

Chapter 6

- Business Networks
 - Describing business networks
 - Introducing participants and assets
 - Introducing transactions and events
 - Implementing a business network

Business Networks



Recognizing
purposeful
activities



Defining a
business network



A language for
business networks

Participants

Types of participants

- Individual
- Organizational
- System or device

Participants are agents

Participants and identity

Assets

Assets flow between participants

Tangible and intangible

Asset structures

Ownership

Asset life cycles

Transactions

Change – a
fundamental
concept

Definition
and instance

Implicit and
explicit

Importance
of contracts

Signatures

Transactions, cont'd



SMART CONTRACTS
FOR MULTI-PARTY
TRANSACTIONS



DIGITAL
TRANSACTION
PROCESSING



INITIATING
TRANSACTIONS



TRANSACTION
HISTORY

Transactions, cont'd



Transaction streams



Transactions that span separate business networks



Transaction history and asset states



Regulators and business networks

Events

Events
defined

Messages
carry event
notifications

Events and
transactions

External and
explicit
events

Events result
in actions

Loosely
coupled
design

Utility of
events

Implementing a Business Network

De-materialization

Blockchain benefits

- Business-to-business (B2B)
- Electronic Data Interchange (EDI)

Participant interaction

Accessing the business network with APIs

3-tier systems architecture

Summary

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