Machuzu Next Generation Productivity

- CRM, Project Management, Collaboration, Agritech, FinTech, Operations - Register and Sign In using Smartcard
- Accountin, SCM - Smartcard Approals
- Compliance Management - Turn services on or off and Workflow Sign In or Out
- SCM, Agritech, FinTech, Operations - Pay using Smartcard, Shipment Trackin
- HR - Building Access Management
- Workflow - Approvals
- NextGen Credential Manager

Machuzu ERP

- Access Electronic Health Record of all permitted FHIR records using Smartcard
- These records are located on the system owner server whether local or cloud.
- Smartcard and health record can be read by any compatible JavaCardOS Reader connected to an FHIR Compliant system

Machuzu FHIR Electronic Medical REcords

NextGen Smartcard

NextGen Downloadable Desktop App (Free)

- Machuzu ERP Process Automation & Analytics
- Writes details once to new **Smartcard**
- Smartcard data can include Login Credentials, Customer data, Electronic Identity, FHIR Patient Record

AgriTech & FinTech

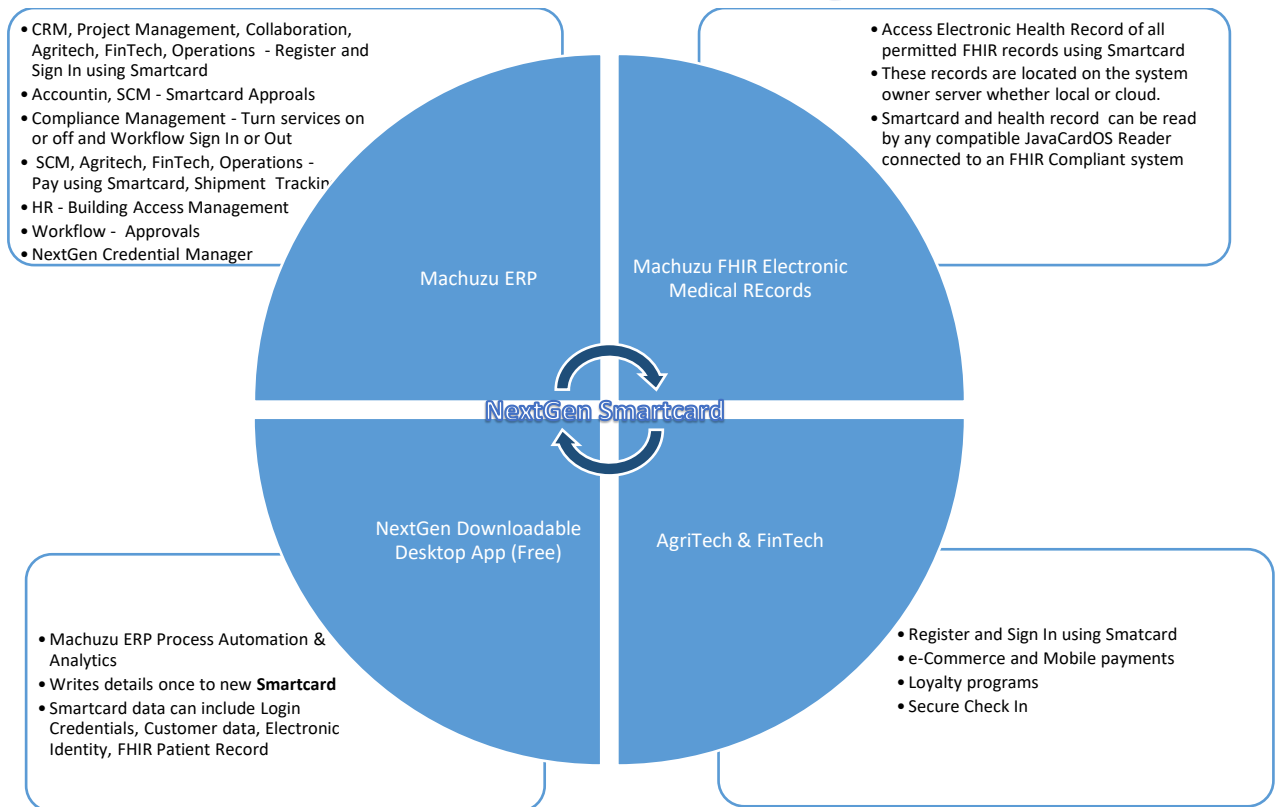- Register and Sign In using Smatcard
- e-Commerce and Mobile payments
- Loyalty programs
- Secure Check In

Description 1: *The diagram displays the Systems that interface with each other, in the Machuzu NextGen Productivity eco-system. The card can be issued by Owners of Machuzu ERP and other systems displayed. However, the card is only written to by the NextGen Productivity app.*

Blockchain Immutable Ledger

The NextGen app makes use of an Immutable Database (ImmuDB), where each Personal Record is recorded indefinitely and cannot be edited, updated or deleted. The only way to update this Blockchain Ledger, is by the NextGen app writing another Block onto the Blockchain with approvals from other Nodes.

Smartcard Data

Multiple records of an individual or organisation can be stored on the card simultaneously. Editing of the card is limited and should be avoided. The NextGen app writes each Block to the Smartcard.

The Smartcard initially generates the required keys and certificates for the sharing of the Block or current Personal Record. This key is shared with the Block, where upon saving into ImmuDB, other keys and hashes are generated upon the creation of the block as per the Blockchain principles.

Individual or Organisational Data

Secure your personal or organisational records on the Smartcard including;

- National Identity / Registration Numbers
- Passport
- Electronic Medical Record

- Login Credentials

Secure Login

Use the Smartcard to login to applications, email or websites securely. Without the Smartcard inserted into a compatible Card Reader, and the Smartcard PIN entered, the login will not succeed.

The Blockchain Ledger Log

The Blockchain Ledger Log of each transaction shall be written to a database on the domain www.machuzu.com. The data shall be encrypted between the NextGen app and the Web API.

The Log shall only contain Transaction Details. No Personal Data is shared anywhere without your consent, which is recorded in a Blockchain as well.

Blockchain Nodes

The NextGen app while running on the internet or a network; is a Blockchain Node. While offline or not on the internet, the NextGen app is still a Node; however it merely cannot receive notifications to vote, approve, sign off or whatever transaction, for a Blockchain record to be saved immutably. The NextGen app exists as a Desktop and Mobile app. Only a Desktop or Laptop can be used as a Blockchain Node.

Each Individual or Organisation can create a Blockchain Network, by inviting others to join theirs. Once joined, when each is on the network, they are available to sign off transactions by their node in the blockchain. Rules can be set for automatic approvals and notifications before approval.

Within a network, each Node has the exact copy of the Blockchain ledger at any time.

Project Status

The following components already exist;

- Smartcard application
- Machuzu ERP platform upgraded to support transactions
- Fast Healthcare Information Resources (FHIR) Electronic Medical Record (EMR) enables seemless sharing of data between compatible Electronic Medical Devices
- Credential Management module with Single Sign-On, Identity Management, SSL Certificate Generation and Management among other use cases; developed for any of our platforms or integration with.

Pending Projects

Completion of the Machuzu NextGen Productivity application.

This product has Blockchain at it's core, and contains several productivity features that make use of the secure blockchain and integrate with external services offered by any provider that requires your personal data.

The app is integrated with Machuzu ERP and is essentially it's reporting, analytics, forecasting, process automation and "AI" engine.

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