What is a Blockchain?

A blockchain is a network of databases between stakeholders that record and share all transactions.

- **Database shared by participants**
- **Shared Ledger**
- **Trust**
- **Smart Contract**
- **Privacy**
- **Participants agree on transactions**
- **Data visible only to trusted participants**

Business rules of a written agreement
Current Situation

Too long to settle.
Too many disputes.
Too many people doing unnecessary work.
Blockchain Implications for the Industry

- Elimination of partner disputes
- Increased speed of payments
- Real time reporting to partners and regulators
- Reduced audit risk
- Lower costs
The Business Case for Royalty Ledger

• Eliminate up to 80% of the effort while increasing the speed of money exchange

• Effort per Month:
  • 30,387 individual royalty calculations
  • 5,459 invoices
  • 940 remittances
  • $1.8 MM of payments
  • 13 Accounting FTE’s for two days a month
What NAL Has Done With Blockchain

- Worked extensively developing the Oil & Gas platform with GuildOne since 2017
- First royalty transaction with Prairie Sky and ATB
- Building Smart Contracts with Royalty Owners
- Expecting to be transacting all freehold royalties by end of 2019
- Working on an internal blockchain to synchronize all internal data
NAL’s Next Target – A/R

- $6.5 MM in Accounts Receivable
- $1 MM in people costs
  - Eight Joint Venture Accountants
  - 75% of time spent dealing with disputes
  - 6,500 lines of monthly JIB disputes
The Future of Blockchain for Oil & Gas