



Innovate | Automate | Transform

# Blockchain Capabilities

# GeT's Blockchain Capabilities

## Our Blockchain Expertise:

### QUARK

- Real time tracking of Goods and Services using Blockchain technologies
- Ability to handle multi party contracts and settlement along the logistics value chain
- Significant savings in transactions processing and reconciliation times

### AXIS

- Tool & Die Lifecycle Management
- Possible to group all tools & dies required for manufacturing a specific components through the system. Will help in planning process , reduced machine down time and improve customer delivery.
- All stakeholders, Tool makers, Component suppliers can track & trace all the 6000 tools & dies on the system. 100 % fool proof, no pilferage and stock out.

### Bill Discounting

- Digitizing the hundi payment and bill discounting process leads to significant reduction in transaction processing time.
- Blockchain enablement provides for a transparent view of the transactions facilitated by the shared ledger.
- Blockchain enablement provides for faster reconciliation and efficient compliance & audit processes.
- Workflow approval process is fully automated

### XACT

- Bunkering Solutions
- Bunkering involves multiple stake holders - The vessel-in-charge, bunkering vendor, surveyor, Fuel Analysis labs, mediators
- The procedure is totally manual requiring extensive monitoring and ratification by all parties
- With blockchain enablement, all the measurements and the transactions can be stored in a distributed database which is immutable



AXIS - Tool & Die Lifecycle  
Management

# Tool and Die Management : Blockchain solution

Tool & Die Manufacturer #1



Component Manufacture sub contractors

Tool & Die Manufacturer #2



T&D Manufacturer's Blockchain Cloud



Component Mfrs. Enterprise Systems

Tool & Die Recondition Vendor



Blockchain Dashboard Analytics

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## Features:

- Tracking of tools & dies
- Monitoring tools & dies life & regrinds
- Capturing of quality reports of tool makers
- Capturing of quality data of tools & dies within Mangal
- Grouping of tools & Dies for each components
- Linking Tools & Dies with Production plans

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## Blockchain Solution using Smart Contracts :

- Blockchain enablement provides for a transparent view of the transactions facilitated by the shared ledger across all stakeholders leading to improvement in Operational efficiency
- End to End traceability of assets
- Alerts and notification related to quality data (Test results), approval status are available online through Blockchain reports
- Will enable improvements in Production Planning
- Ability to predict end of life through data analytics



Bill Discounting (Hundi)

## Hundi Discounting : “As Is” Process

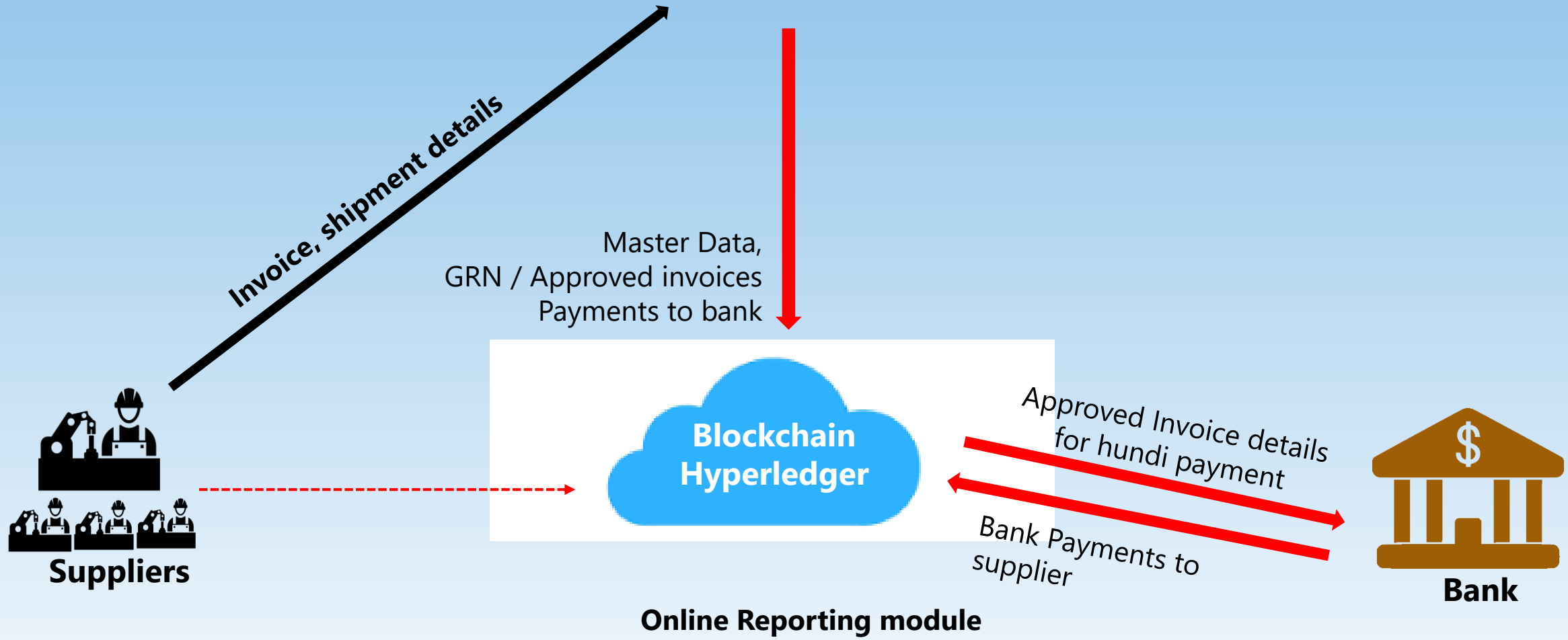
- Co raises the Blanket PO for the supplier to deliver required parts
- Supplier ships the parts and raises the invoice against the PO/Schedule
- Supplier sends the Hundi copy and invoices to AL finance
- Co validates invoice details with 3 way matched invoices from their ERP system.
- Co finance approves invoices for bill discounting by Bank and returns the approved copy of Hundi documents and invoice to the Supplier
- Supplier submits the hundi and approved invoice documents to the bank for payment (bill discounting).
- Bank releases the payment to supplier.
- Co releases the payment at the end of the credit period



## Hundi Discounting : Blockchain enabled “To Be” Process

- Supplier ships the parts and raises the invoice against the PO/Schedule
- Co updates the GRN and completes 3 way matching in the ERP.
  - Details updated in Blockchain through APIs
- Blockchain system notifies bank to discount and release payments for the approved invoices
- Bank releases payment to the supplier for approved invoices (no realtime integration with bank systems).
  - Bank Payment to supplier on discounted invoices updated in Blockchain
- Co will release payment to bank at the end of credit period for the bill discounted invoices.
  - Payment details updated in Blockchain

# Manufacturer



## Three key benefits of using BLOCKCHAIN / IoT



### **BUILD TRUST**

**Build trust  
between  
Parties and  
Devices**

**Reduce risk of  
collusion and  
tampering**



### **REDUCE COSTS**

**Reduce costs by  
removing  
overheads  
associated with  
middlemen and  
intermediaries**

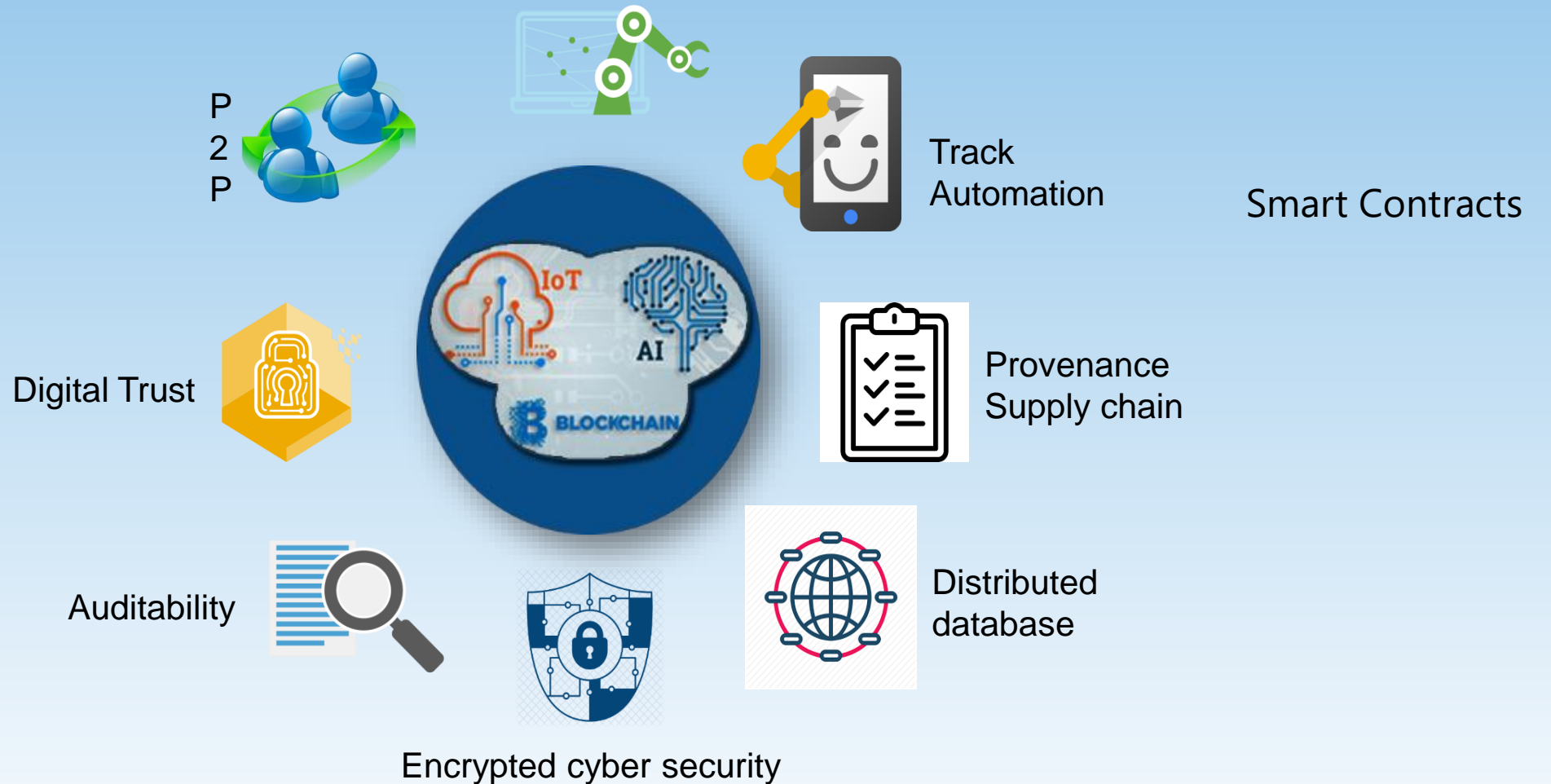


### **ACCELERATE TRANSACTIONS**

**Reduce settlement  
time from days to  
near instantaneous**

# BLOCKCHAIN – IoT - AI

Velocity blurred lines between physical & digital



## Technology Stacks:

Hyperledger – **QUARK, Michelin**

Language - **Go, Node.JS**

Database - **CouchDB, LevelDB**

Ethereum – **QUARK, Digital Identity, Talend**

Language - **Solidity, Node.JS**

Database - **MongoDB**

Server - **Geth**

# Benefits of working with Gemicorn

Function	Impact on
Mgmt time savings	Focus
Cut fixed costs	Profits
Eliminate variable costs	Profits
Conserve capital	Profits
Achieve scale	Growth
De-risking goals	Profits

- 24 x 7 operation - ( No need to fret on Sat/Sun ).
- Gemicorn takes responsibility for production allowing you to focus on your customers.
- Highly Scalable
- Further expansion to outsourcing and other technology landscape

**Thank You!**

India – Chennai  
[www.gemi-corn.com](http://www.gemi-corn.com)  
Australia – Adelaide, Melbourne  
[www.gemicorn.com.au](http://www.gemicorn.com.au)