

KU XBRL Conference

On how to move
widespread XBRL usage
upstream to the point of first recording

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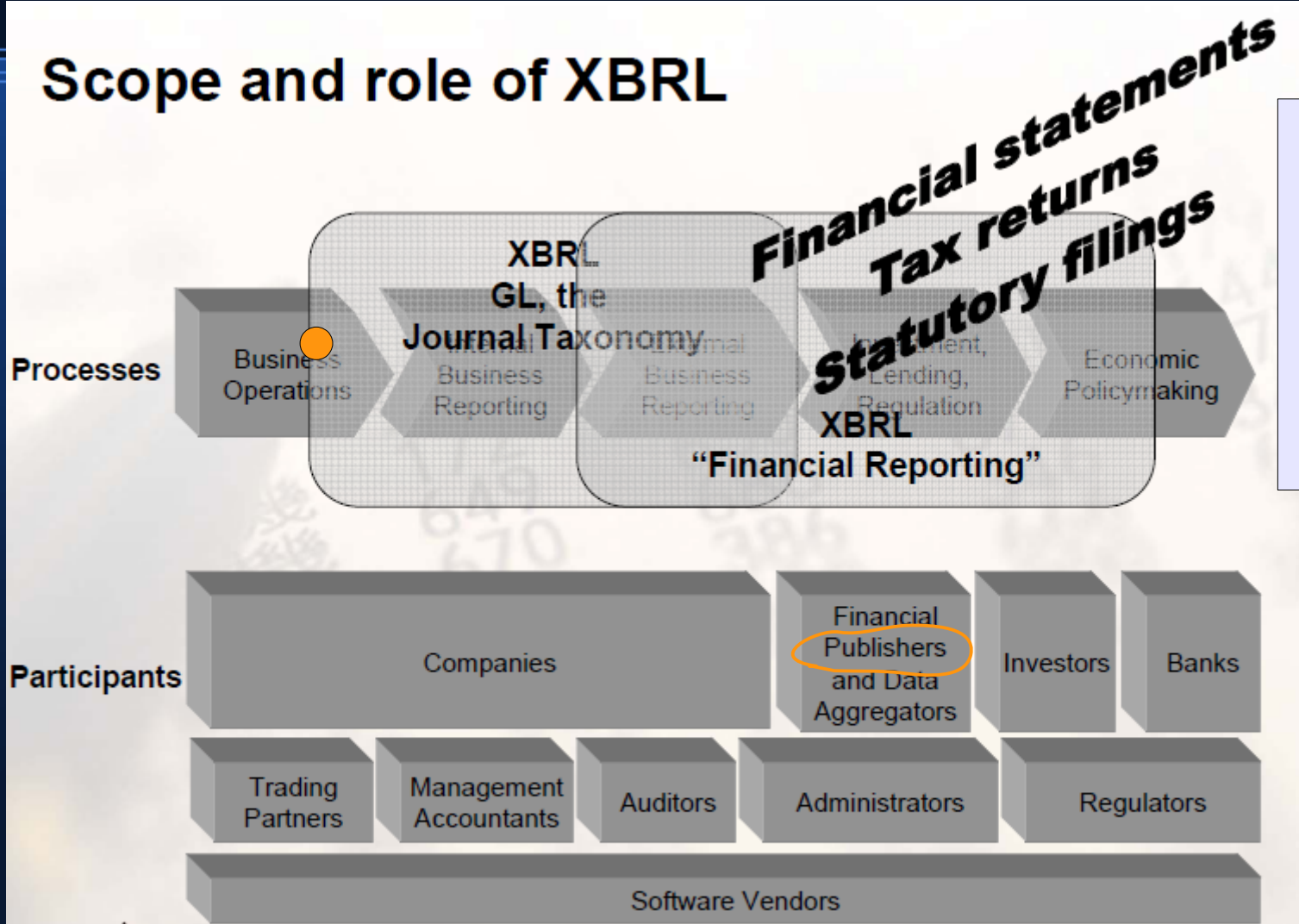
On how to move widespread XBRL usage upstream



- Connectivity perspective
- Transferable FpML mechanisms
- Industry packs & positioning

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Scope and role of XBRL

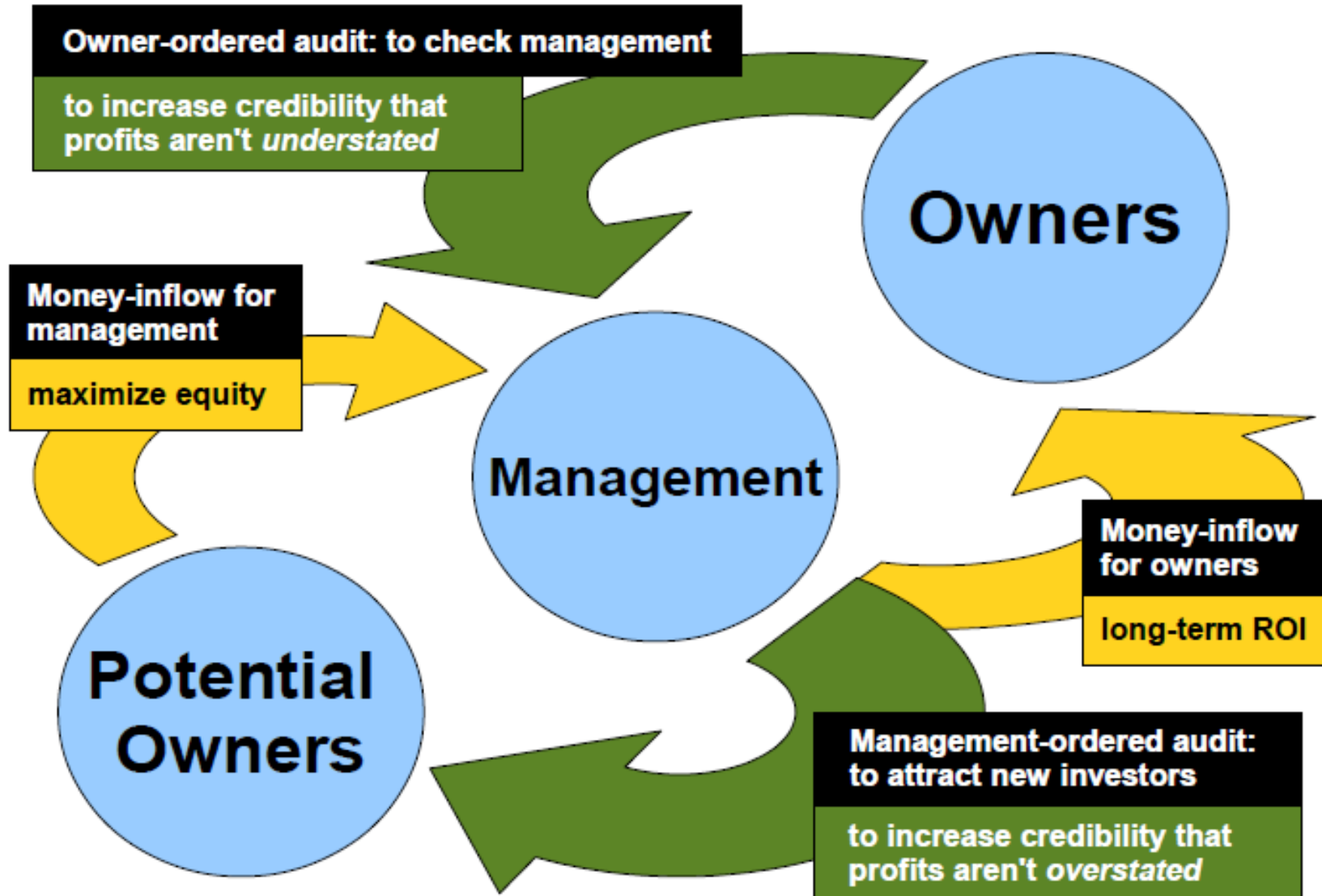


“XBRL in Tax & Government”, Terry Lutes, IRS & Eric E. Cohen, webinar 2005, xbrl.org, GL Taxonomy



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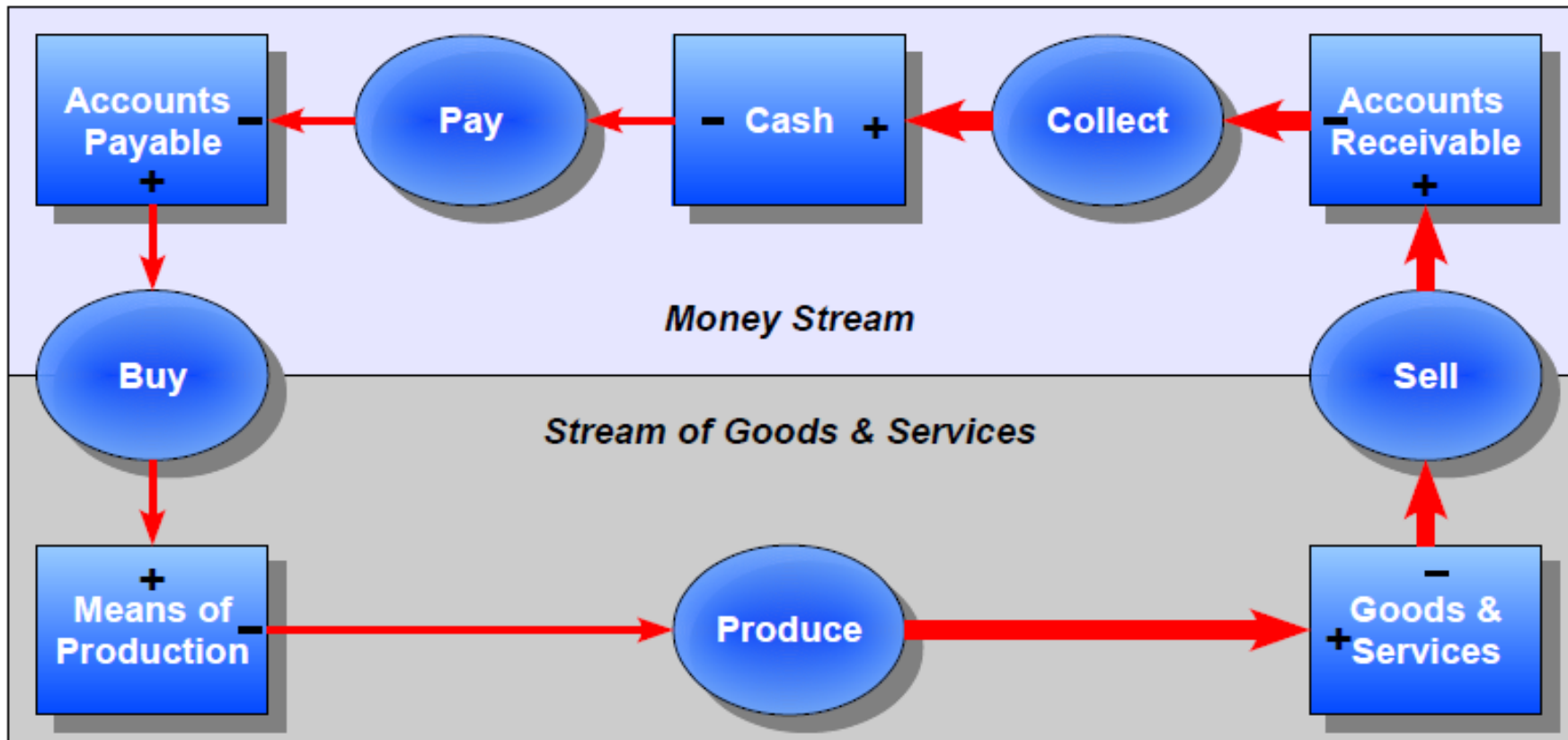
Owner-ordered & Management-ordered Auditing



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Integrated Owner-ordered & Management-ordered Audit Approach

Is this integrated approach somewhere recognized, proven or implemented?



Capturing “understanding the client's business” in a top-cycle model, originated in UK & Germany, matured in Netherlands in 1930s-1990s

CLASSIFICATION			EXAMPLES	
organizations with a dominant flow of own goods	organizations without a technical transformation process	trade organizations delivering mainly to other industries	wholesalers, importers, exporters	
		trade organizations delivering mainly to final consumers	shops, retailers	
	industrial organizations	industrial organizations with homogeneous mass production	(flowingly) rotating homogeneous mass production	gas-works, power stations, sugar-factories, oil refineries, paper-mills
			(intermittently) parcelling homogeneous mass production	brick-works, breweries, tanneries, lime-kilns, wire-drawing mills
		industrial organizations with heterogeneous mass production	singular heterogeneous mass production	glass-works, potteries, wall-paper factories, preserving factories
			compound heterogeneous mass production	factories for: shoes, ready-made clothing, audio devices, bicycles, cars
		industrial organizations with (serial) piece production	(unique) piece production	cloth tailoring, house building contractors, shipyards, engineering works
			serial piece production	builders of: sisterships, ship motors, railroad passenger cars
	agrarian and extractive organizations			agriculture, animal husbandry, horticulture, forestry, mining industry, fishing industry
	organizations producing for the market	service organizations	service organizations with flow of goods	some flow of goods owned by the organization
flow of goods owned by others				auctioneers, laundries, dye-works, repair-works, transporters, store-houses (goods)
delivery of goods via fixed pipes or wires (is: outflow)			gas, electricity and water suppliers, telephone exploiters, radio and television broadcasters,	
service organizations offering space-time capacity			specific reservation of space-time capacity	house exploiters, hospitals, hotels, storehouses (see also above), transporters of passengers over relatively long distance (e.g. aviation, shipping)
			unspecific reservation of space-time capacity (via quasi-goods, e.g. tickets)	entertainment providers, swimming pools, theaters, transporters of passengers over relatively short distance (e.g. train, bus, taxi-cab)
other service organizations and professions (time capacity / number of performed tasks)			professional services, cleanup services	
financial institutions		banks		general banks, savings banks, mortgage banks
		special finance institutions		venture capital companies, investment companies (trusts)
		intermediates in stock exchange		stockbrokers
		insurance organizations		life insurance and indemnity insurance companies
organizations producing (and/or offering services) directly for their members, i.e. without mediation of the market	governmental agencies and public corporate bodies (as excluded above)		government (central, provincial, municipal), public corporate bodies (possibly belonging to organizations which produce for the market)	
	private corporate bodies (as excluded above)		foundations, societies, religious communities	

Typology of top-cycles
-
Integrated owner-ordered & management-ordered auditing,
Starreveld et al.

Three example top-cycle models, represented as audit equation sets, by Frielink et al.

Corresponds to equation-based & assertion-based auditing, as introduced by Leslie et al.

FIRST LETTER	SECOND LETTER
A = Articles in quantities (merchandise or finished product)	a = delivery or depreciation
B = Extraordinary income (i.e. not due to turnover)	b = opening balance
C = Creditors	c = via creditors
D = Debtors	e = closing balance
F = Financial resources	i = purchase or cost prices
G = Cash	o = receipts
I = Investments (in durable production means)	t = attributed, allocated or imputed
K = Sundry costs	u = expenditures
L = Salaries (and other labour costs)	v = sales price
P = Prices	(Notice, r and x are dropped here.)
T = Value-added tax (VAT)	
V = Raw material in quantities (including auxiliary material and half-finished articles)	
W = Profit or gross profit	

Owner-ordered audit direction: equation parameters in bold face on understatement, in regular font on overstatement

WHOLESALE TRADING ENTERPRISE, ELEMENTARY MODEL - § 5.1.211

(7) Debtors	Db + Aa × Pv + Tv - De → Do
(6) Sales	Aa × Pi + W → Aa × Pv
(3) Articles	Ab × Pi + Ao × Pi - Ae × Pi → Aa × Pi
(2) Creditors	Cu - Cb + Ce - Ti → Ao × Pi
(1) Cash	Gb + Do - Tu - Ge → Cu
(8) VAT	Tb + Tv - Ti - Tu → Te

WHOLESALE TRADING ENTERPRISE, EXTENDED MODEL - § 5.1.303

(7) Debtors	Db + Aa × Pv + Tv - De → Do
(6) Sales	Aa × Pi + W → Aa × Pv
(4) Durable production means	Ib + Iu + Ic - Ie → Ia
(3) Articles	Ab × Pi + Ao × Pi - Ae × Pi → Aa × Pi
(2) Creditors	Cu - Cb - Ti - Ic - Kc - Tc + Ce → Ao × Pi
(1) Cash	Gb + Do + Fo + Bo - Iu - Ku - Lu - Tu - Fu - Ge → Cu
(8) VAT	Tb + Tv - Tu - Tc - Ti → Te
(9) Financial resources	Fu + Wu - Fb - We + Fe → Fo

Not included: Accruals, Deferrals, Provisions and Group company related items.

PRODUCTION ENTERPRISE MODEL - § 4.3.133

(7) Debtors	Db + Aa × Pv - De → Do
(6) Finished articles	Ab × Pi + Ao × Pi - Ae × Pi + W → Aa × Pv
(5) Production	Va × Pi + Lt + It + Kt → Ao × Pi
(4) Durable production means	Ib + Iu + Ic - Ie → Ia
(3) Raw material	Vb × Pi + Vo × Pi - Ve × Pi → Va × Pi
(2) Creditors	Cu - Cb - Ic - Kc + Ce → Vo × Pi
(1) Cash	Gb + Do + Bo - Iu - Ku - Lu - Ge → Cu

Not included: Accruals, Deferrals, Provisions, Group company related items, Value-added tax, Financial resources and position Work in progress.

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AUDIT EQUATION SET FOR FRANCHISOR ORDERED AUDITING - Frielink et al, §5.1.413

- (1S) Cash at franchisees **SGb + SAa×Pv - SGe → SGu**
- (3S) Goods at franchisees **SAb×Pv + SAo×Pv - SAe×Pv → SAa×Pv**
- (5H) Permanence sales prices **HAa×Pi + SAo×Pi + Wr + Tr → SAo×Pv**
- (3H) Goods at central stock **HAb×Pi + HAo×Pi - HAe×Pi → HAa×Pi**
- (2H) Accounts Payable **Cu - Cb + Ce - HAo×Pi - Ti → SAo×Pi**
- (1H) Cash at corporate **HGb + SGu - Tu - HGe → Cu**
- (8H) Value Added Tax **Tb + Tr - Tx - Ti - Tu → Te**
- (9H) Profit **Wr - Wx → We**

Restricted to: cash-goods-cash top cycle

Parameters with two capitals:
first capital is either 'H' for headquarters,
or 'S' for store

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SIKS Coney/ACL ZeeZor ComputationalAuditing.com

Owner-ordered Auditing Symposium

with: Limperg operational, Starreveld online, ...

key note:

*Dutch Internal Revenue Service
franchise project*

Gatineau, Quebec, Canada
September 27-28, 2013

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- Publishers are stepping in:
 - RR Donnelley
 - acquired Edgar Online, August 2012
 - acquired UB Matrix, June 2010
 - Wolters-Kluwer
 - acquired TwinField, June 2011
 - Others: online educational materials, “flight simulator setting”, MOOC

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- **FpML:** Financial product Markup Language
- **Digital channel for nexus micro-macro, with 2-way direction:**
Limperg, Carmichael & PCAOB blueprint
- **Macro level:** Bookstaber indicators for systemic risk -
leverage, crowding & market linkages
- **Meso level:** financial institution, individually or as group
- **Micro level:**
 - **UPI - Unique Product Identifier**
 - **LEI - Legal Entity Identifier**
 - **UTI - Unique Trade Identifier**

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Industry pack, in builder & player architecture (Deloitte):

- **XBRL Global Ledger taxonomy as base**
 - Audit equation set is a tagged matrix (Nehmer):
 - Tagged account vector (row vector) \times
 - Tagged transaction vector (column vector)
- **Hosting close-to-real-time tagging & checking**
 - Audit driven accounting: logging locations coverage
 - Tagging a stream of transactions
 - Checking tagged stream versus audit equation set

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- Prefab industry packs
- Digital infrastructure, with **open** up- & download facilities
- Market verticals in:
 - **Franchise industry**
 - Dealer networks
 - Receiving end of royalties, in broad sense, incl. tax
- Getting it right at entry level:
 - XBRL GL tagging at the source, **close-to-real-time**
 - E.g., Point Of Sales systems: new, attractive dynamics

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