between citizens and merchants or other payment receivers can be handled via encrypted wallet addresses with no direct connection to identity, thus preventing identity fraud or theft.

05 INSTANT REDEMPTION
Merchants can instantly redeem tokens for dollars at the touch of a button.

06 IMMUTABLE RECORD
Every transaction—from initial distribution to payments with tokens and redemptions—are immutably logged to the blockchain providing a secure paper trail for compliance reporting as well as program success analysis.