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RUTGERS ACCOUNTING WEB



Business Case for the Integrated Owner-ordered & Management-ordered Audit Approach

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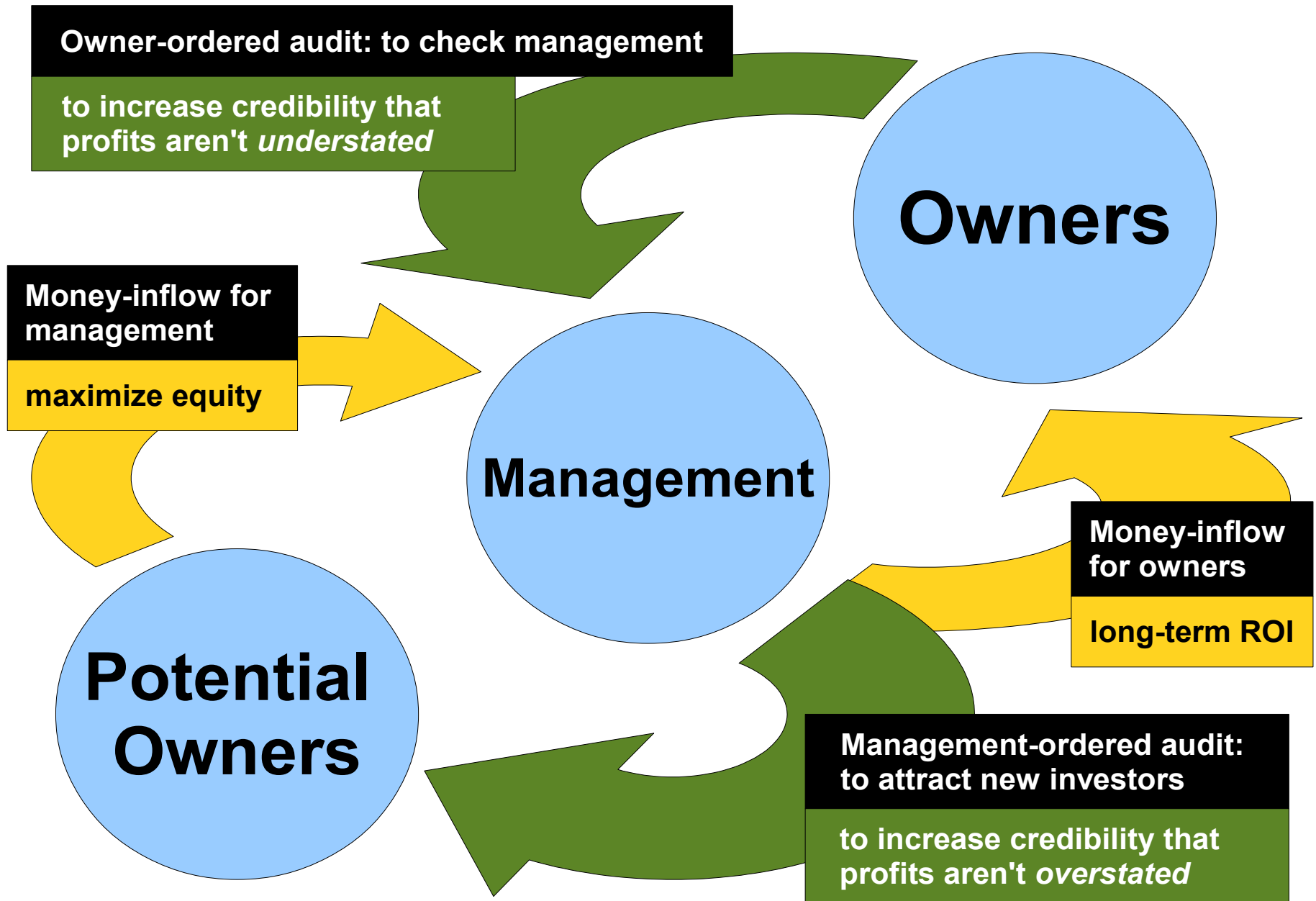
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Business Case for the Integrated Owner-ordered & Management-ordered Audit Approach

- **Auditing in a close-to-real-time setting by the one who is at the receiving end of royalties** (in a broad sense)
 - on hardware, software, franchised services or a dealer network
 - applies to the internal audit of every IT firm
- Focus: completeness of stated profits
- Owner-oriented audit services do exist, however...
- Not a niche: 20-30% of economy + Tax Office efficiency

Owner-ordered & Management-ordered Auditing



The Ownership Imperative: Ownership Revisited

"Investors have reduced their time horizons; with owners all but gone, there's no countervailing leadership."

Twenty-five years ago, the average holding time for a stock was seven years; now it's seven months.

In today's market, 80% of daily trades are made by investors who hold the stock less than seven seconds.

The guy who holds your stock for seven seconds doesn't care about your strategy, much less sustainability."

Charles Sirois, *The Ownership Imperative*, Listed, 2012

The Ownership Imperative:

Where can we perceive true long-term ownership?

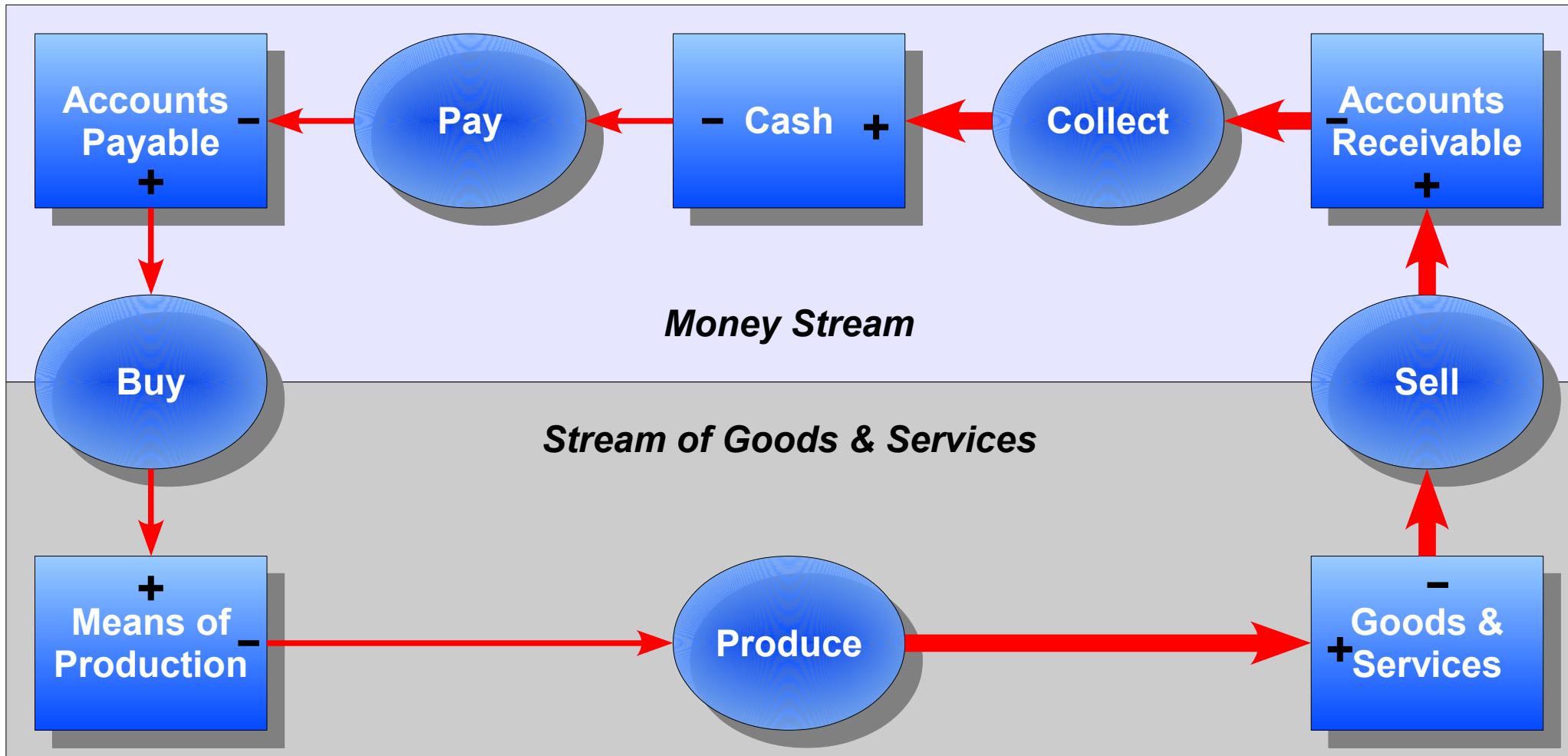
The one who is at the receiving end of royalties:

- Franchisor ↔ franchisee
- Being in charge of a dealer network ↔ dealers
- Designer ↔ facilities that produce according to design

You, as a leading internal auditor in an IT firm, how do you assure completeness of profits? What is your approach?

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

A sketch of the Audit Process in the model-based integrated owner- & management-ordered approach

Key steps in audit planning and performance are based on “understanding the client's business”, as captured and documented in a **top-cycle production model**:

1. Evaluate **internal control** over the identified top-cycle (especially segregation of duties over logging locations)
2. Derive **accounting equations** from the top-cycle model
3. Associate **risk driven audit assertions** to equation parameters
4. Configure audit task scripts which **relate**
 - **sell side and buy side transaction volumes**, to
 - **generated gross profits**, per product type
5. Perform audit tasks and collect resulting **findings**

Model-based auditing

closed-loop model: full equation-based & assertion-based approach
model is not instead of evidence, but as framework for evidence:
what evidence to find, how to find it, and how to use it

Accounts Receivable [+]: AccRec [begin] + ps × Sell - AccRec [end] → CollCashRcpt

Inventory [+]: Inv [begin] + Buy - Inv [end] → Sell

Accounts Payable [-]: AccPay [end] + PayCashDisb - AccPay [begin] → pb × Buy

Cash [+]: Cash [begin] + CollCashRcpt - Cash [end] → PayCashDisb

The equations apply to the full array of products

coefficient ps : sell side prices

coefficient pb : buy side prices

*with ps > pb , and pb including inside costs for production and
keeping inventory: Cost of Goods Sold (COGS)*

*Audit assertions are indicated by underlining and overlining,
for understatement and overstatement, respectively*

Scalability of ~~models~~ approach

Inventory [+]: Inv [begin] + Buy - Inv [end] → Sell

To capture the quintessence of “Understanding the client's business” the auditor, in this approach, only needs a few smartly identified key goods on the buy side, which have a robust norm ratio to goods and services on the sell side, to close the top-cycle loop.

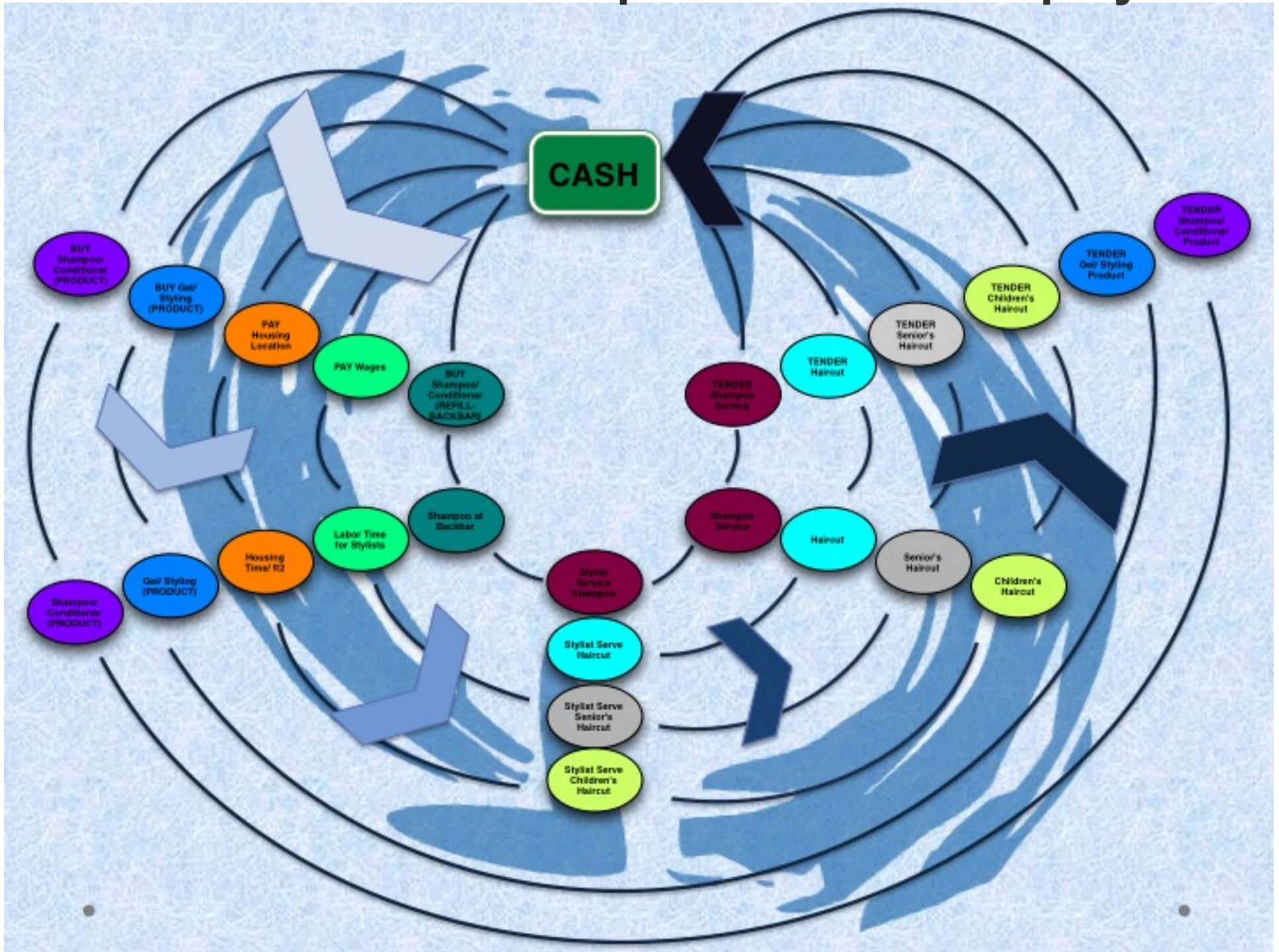
Only for these goods the inventory equation has to be checked.

First the auditor shows that the inventory equation holds in units and transaction volumes. Then brings in money valuation and checking on the gross margin, per product type (**ps – pb**).

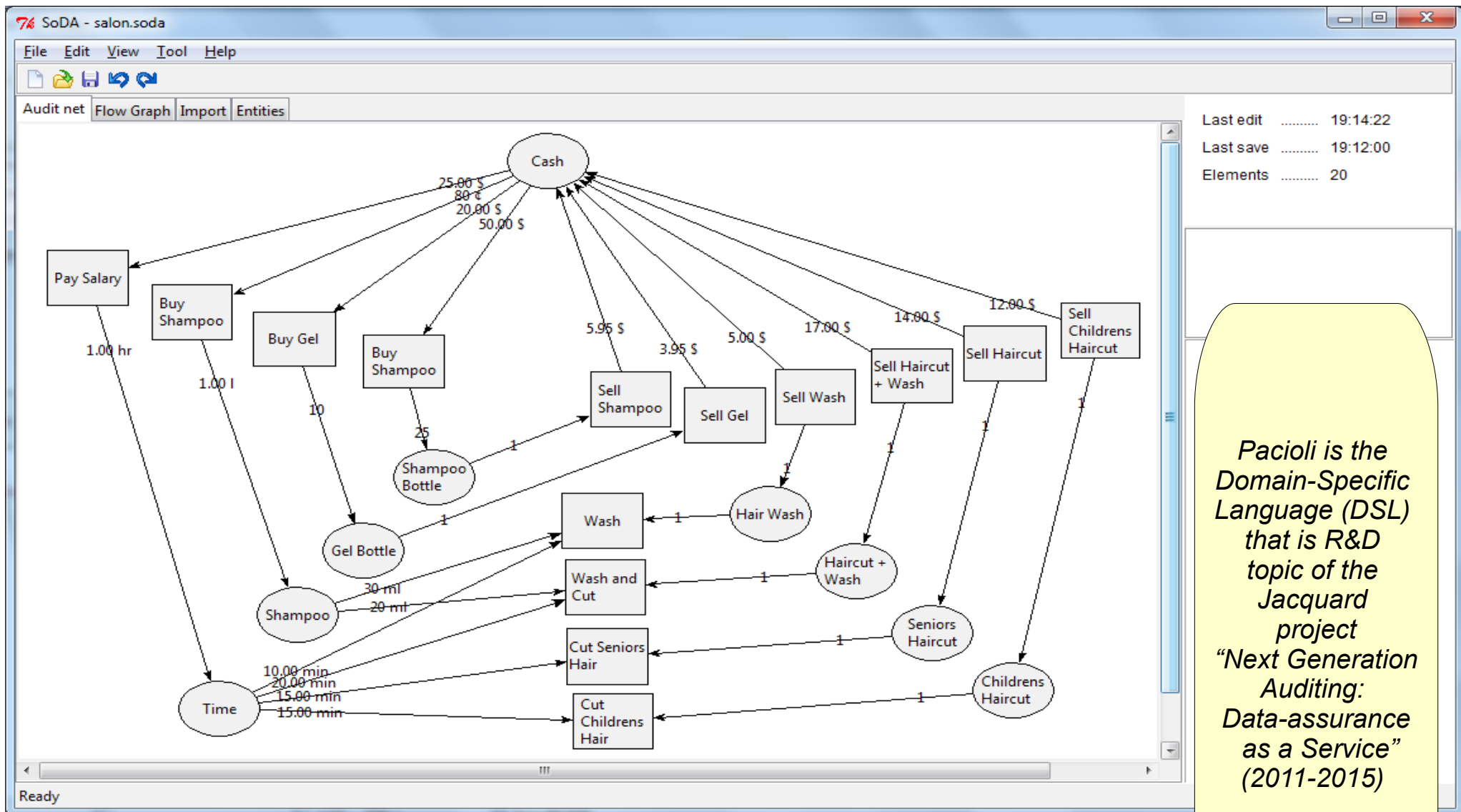
This shows that the approach doesn't need a full-blown model
The approach is independent of auditee's size or complexity
The model 'only' captures “buy side - sell side” connectivity

Please realise that the approach has been used over the 1950s, 1960s, 1970s & 1980s for diverse multinational companies like: Shell oil, Unilever manufacturing, Heineken breweries, ING banking, Ahold retail, Philips manufacturing, Hoogovens steel industry, etc.

Sketch of the Great Clips® Franchisee Top-cycle



Great Clips® Franchisee Top-cycle in Pacioli Editor



Pacioli is the Domain-Specific Language (DSL) that is R&D topic of the Jacquard project "Next Generation Auditing: Data-assurance as a Service" (2011-2015)

The business case: Franchisor-ordered Auditing

The following three talks introduce the business case for the integrated franchisor-ordered and franchisee-ordered audit.

This business case shows a special class of the integrated owner-ordered and management-ordered audit approach, as it proved itself on a national level (Netherlands).

The business case for the franchisor is easily extended to apply to the one being in charge of a dealer network, or more generically, to the one that's at the receiving end of royalties (in a broad sense).

In particular, franchisor-ordered auditing showcases an organizational arrangement that might prove quite valuable for reform of financial institutions (countervailing management's moral hazard for 'gaming the system' & tax-payer's bail-outs).

The business case: Franchisor-ordered Auditing



Rob Nehmer:

- Elaborates on how to extend the familiar assertion based audit approach to coincide with top-cycle based auditing
- Indicates how this unified approach fits in PCAOB directives (Carmichael & Limperg) and International Standards on Auditing (ISA's)
- Recognizes integrated equation-based & assertion-based auditing (as introduced by Leslie, Aldersley, Cockburn & Reiter, and central in the top-cycle auditing tradition), as common denominator for general unification & anchoring

The business case: Franchisor-ordered Auditing



Chris Nedza:

- Illustrates franchisee's underreporting by anecdotes
- Presents a live demo of a close-to-real-time franchisor-franchisee relationship
- Shows a real-life pilot case with Jacquard project “Next Generation Auditing: Data-assurance as a Service”
- Elaborates on how a franchisor-made continuous audit model pays itself back, for both franchisor & franchisees

- ***Wanted: identify a Rutgers-lead R&D project, with IT industry internal auditors and ZeeZor as project partners, to boost continuous franchisor-ordered auditing***

The business case: Franchisor-ordered Auditing



Pieter de Kok:

- Shows real-life underreporting cases:
 - Temp Agency – Coney Audit Client
 - Super de Boer – Dutch Internal Revenue Services
- Discusses how retail can nip fake stores in the bud – starts by connecting BUY and SELL side
- Elaborates on Coney audit approach applied to:
 - client's software supply chain, using social media
 - car import, using public Big Data (Dutch government)
 - Continuous Monitoring in the Insurance Chain: experts, brokers, etc. using process mining