## How Blockchain will Impact Financial Management Software Systems



Photo Credit: DC Chain by Hayden flic.kr/p/dXHjr creativecommons.org/licenses/by/2.0/

#### David Haimes Cloud Enterprise Apps Development, Oracle

- Responsible for determining what our applications will look like in 3, 5 or more years
- Leading Oracle Applications Blockchain and Distributed Ledger Technology Initiatives
- Formerly managed Engineering Product for Oracle General Ledger & Intercompany products



#### ORACLE<sup>®</sup>

#### The Economist

Our guide to America's best colleges Myanmar's free-ish election Those ever-creative accountants America takes the fight to IS Coywolves: the new superpredator

OCTOBER 31ST-NOVEMBER 6TH 2015



Economist.com

How the technology behind bitcoin could change the world



"Simply put, the Blockchain is a machine for creating trust"





## Two Types of Blockchain

#### PERMISSIONLESS

- Bitcoin, Ethereum
- Anyone can join
- Expensive mining process to ensure trust



- Hyperledger, R3 Corda
- Network decides joining criteria



Bet Alberta Million (1) and a light Shirts

## How Blockchains Provide Trust



#### IMMUTABLE AND NON-REPUDIABLE

Shared, Distributed Ledgers

Trusted Single Source of Truth



SMART CONTRACTS

Business Rules Defined in Computer Code

Trusted Automation of Transactions ENCRYPTION AND DIGITAL SIGNING

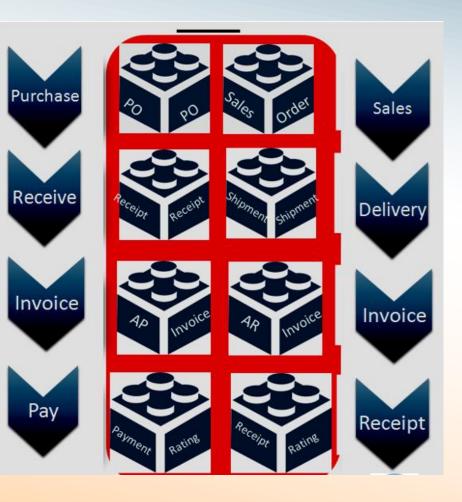
Security and confidentiality of data

Trusted provenance of transactions

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## Reduce Friction, Enable Micro Transactions









# How Do I Build the Network?



NEWT

Text 18/160 You are all alone.

10:0/20

## Three Layered Blockchain Networks

Blockchain

## Distributed Ledgers

- Consensus Models
- Digital Signature
- Smart Contracts
- Trusted Database

Distributed Applications

• IOT, dapps

**Applications** 

- Back Office (ERP, SCM)
- Analytics, AI/ML
- Consumer Apps

#### Business Network



## Distributed Governance

- Legal Agreements
- Onboarding Rules
- Arbitration
- Revenue Models

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## Who do we trust to govern the network?

What trust do enterprises need?

# Questions ?

