

Banking Evolution And Mathematical Foundation

May 2011

- 1. Banking evolved from GL way back in 1494.**
- 2. Has evolved over time – now, the Digital Economy (e.g. China).**
- 3. Cloud Computing represents a ‘Subset’ of the Digital Economy.**
- 4. Silverlake researches in Mathematical ‘Primitives’.**
- 5. New model of ‘Software Quality’**

The above summarizes the evolution of Banking, Silverlake, and future research.

One key characteristic of 'New Banking' is its Complexity.

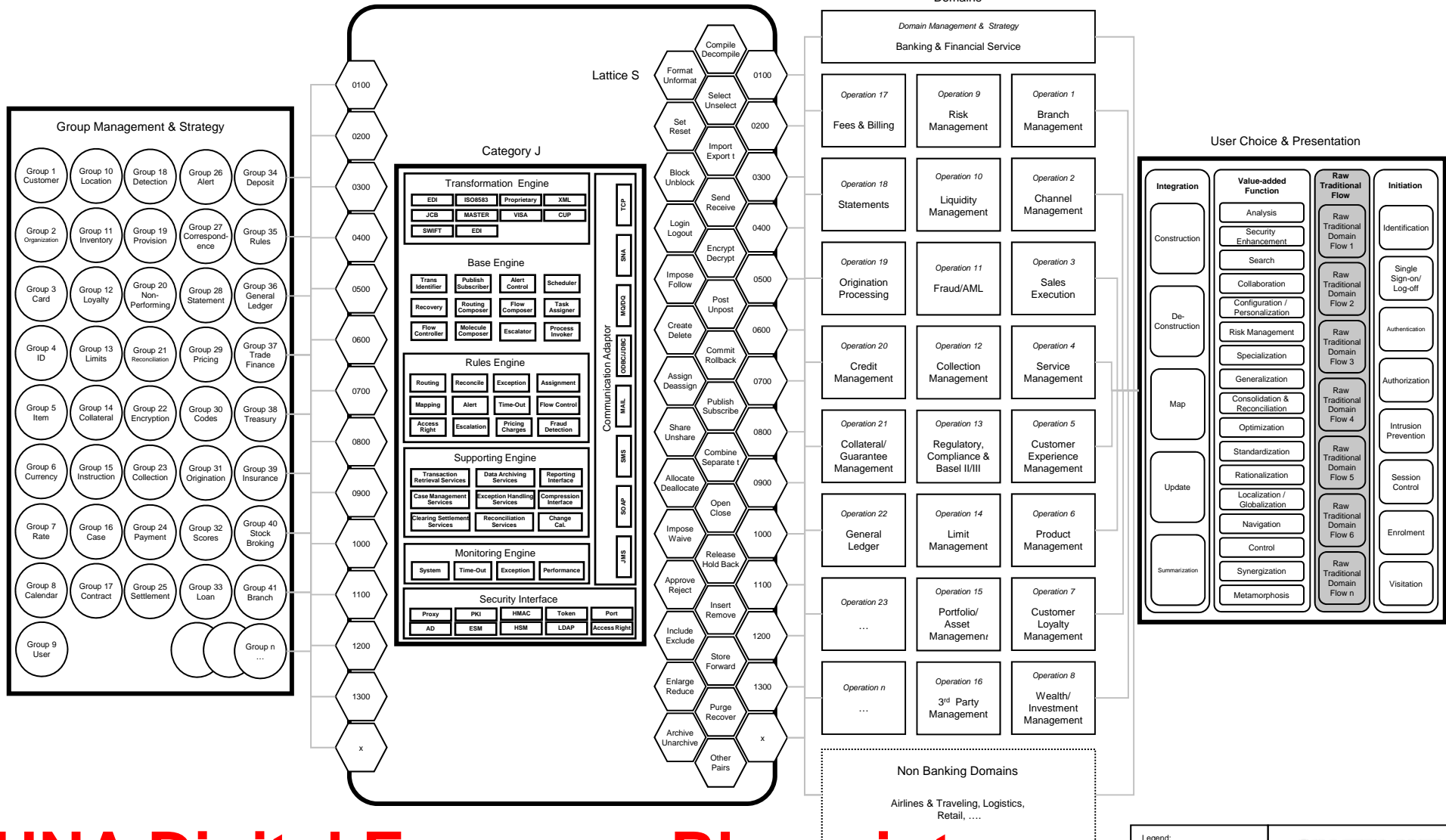
In China, non Banks are encroaching into the territory of 'Finance' with a myriad of fascinating 'New Ideas'.

For e.g. HNA Group

Complexity:

I define Complexity as being requirements or domain subjects which exceed what can be understood, read or documented by human beings, whether as an individual or as a team.

Digital Economy-Cloud Computing Blueprint



HNA Digital Economy Blueprint

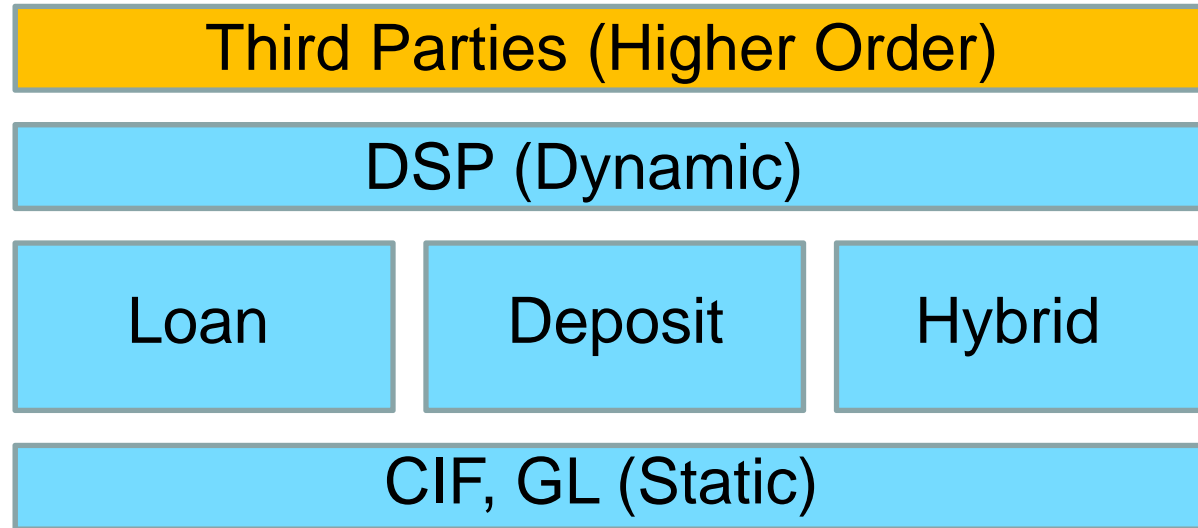
Legend:

- Digital Economy
- Traditional Economy

SILVERLAKE

Date: 28/9/2010 Version: 1.6

How It Evolved



- 1. Committed to Symmetry. This took 15 years**
- 2. Persisted with AS/400 in spite of market hypes. Commitment is about not changing our minds in the face of constantly changing market hypes.**

Third Parties (Higher Order)

DSP (Dynamic)

Product Construction

Loan

Third Parties

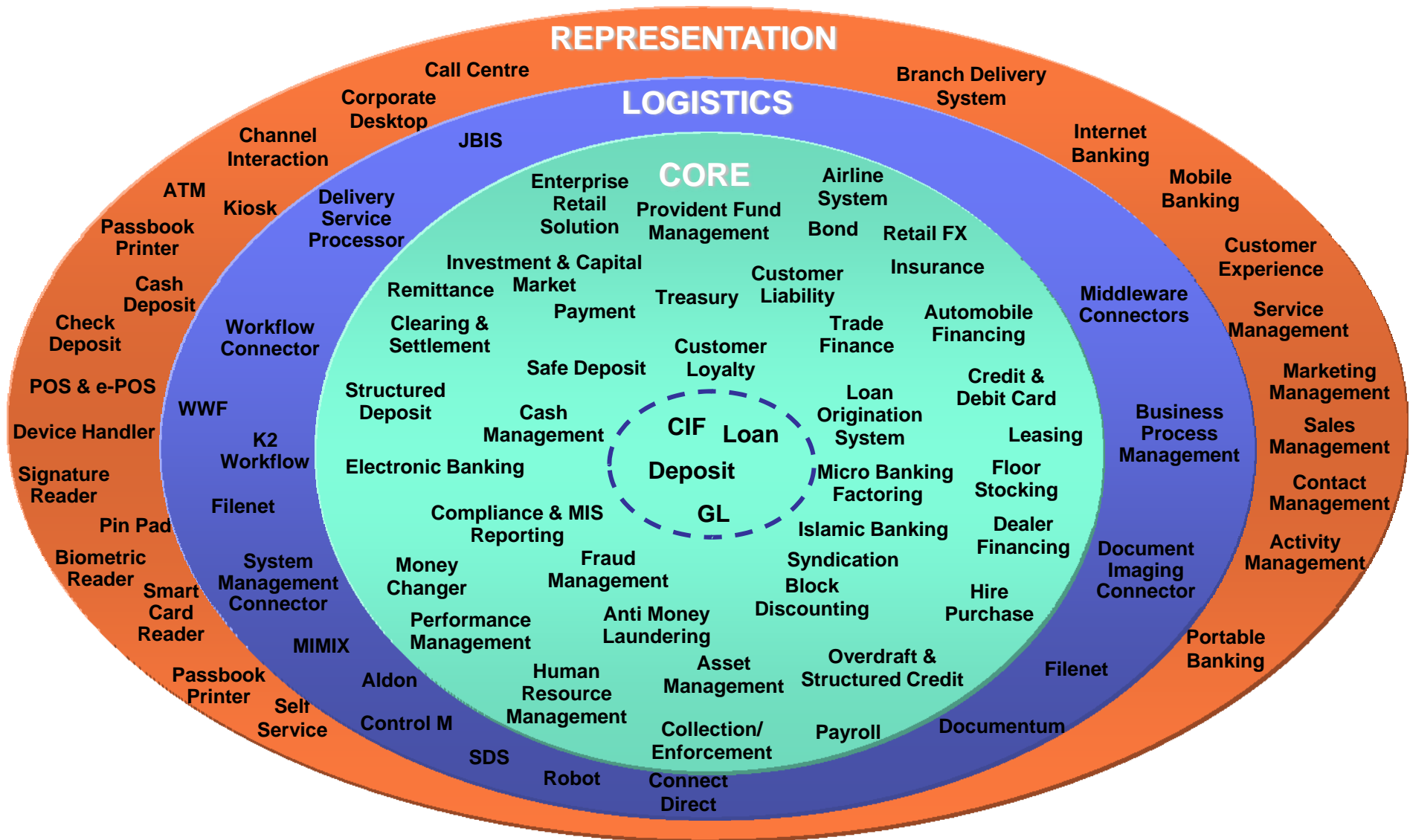
Deposit

Hybrid

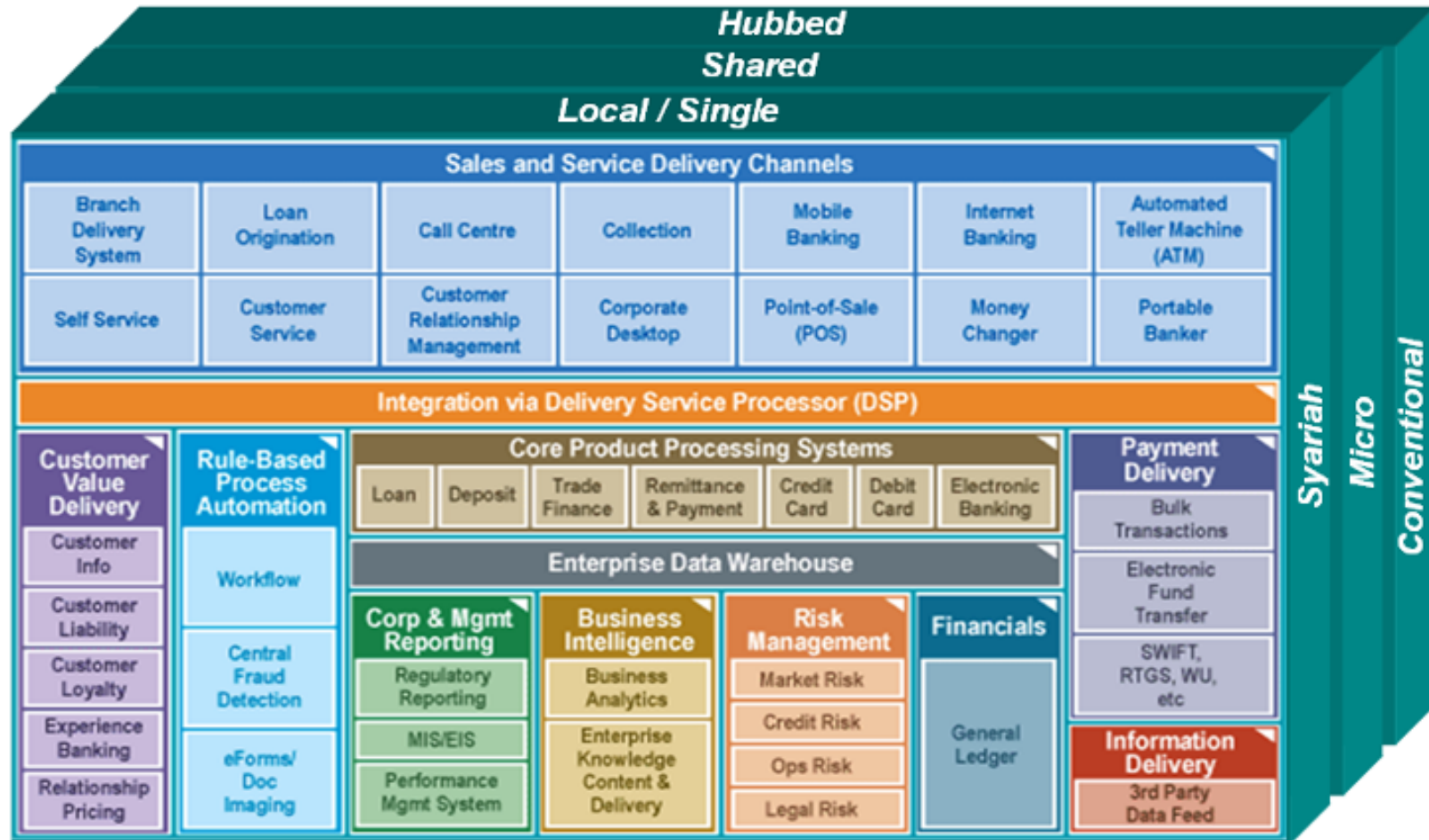
CIF, GL (Static)

Advance Symmetry

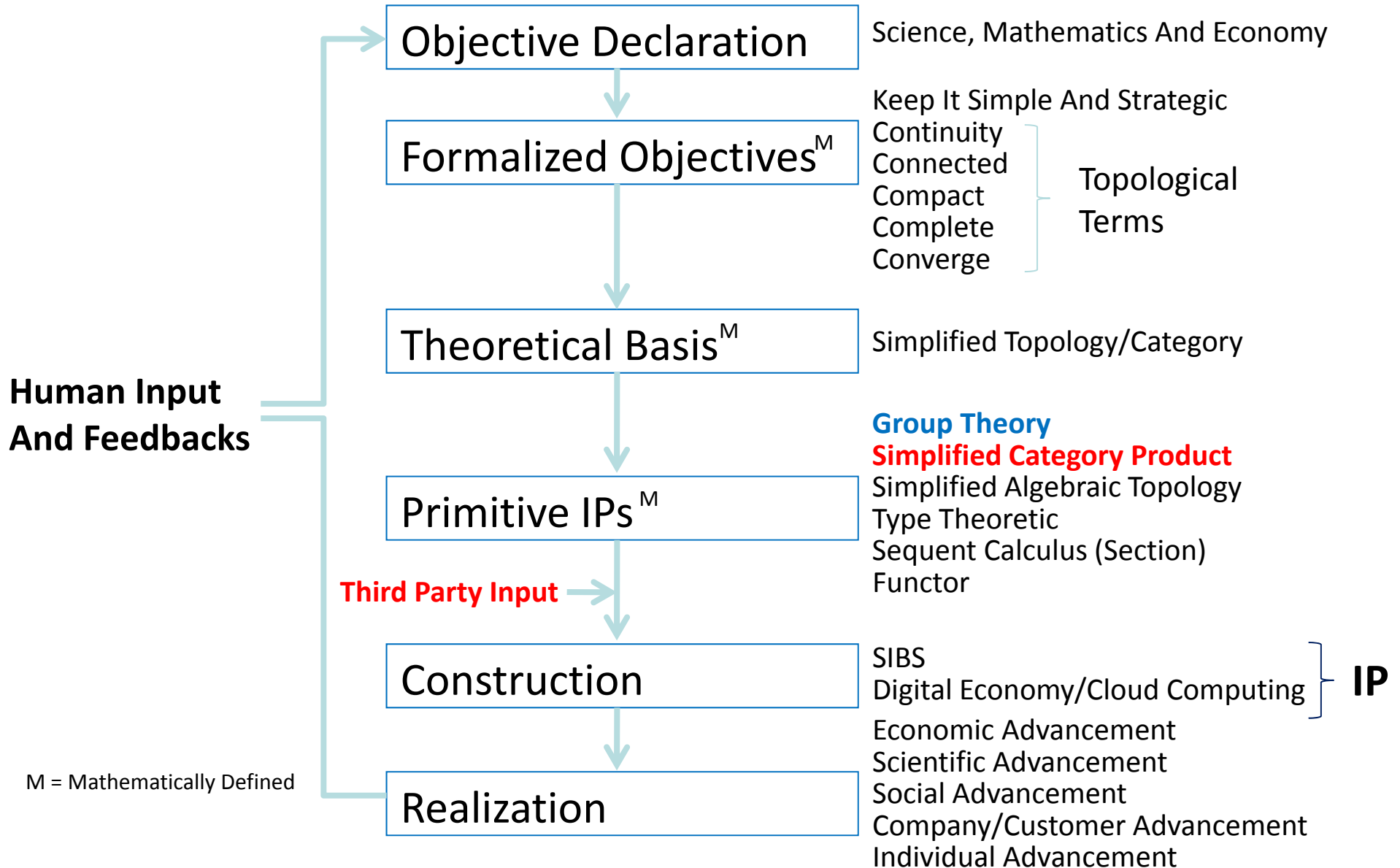
2006 Mandiri Bank: Complexity



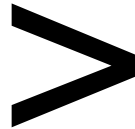
Comprehensive, Matured, Proven & E2E ~ For Today & Future



The Only Solution To Complexity Is Mathematics



Connectedness
Compactness
Completeness
Convergence
Continuous

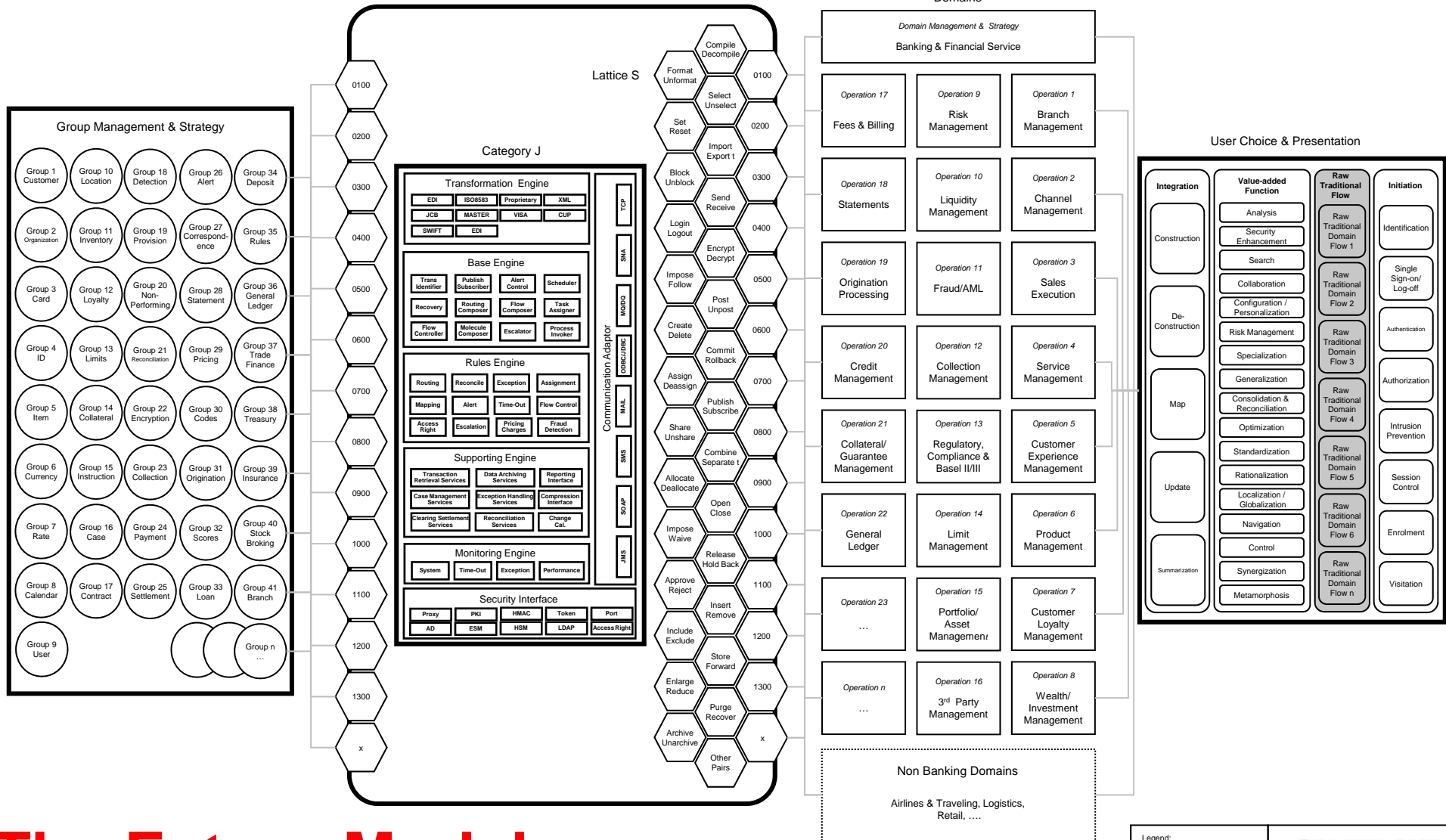


Predictability
Correctness
Reliability
Integrity
Usability
Efficiency
Maintainability
Testability
Interoperability
Flexibility
Reusability
Portability
Clarity
Modifiability
Document-able
Resilience
Understandability
Validity
Functionality
Generality
Economy
Continuous Improvement
Culture Invariance
Etc



ISO9126 (1993)
Boehm (1978)
McCall (1977)
NASA Quality Standard

Digital Economy-Cloud Computing Blueprint



The Future Model

Legend:

- Digital Economy
- Traditional Economy

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