Figure 1: Example of the complexity in a typical copper mining value chain

Raw material/consumables inventory level
Mining operations (Open pit)
Smelting, casting, rolling operations
Raw material/consumables inventory level
Refining operations
Port operations
Customer

Stockpile copper ore, copper concentrate, cathodes
Smelters/cast houses
Copper rod wires
Refineries
Copper rod
Port yard management and vessel movement
Domestic customers
International customers

External suppliers
Explosives
Bulk fuel
Copper concentrate
Anode
Caustic
Lime
Copper concentrate

Source: Accenture