

2. Managing with Disaggregate Information

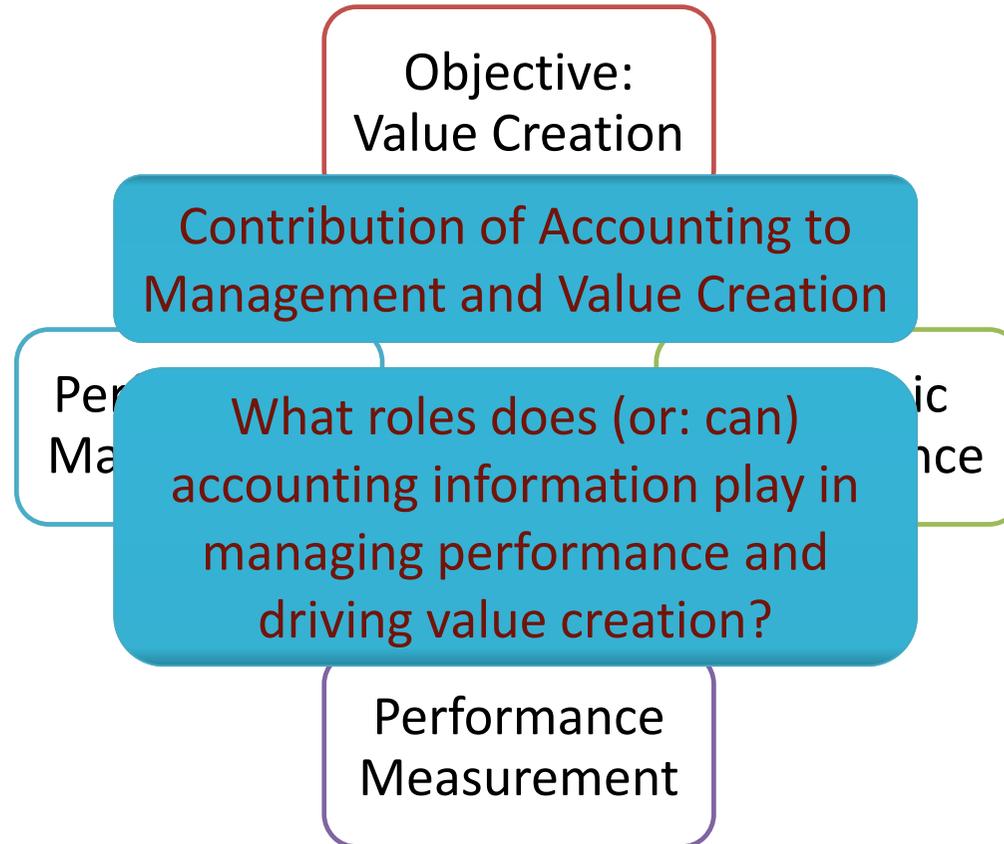
Industrial Grinders: Agenda

1. Context & Objective
2. Review: Salem Telephone
3. Industrial Grinders NV
4. Perspectives: Income Statement
5. Summary

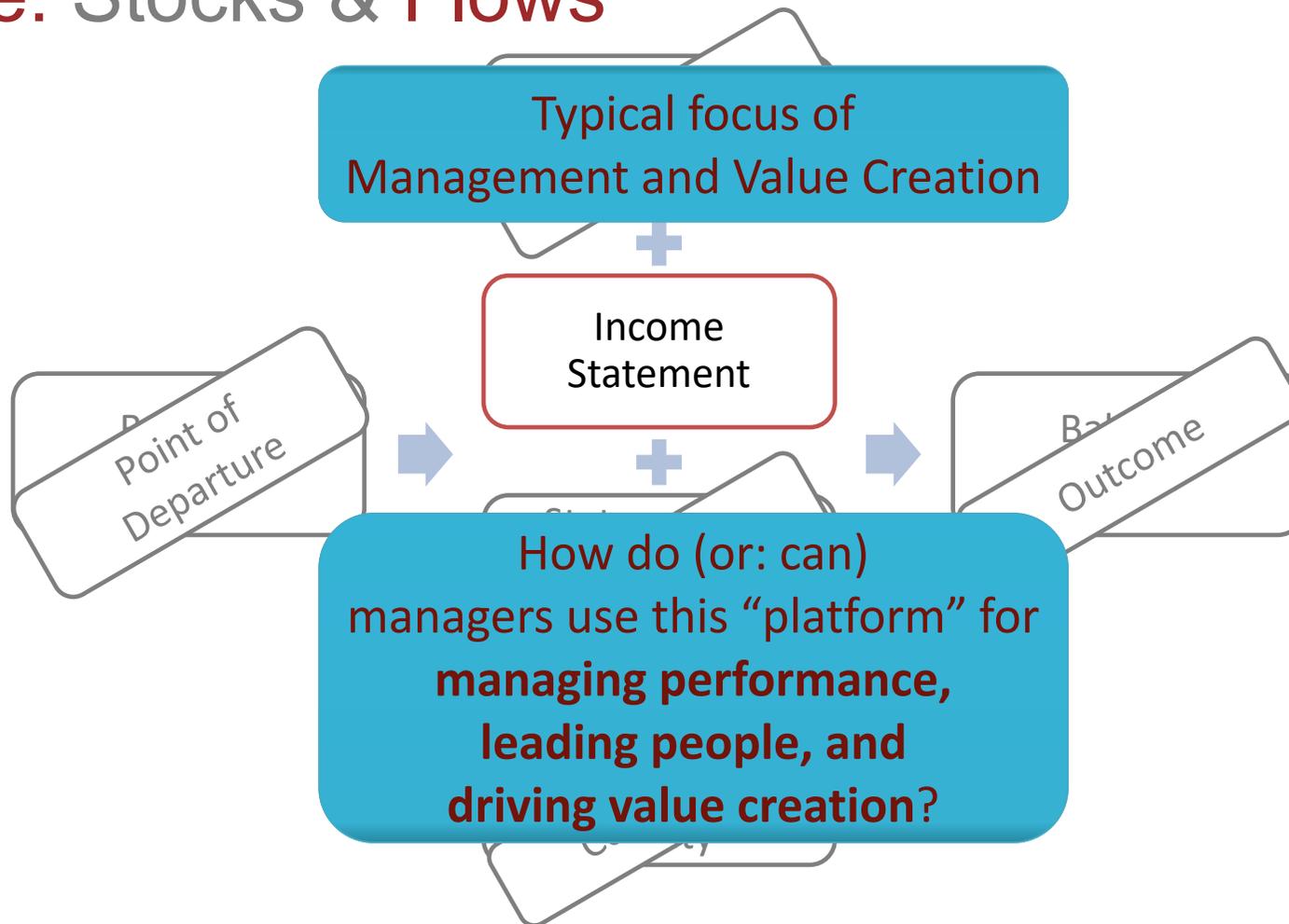
Industrial Grinders: Agenda

1. Context & Objective

Value Creation & Accounting



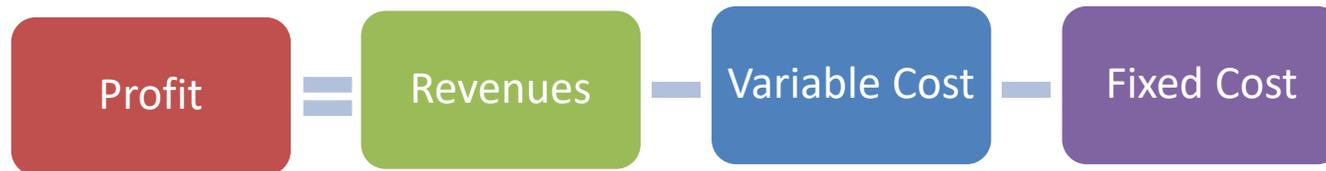
Value: Stocks & Flows



Industrial Grinders: Agenda

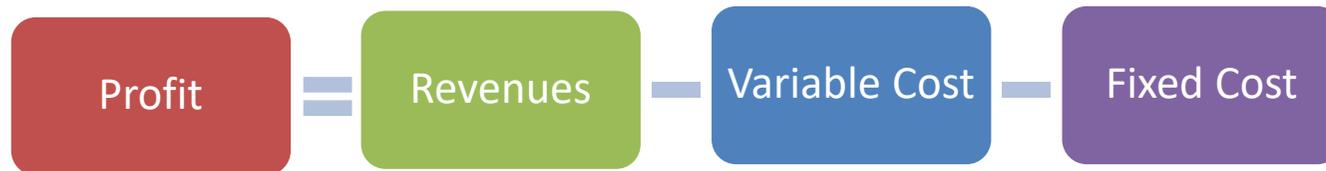
1. Context & Objective
2. Review: Salem Telephone

Cost Behavior



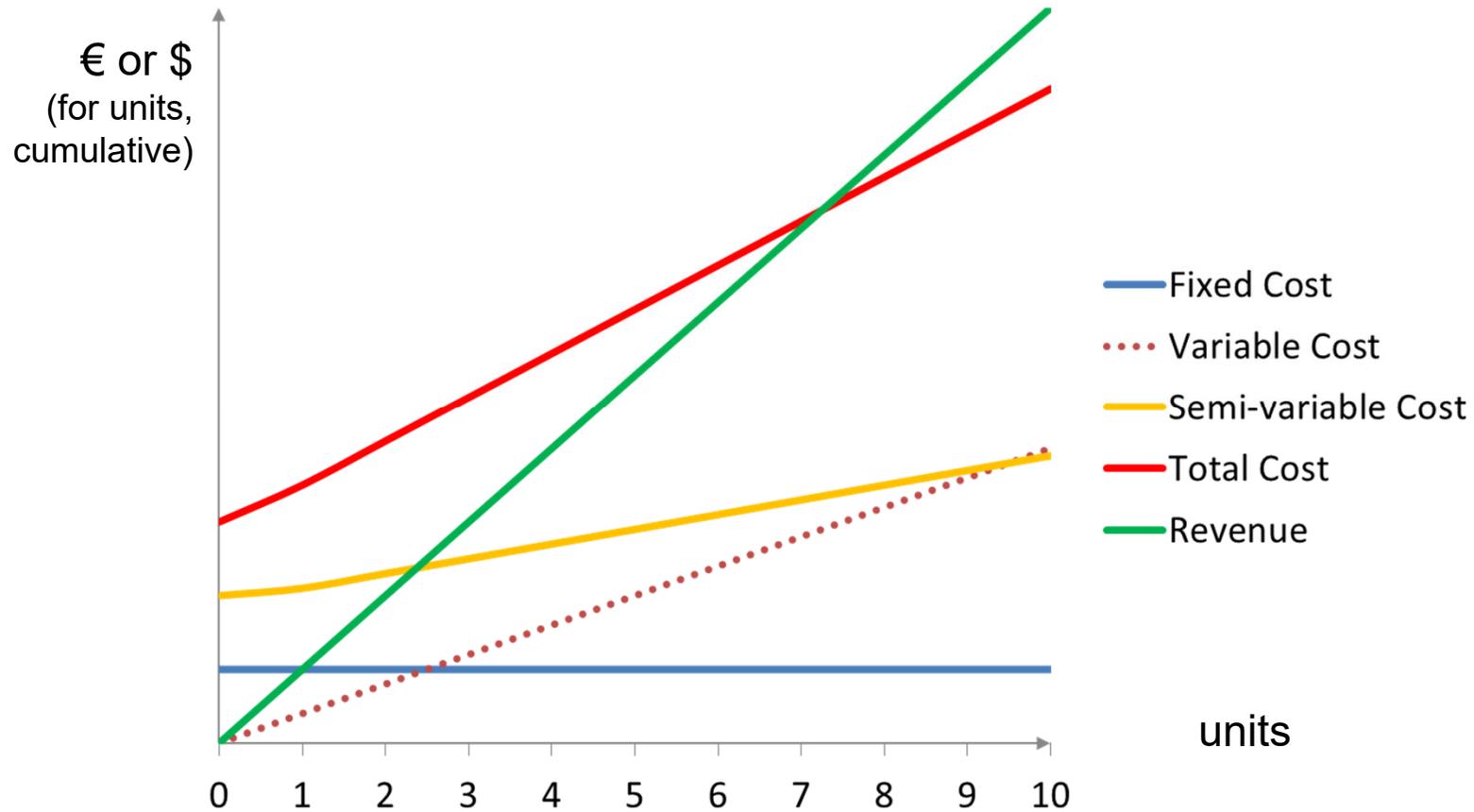
- Question
 - **How** does a cost position change **in response to** a change in the level of business activity?
- Distinction (prototypes)
 - **Variable** cost = cost that change proportionally.
 - **Fixed** cost = cost that do not change.

Cost Behavior: Advanced

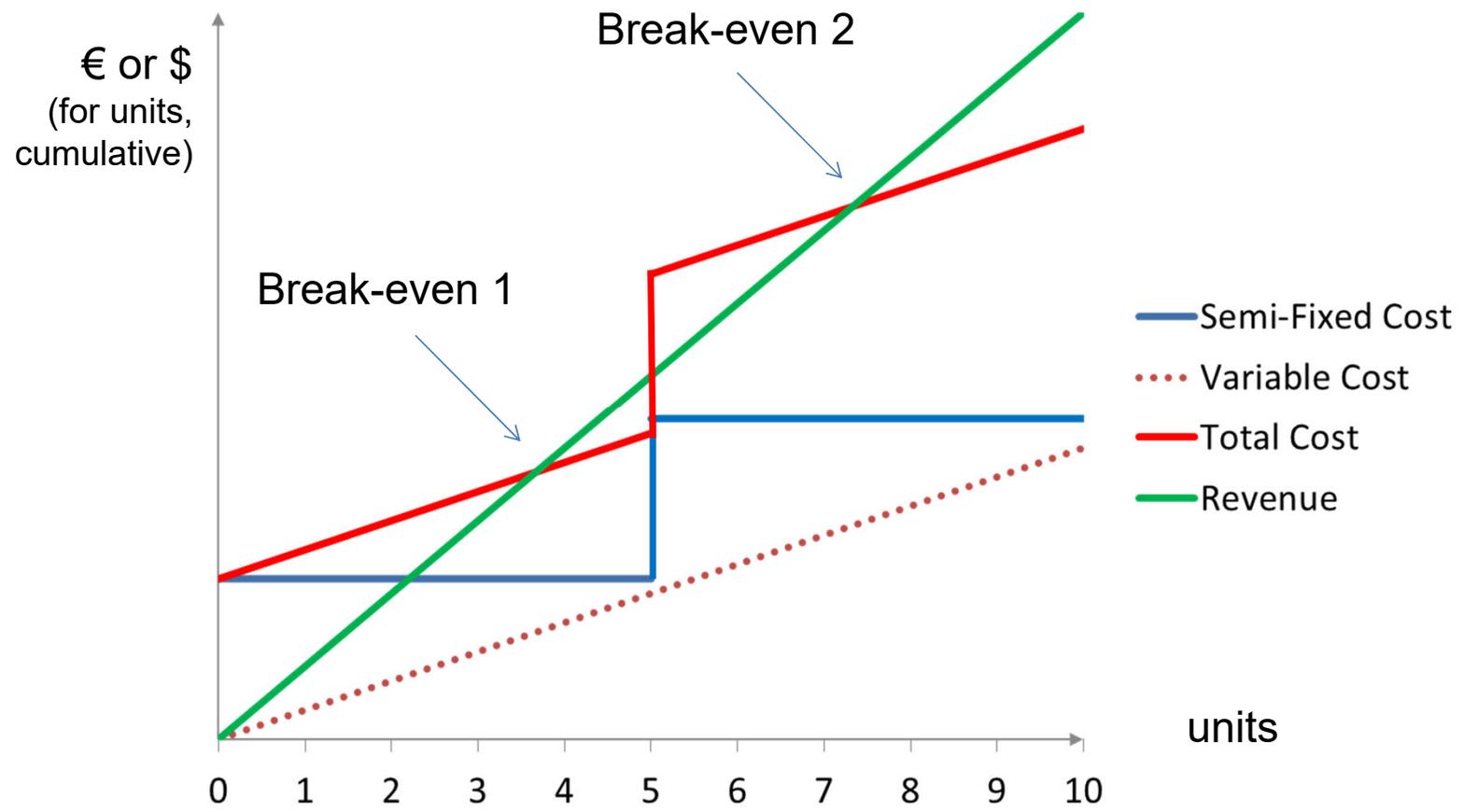


- Distinction (advanced)
 - **Semi-variable** cost = fixed and variable components (mixed cost).
 - **Semi-fixed cost** = fixed over a range, increasing in lump sums at thresholds (step cost).

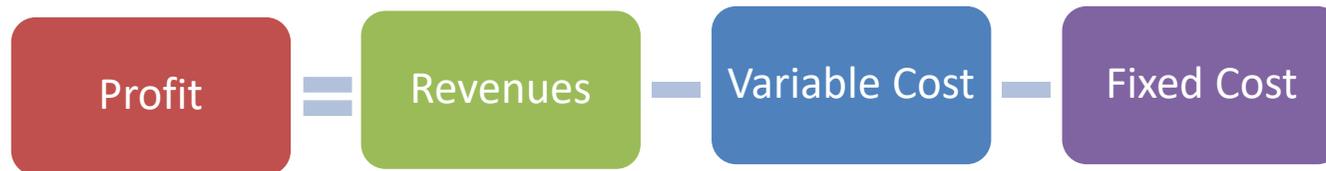
Cost Behavior: Semi-variable



Cost Behavior: Semi-fixed

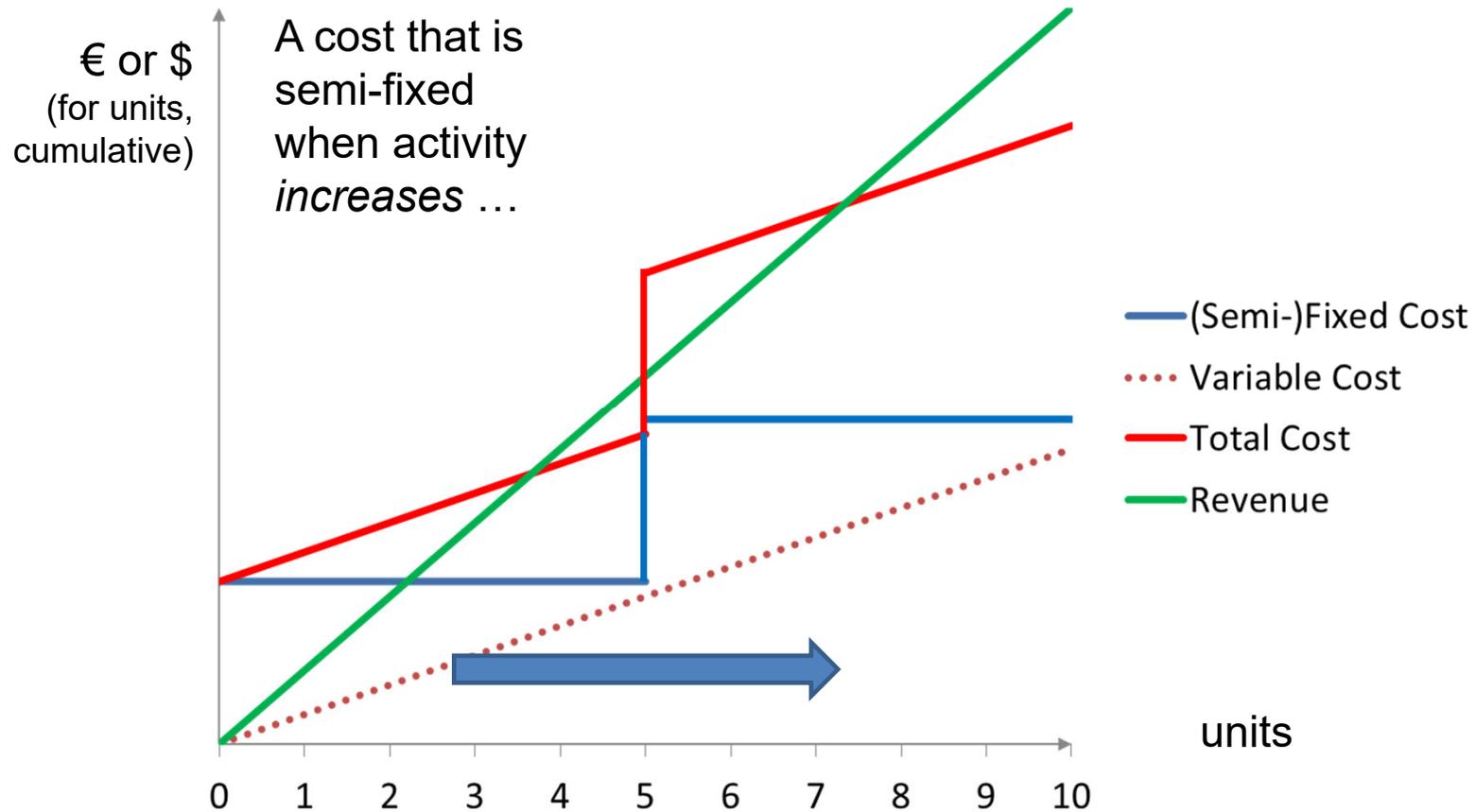


Cost Behavior: Advanced

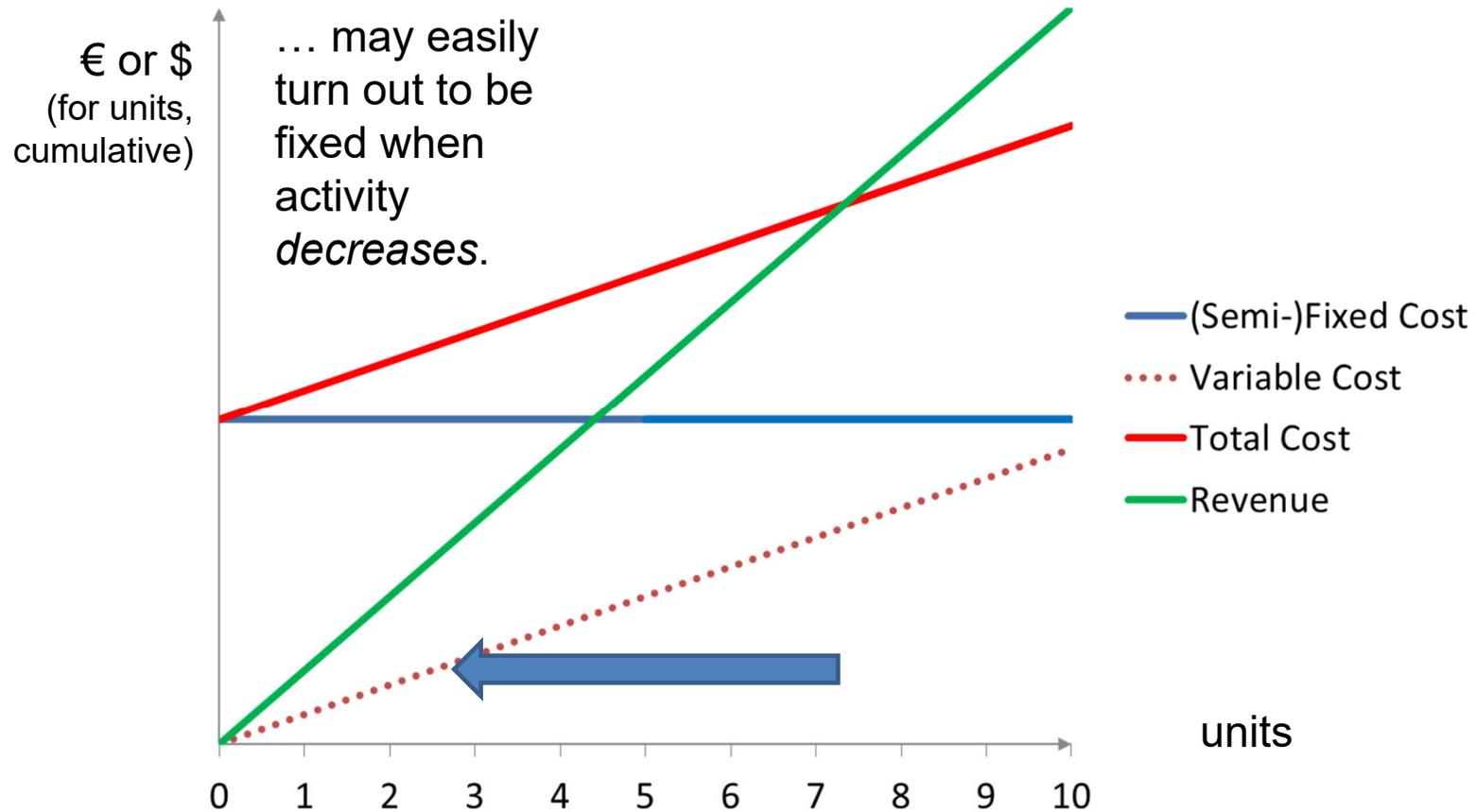


- **Stickiness of Cost**
 - **Cost behavior** when business activity **increases**
≠ **cost behavior** when business activity **decreases**.
 - Cost build up faster than they scale back (e.g. ease of acquisition vs. disposal, real option).

Cost Stickiness (Example)

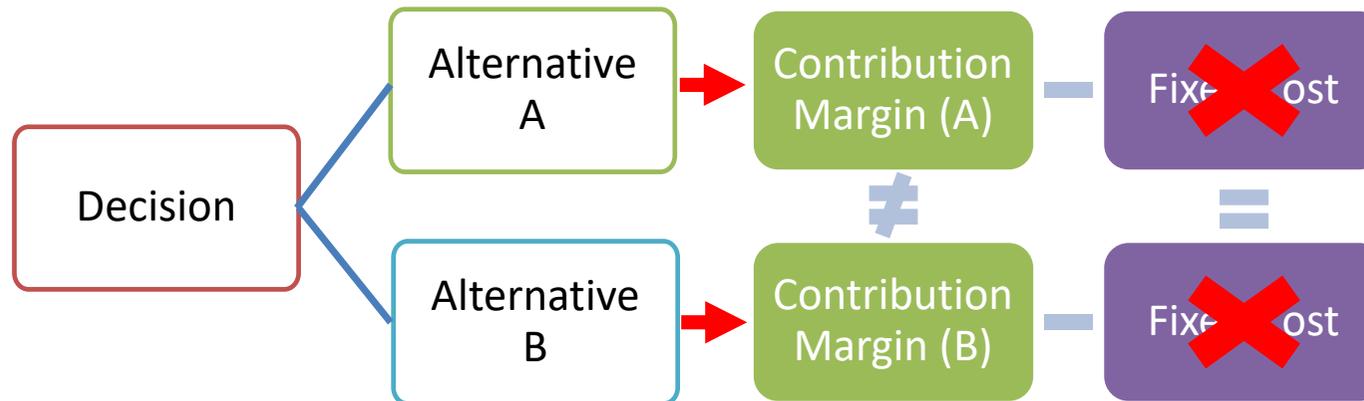


Cost Stickiness (Example)

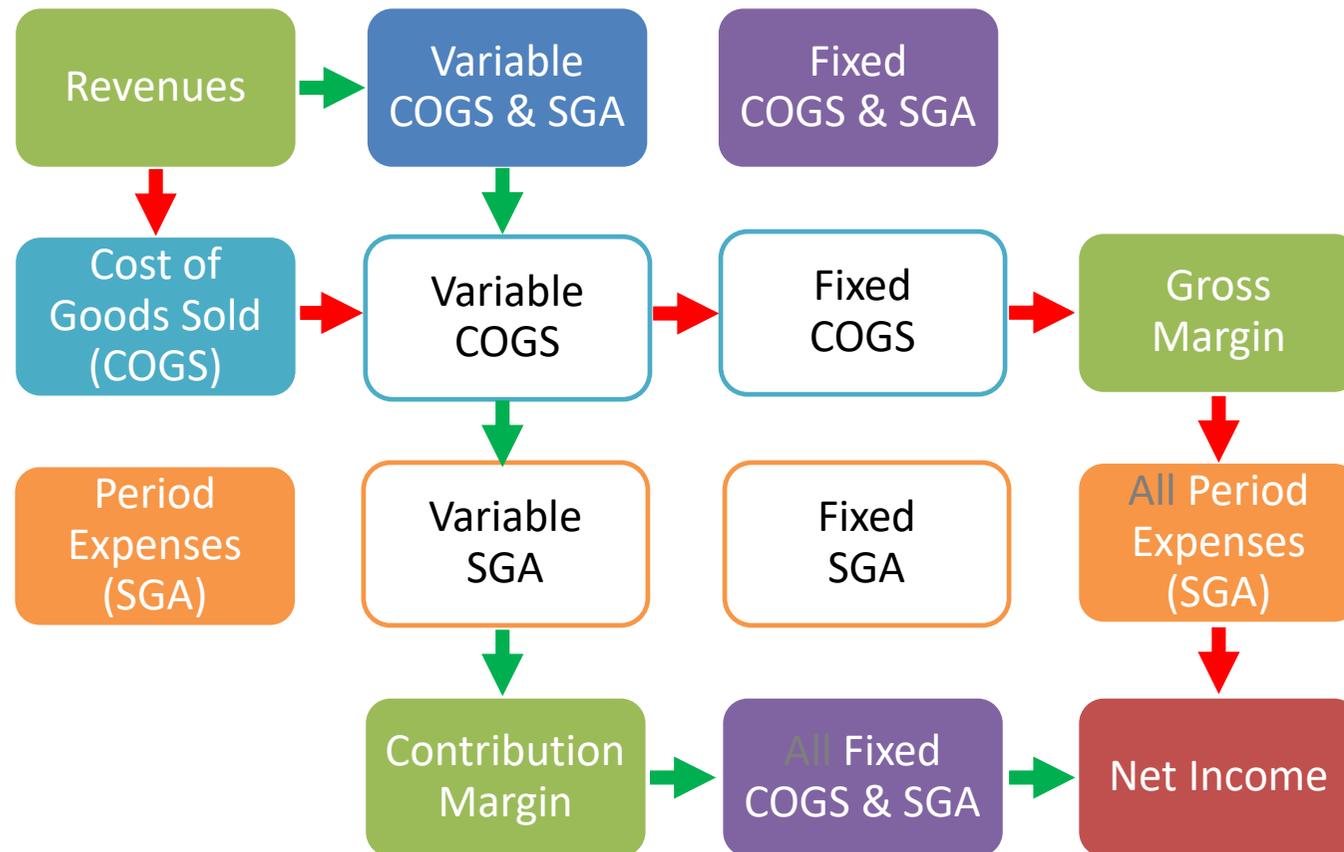


Contribution Margin

- Definition/calculation: Revenue – Variable Cost.
- Interpretation: change in profit in response to the decision.
 - Typically, producing & selling one more unit of product.
 - But also: a product line, a business unit, etc.
- Use: decision criterion if fixed cost do not change.



Income Statement

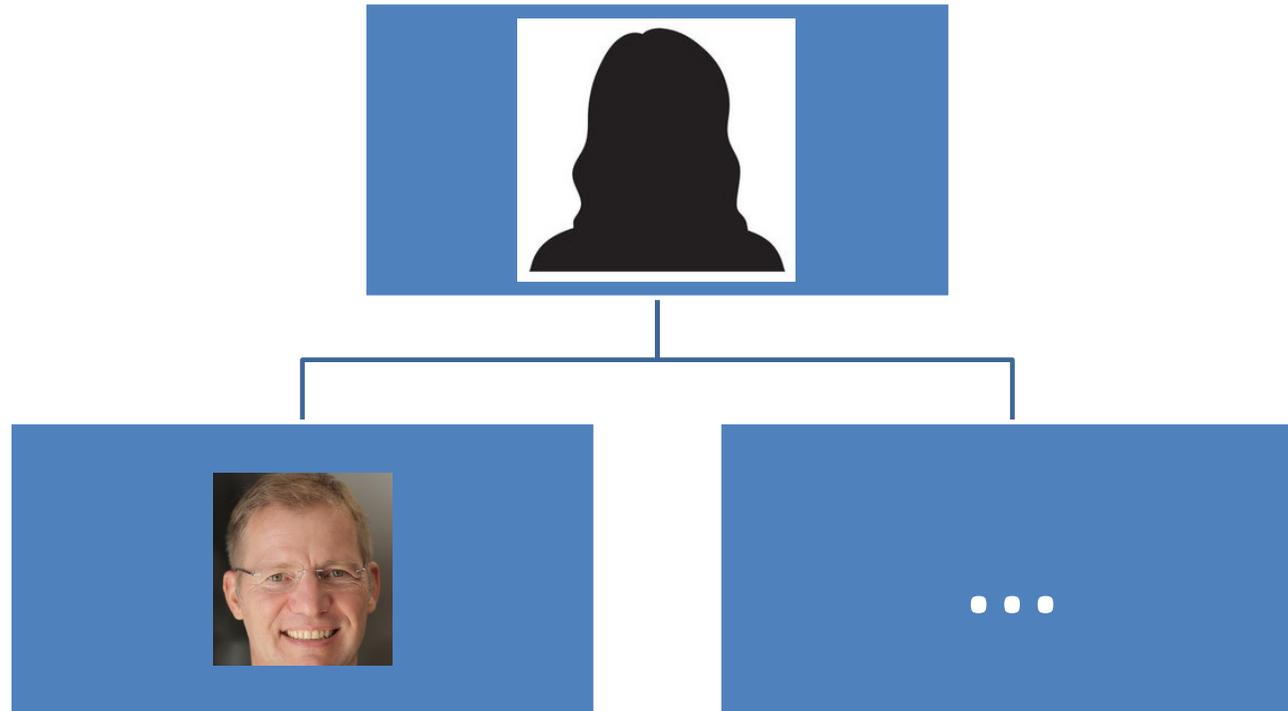


“Good” Report



- Organization of accounting information.
- Different presentation = different perception of economic reality.
- Perception of reality = better or worse decisions.

Person vs. Family



Industrial Grinders: A Classic

- **Theme:** Product Costing & Decision Relevance.
 - Product decisions with relevant product cost.
 - Context: technological change & competitive pressures.
- **Questions:**
 - How much value does product X contribute?
 - How much value does a manager's decision about product X contribute?

Industrial Grinders: Agenda

1. Context & Objective
2. Review: Salem Telephone
3. Industrial Grinders NV
 1. Situation

What is the Problem?

Another Classic Movie



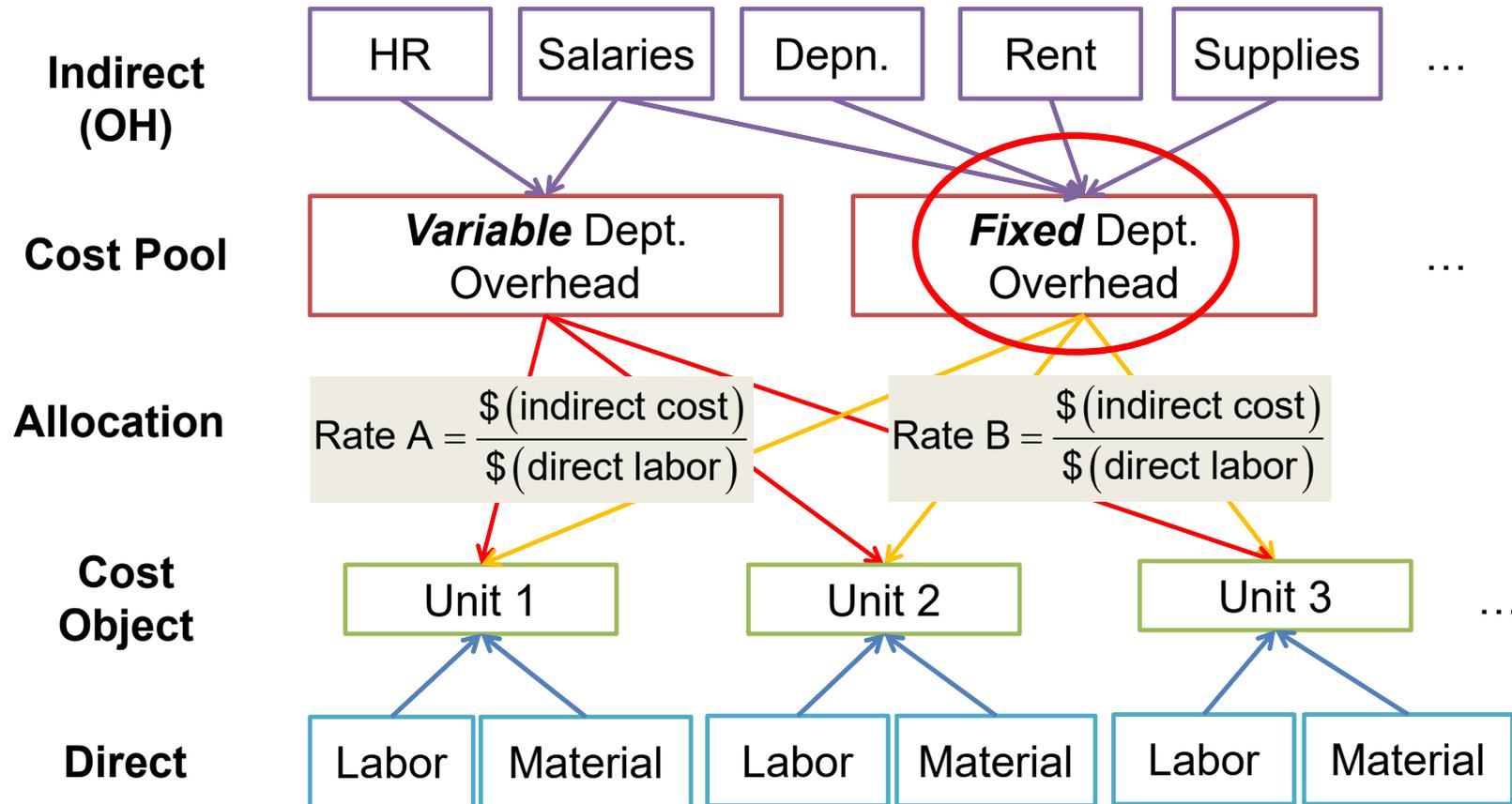
“I just want to say one word to you. Just one word. Plastics.”

Industrial Grinders: Table A

	100 Plastic Rings	100 Steel Rings
Material	\$ 4.20	\$ 76.65
Direct labor	15.60	46.80
Overhead ^a		
Departmental	31.20	93.60
Administrative	<u>15.60</u>	<u>46.80</u>
Total (cost)	\$ 66.60	\$ 263.85

a. Overhead was allocated on the basis of direct labor dollars. It was estimated that the variable overhead costs included here were largely fringe benefits related to direct labor and amounted to 80€ per direct labor dollar or about 40% of the departmental amounts.

Cost System (abridged)



Cost System: A Pitfall



Source: www.worth1000.com, accessed January 9, 2014

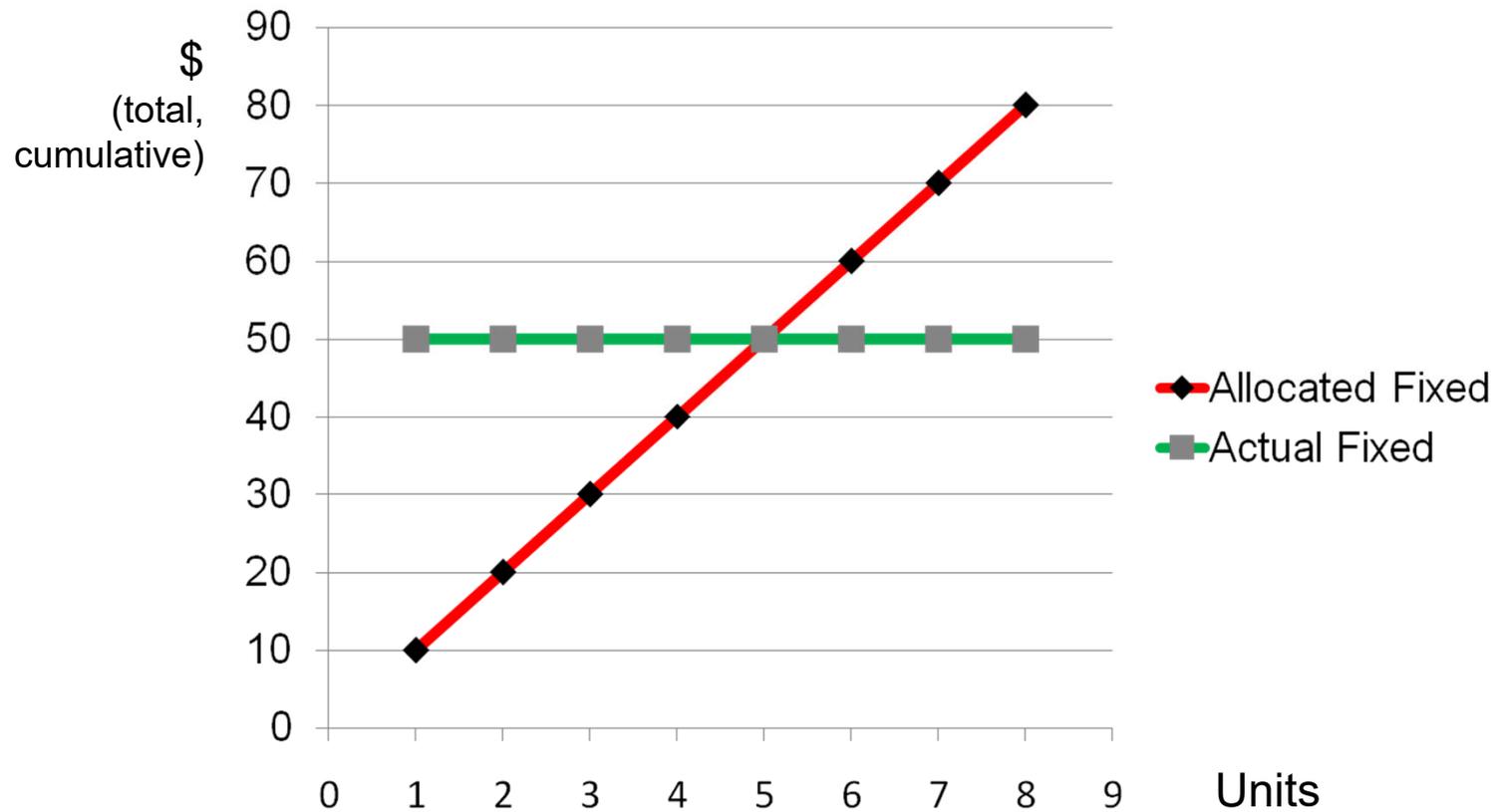
Industrial Grinders: Agenda

1. Context & Objective
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 1. Situation
 2. Pitfalls of fixed cost allocation: example(s).

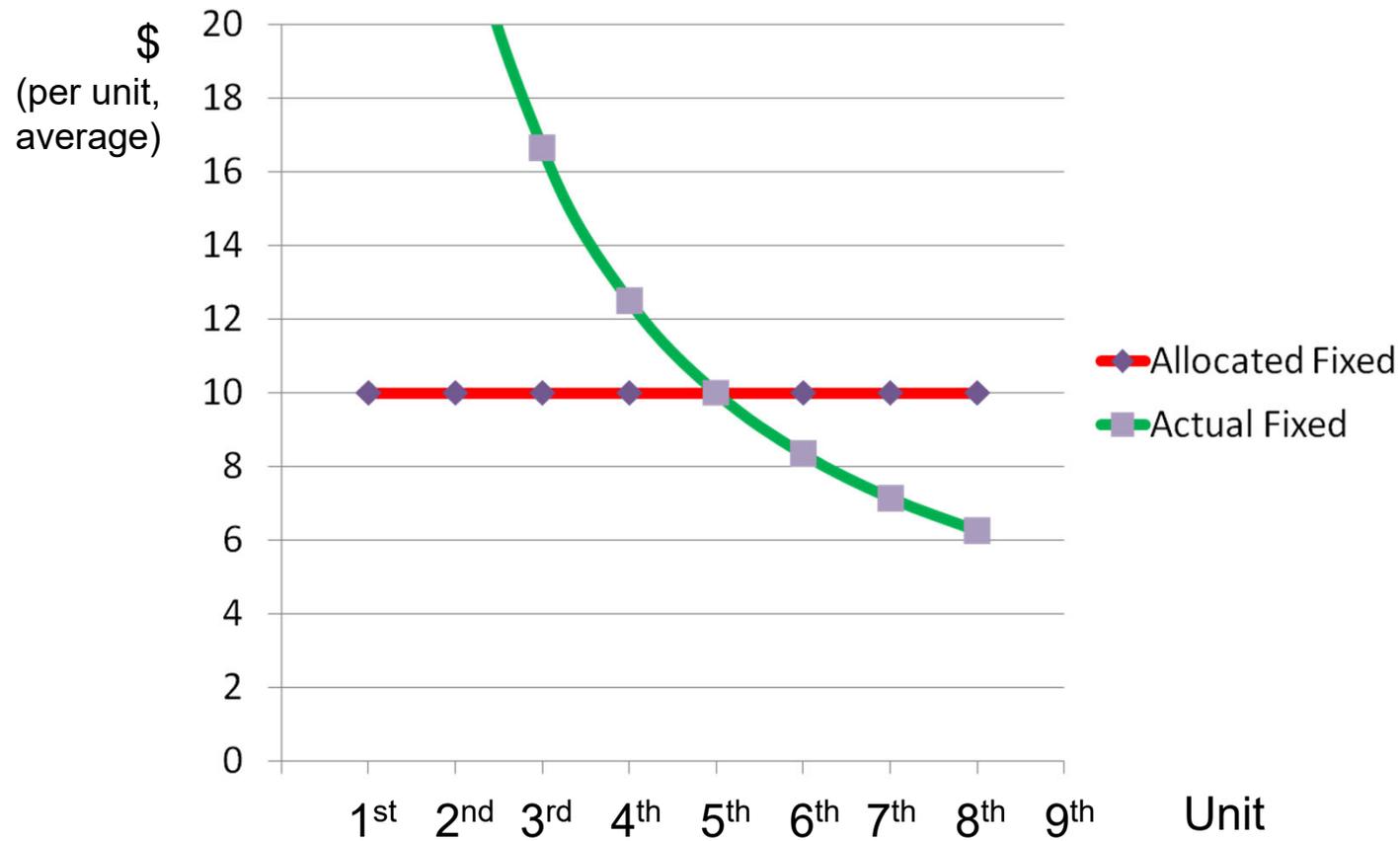
Fixed Cost Allocation: Ex.(1)

- Accounting information:
 - Fixed overhead = **\$50 total**.
 - Allocation base = units.
 - Volume used to allocate overhead and estimate unit cost = **5 units**.
 - Calculations:
 - Allocation rate = \$ fixed OH / # units = $\$50 / 5 = \text{\$10 per unit}$.
 - Unit cost: **\\$10 per unit** (for illustration, no other cost!).
-
- Questions:
 - How much cost is *allocated and reported* if you produce 4, 5 or 6 units?
 - How much cost is *really incurred and paid* for at each of these 3 production levels?

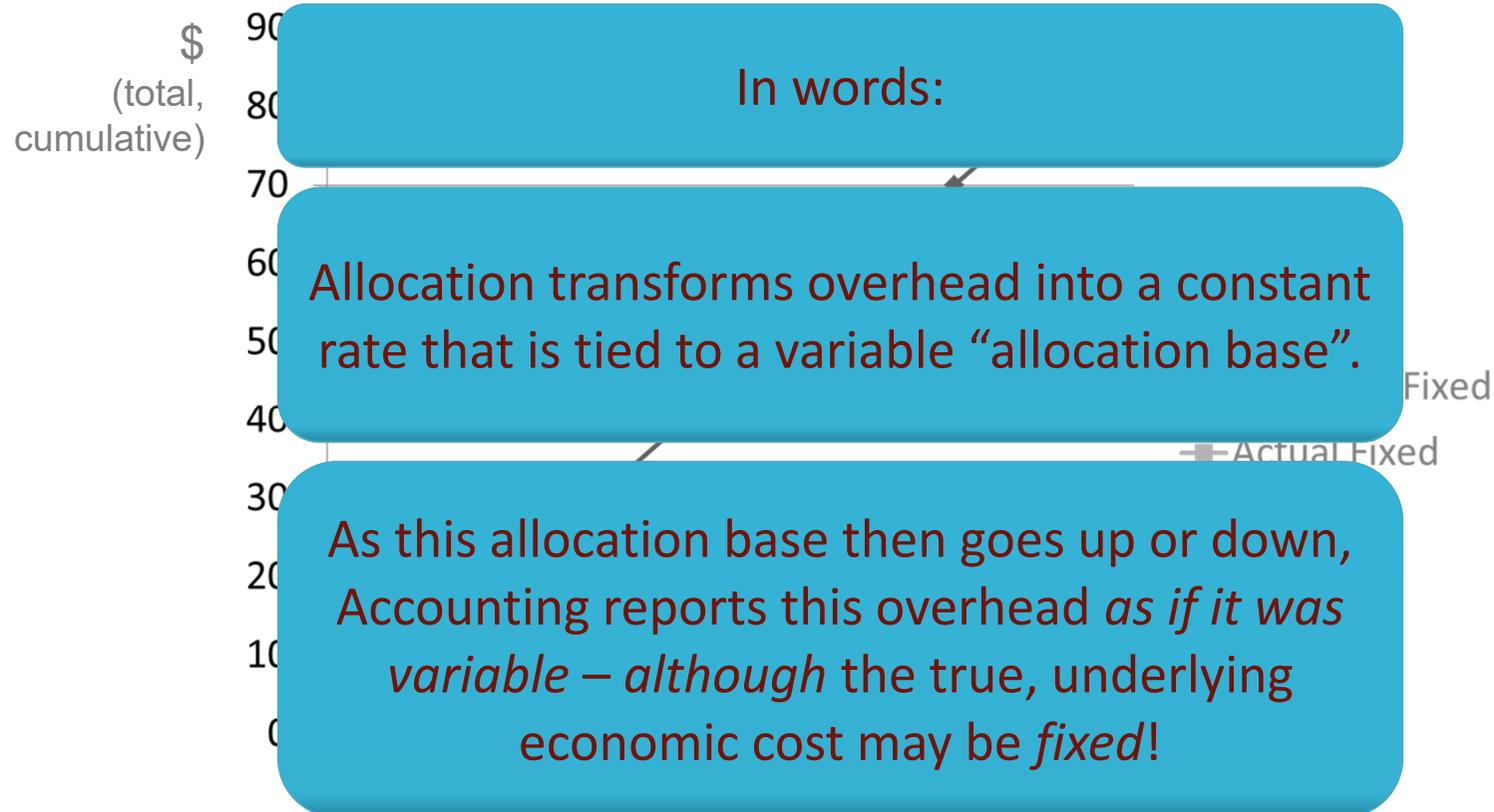
Fixed Cost Allocation: Ex.(1)



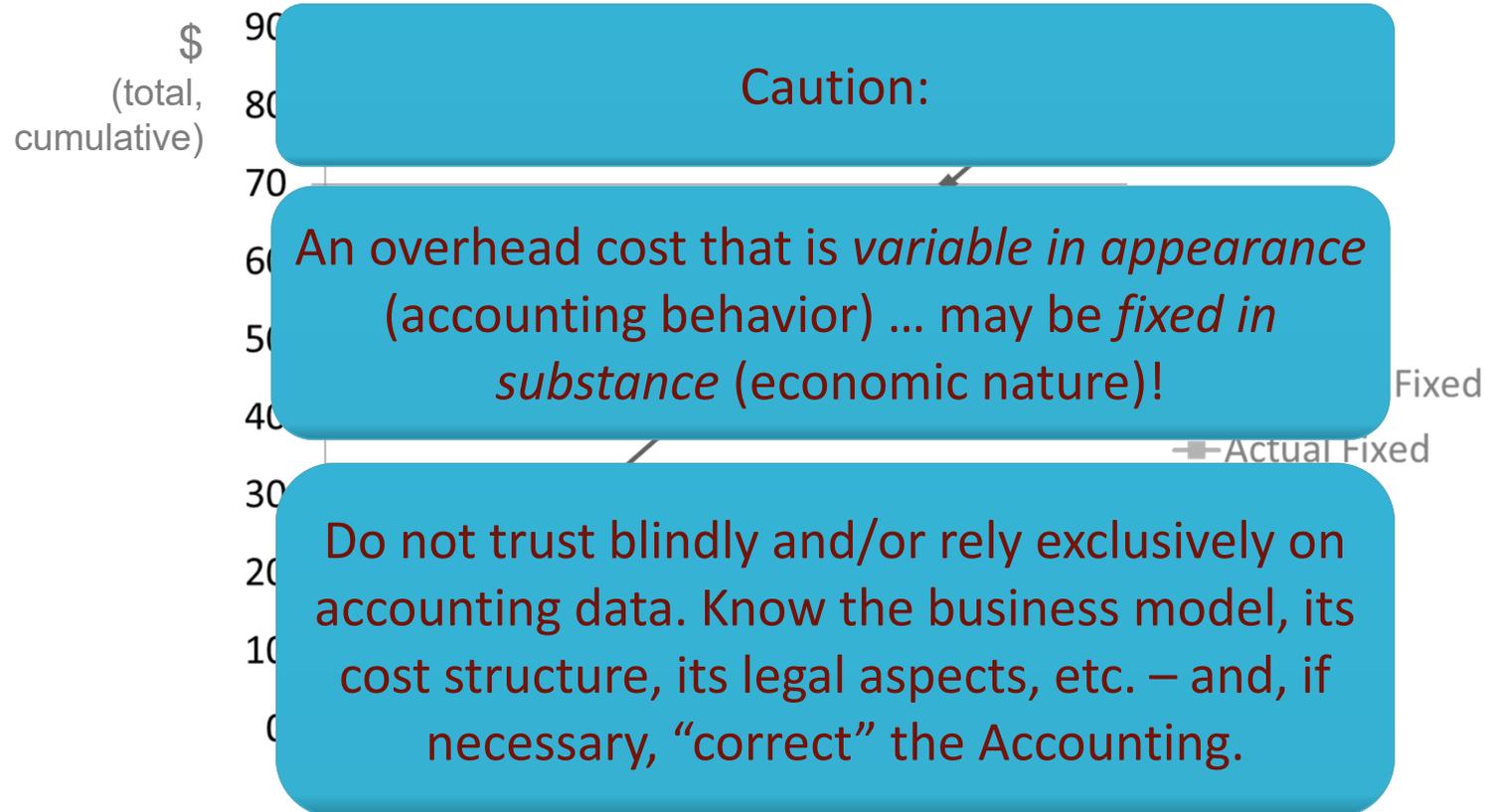
Fixed Cost Allocation: Ex.(1)



Fixed Cost Allocation: Ex.(1)



Fixed Cost Allocation: Ex.(1)

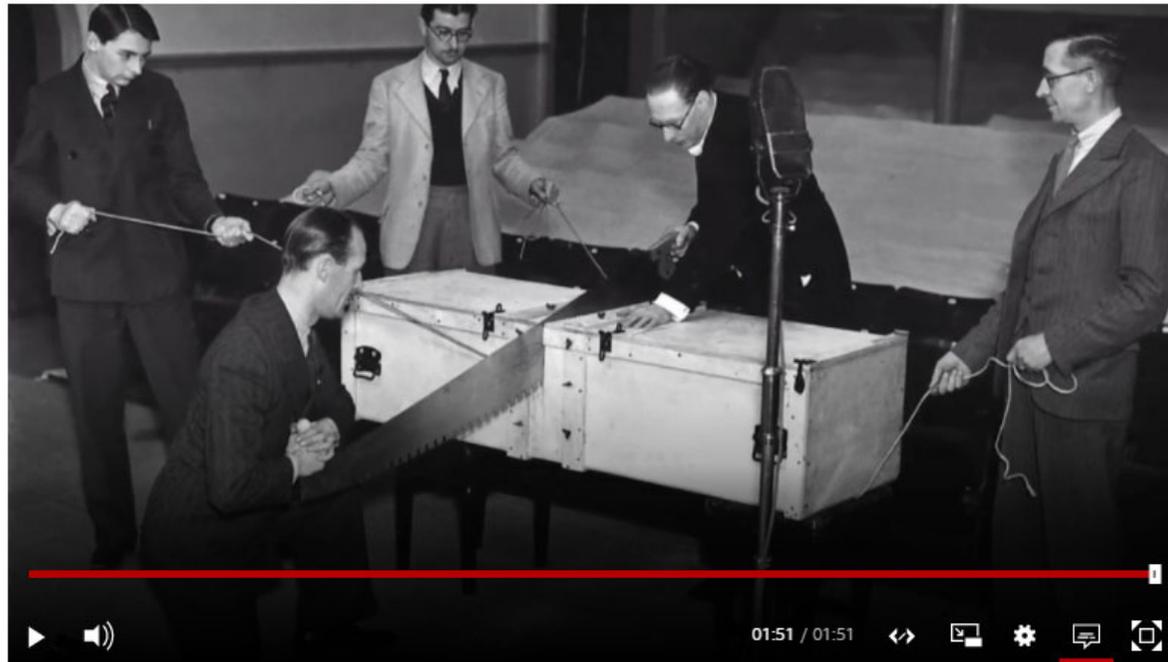


Cost System: A Pitfall



Source: www.worth1000.com, accessed January 9, 2014

Update: Anniversary



Magicians mark 100 years of 'sawing woman in half' trick

<https://www.bbc.com/news/av/entertainment-arts-55683508>, published and accessed January 17, 2021

Longitudinal Cut (Inspired by his Accountant?)



David Copperfield – The Blade, <https://www.youtube.com/watch?v=nS9axuonNqs>, accessed January 28, 2025

Industrial Grinders: Agenda

1. Context & Objective
2. Review: Salem Telephone
3. **Industrial Grinders NV**
 1. Situation
 2. Pitfalls of fixed cost allocation: example(s).
 3. **Solution**

Industrial Grinders: Table A

	100 Plastic Rings	100 Steel Rings
Material	\$ 4.20	\$ 76.65
Direct labor	15.80	12.80
Overhead		60
		80
Total (cost)	\$ 66.60	\$ 263.85

Example of
a really bad report ...

a. Overhead was allocated on the basis of direct labor dollars. It was estimated that the variable overhead costs included here were largely fringe benefits related to direct labor and amounted to 80€ per direct labor dollar or about 40% of the departmental amounts.

Industrial Grinders: Table A

	100 Plastic Rings	100 Steel Rings
Material	\$ 4.20	\$ 76.65
Direct labor	15.80	12.80
Overhead		60
		80
Total (cost)	\$ 66.60	\$ 263.85

How can we improve the presentation?

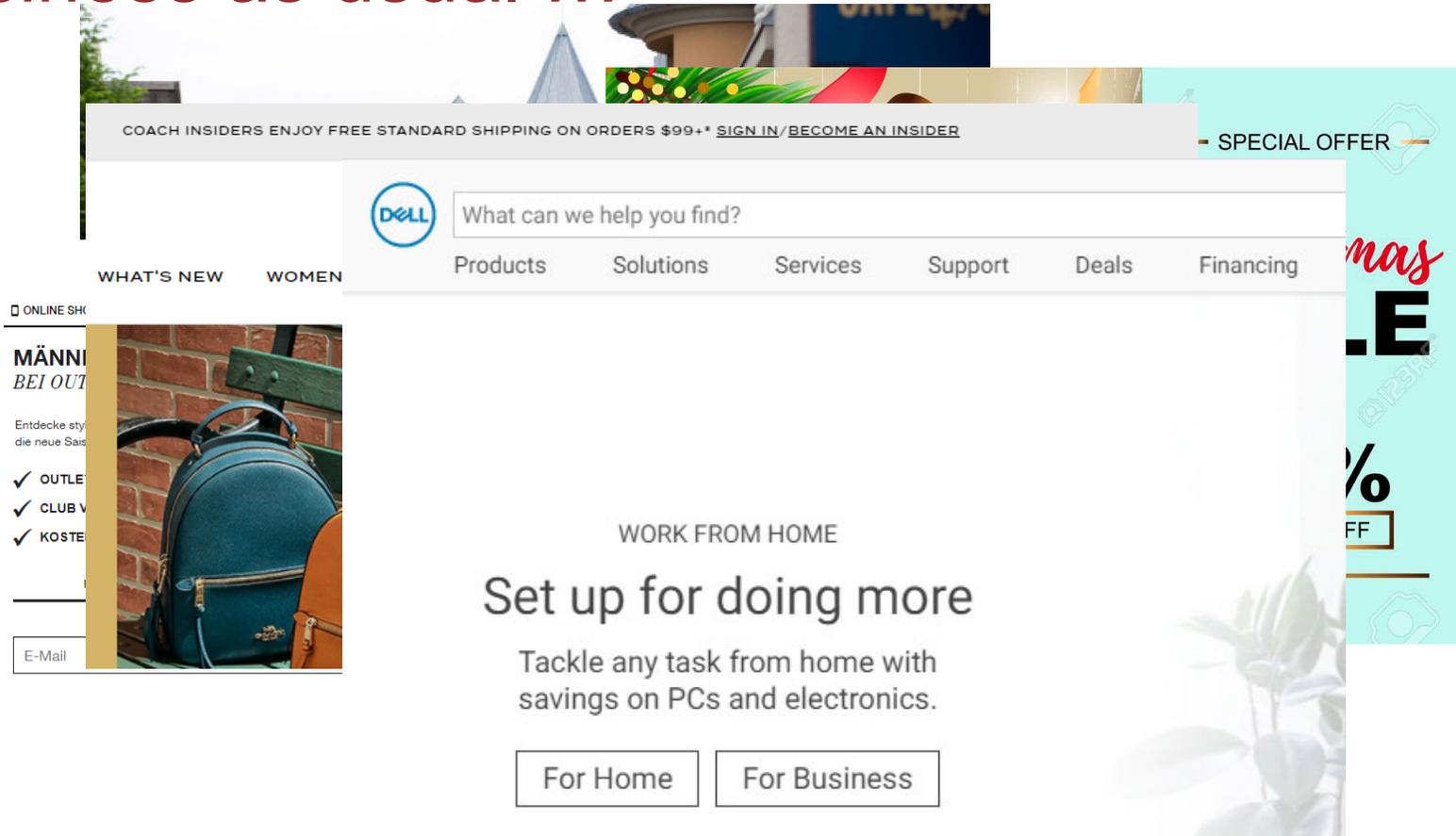
a. Overhead was allocated on the basis of direct labor dollars. It was estimated that the variable overhead costs included here were largely fringe benefits related to direct labor and amounted to 80€ per direct labor dollar or about 40% of the departmental amounts.

Improve ...

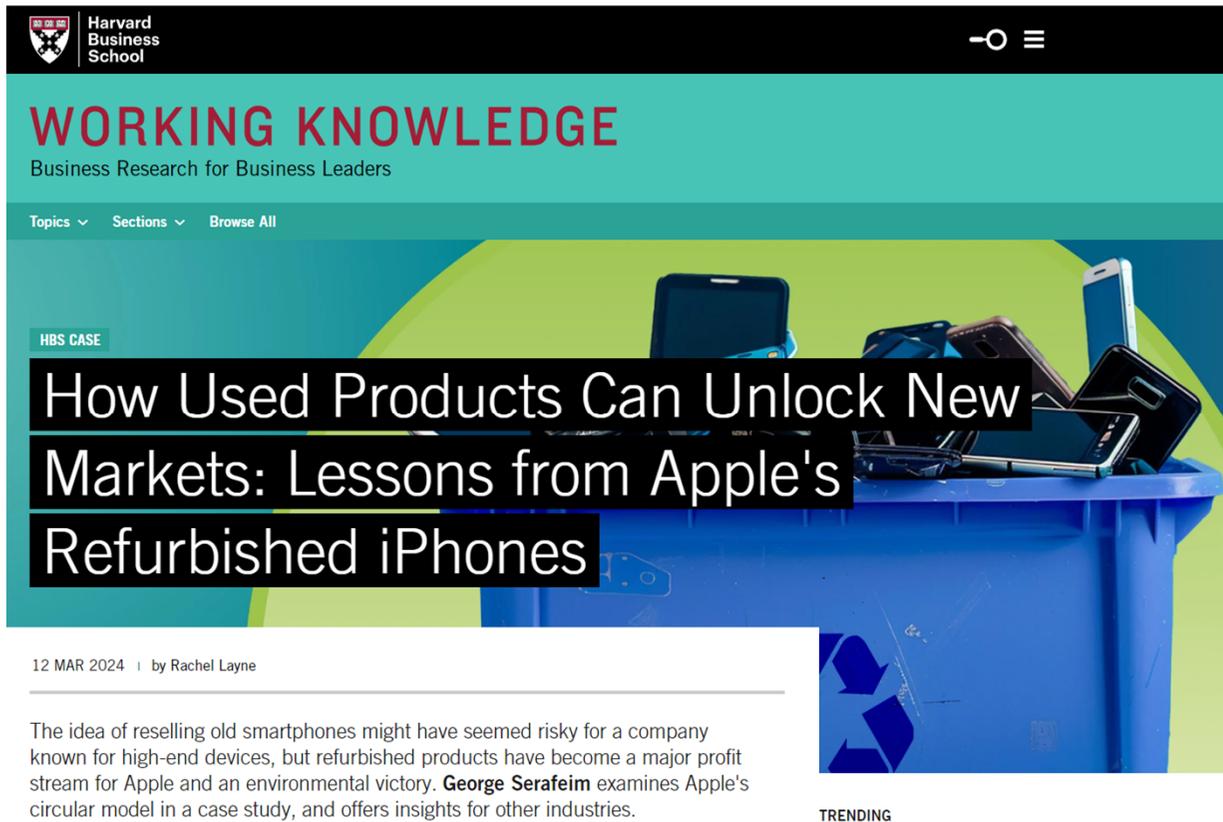
Now What?

- Market context:
 - Must change to Plastic Rings.
 - This is not a “decision” (or choose slow but painful suicide).
- Transition preferences:
 - #1: Sell finished Steel Rings.
 - #2: Sell newly produced Plastic Rings.
 - #3: Produce (or not) more Steel Rings?

Business as usual ...



Including the best Brands



The screenshot shows the Harvard Business School Working Knowledge website. The header includes the Harvard Business School logo and navigation icons. The main content area features a teal background with the title 'WORKING KNOWLEDGE' and the subtitle 'Business Research for Business Leaders'. Below this, there are navigation links for 'Topics', 'Sections', and 'Browse All'. The main article is titled 'How Used Products Can Unlock New Markets: Lessons from Apple's Refurbished iPhones' and is categorized as an 'HBS CASE'. The article is dated '12 MAR 2024' and written by 'Rachel Layne'. The text of the article begins with 'The idea of reselling old smartphones might have seemed risky for a company known for high-end devices, but refurbished products have become a major profit stream for Apple and an environmental victory. George Serafeim examines Apple's circular model in a case study, and offers insights for other industries.' The article is also marked as 'TRENDING'. The background image of the article shows several smartphones in a blue recycling bin.

Harvard Business School

WORKING KNOWLEDGE
Business Research for Business Leaders

Topics ▾ Sections ▾ Browse All

HBS CASE

How Used Products Can Unlock New Markets: Lessons from Apple's Refurbished iPhones

12 MAR 2024 | by Rachel Layne

The idea of reselling old smartphones might have seemed risky for a company known for high-end devices, but refurbished products have become a major profit stream for Apple and an environmental victory. **George Serafeim** examines Apple's circular model in a case study, and offers insights for other industries.

TRENDING

<https://hbswk.hbs.edu/item/how-used-products-can-unlock-new-markets-lessons-from-apples-refurbished-iphones>,
published March 12, 2024,
accessed March 14, 2024

“Strong as Steel”

LOUIS VUITTON

NEW

WOMEN

MEN

Louis Vuitton never makes any sale
Louis Vuitton never discounts its products.



Now What?

- Market context:
 - Must change to Plastic Rings.
 - This is not a “decision” (or choose slow but painful suicide).
- Transition preferences:
 - #1: Sell finished Steel Rings.
 - #2: Sell newly produced Plastic Rings.
 - #3: Produce (or not) more Steel Rings?
- Business strategy:
 - Which markets, customer segments?
 - “Fire sales” (or wastage) as part of your business model, pricing/margin strategy.
- Or then ... **quick and painful suicide?**

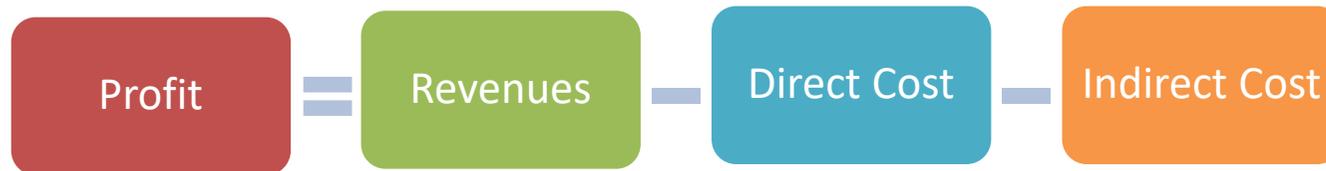
Industrial Grinders: Table Z

	<i>PAST</i>		<i>FUTURE</i>	
	Steel Rings		Plastic Rings	
	Weekly	Annual (52 wks)	Weekly	Annual (52 wks)
Sales Volume (100s of Rings):	6.9	358.8	→ 1.7	89.7
	<i>Unit</i>	<i>Total</i>	<i>Unit</i>	<i>Total</i>
Sales Price	\$320.40	\$114,960	\$320.40	\$28,740
Variable Cost	<u>\$160.89</u>	<u>\$57,727</u>	<u>\$32.28</u>	<u>\$2,896</u>
Contribution Margin	\$159.51	\$57,232	\$288.12	\$25,844
Fixed Overhead:				
Departmental	\$56.16	\$20,150	\$224.64	\$20,150
One-time Setup				\$1,800
Administrative	\$46.80	<u>\$16,792</u>	\$187.20	<u>\$16,792</u>
		\$36,942		\$38,742
Accounting Income		<u>\$20,290</u>		<u>-\$12,898</u>

Industrial Grinders: Agenda

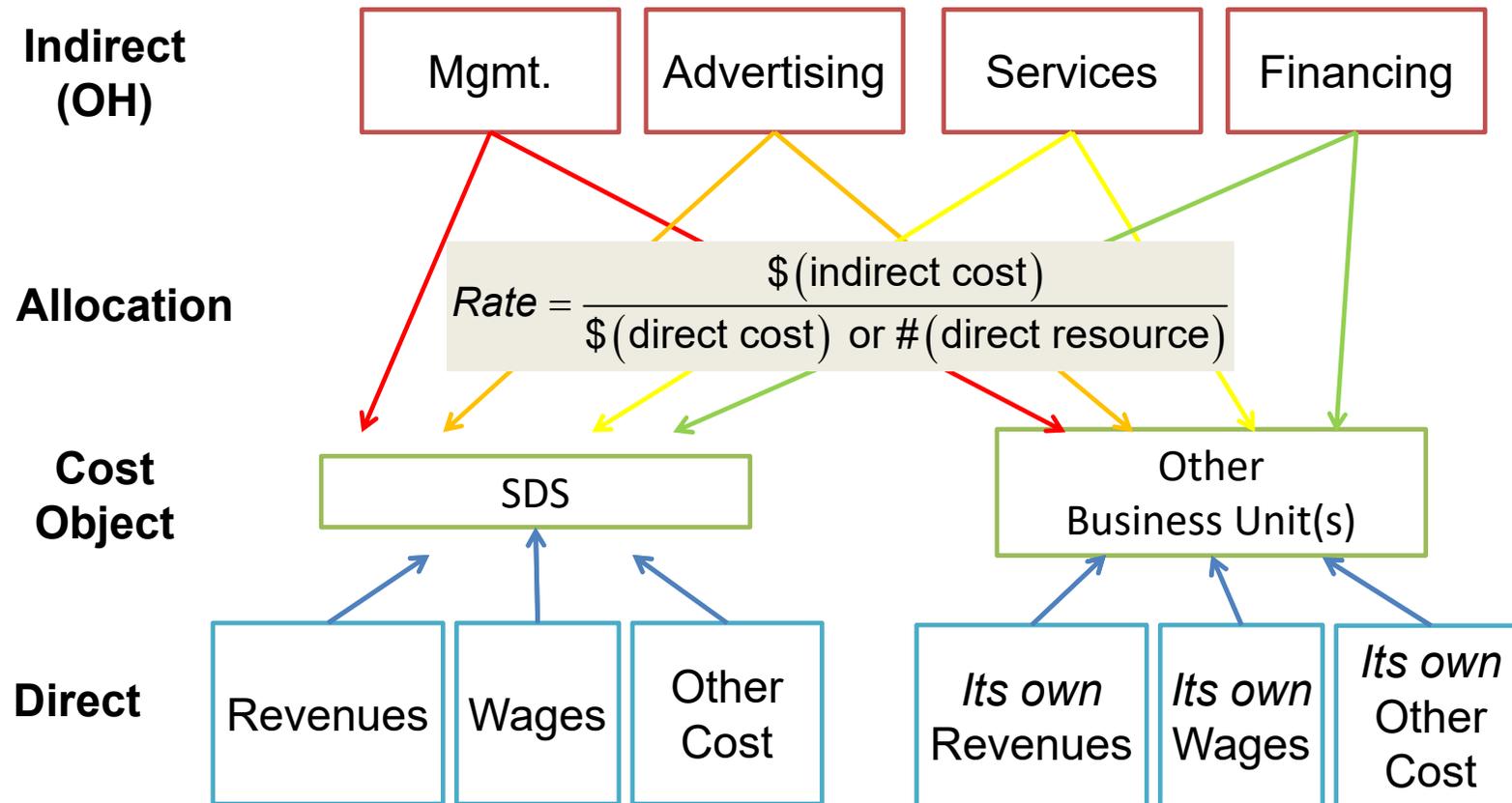
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4. Perspectives: Income Statement
 1. Granularity: cost specificity.

Cost Specificity

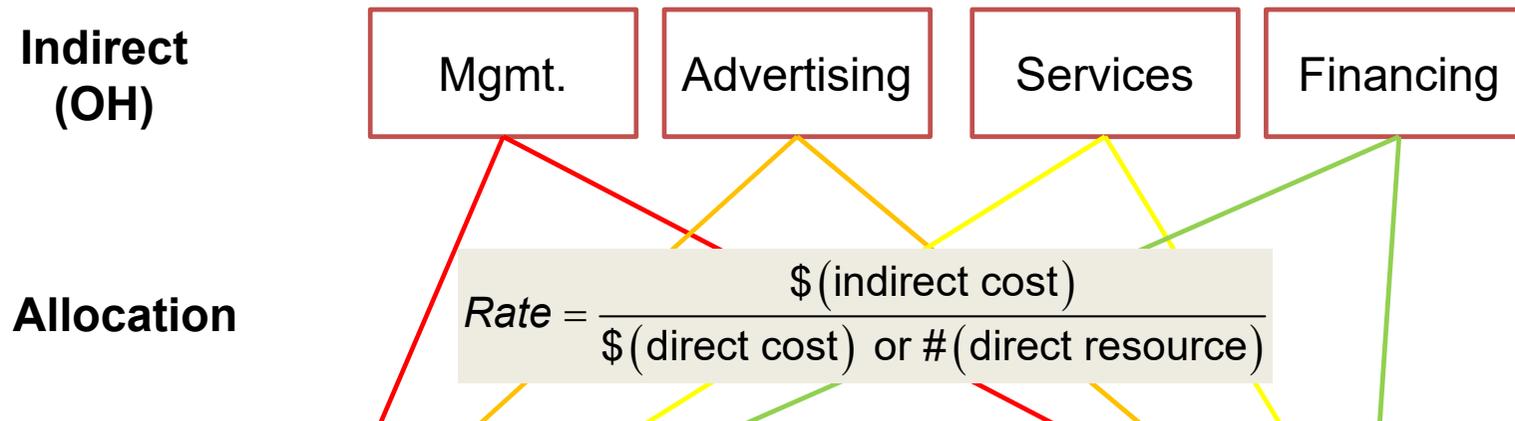


- Question
 - How does a cost position relate to a decision object?
- Distinction
 - **Direct** cost = unique or specific to an individual decision object, clearly caused by and easily identifiable with it.
 - **Indirect** cost (overhead) = common or unspecific to more than one decision object, only possibly caused by and without any clear link to it.

Cost System

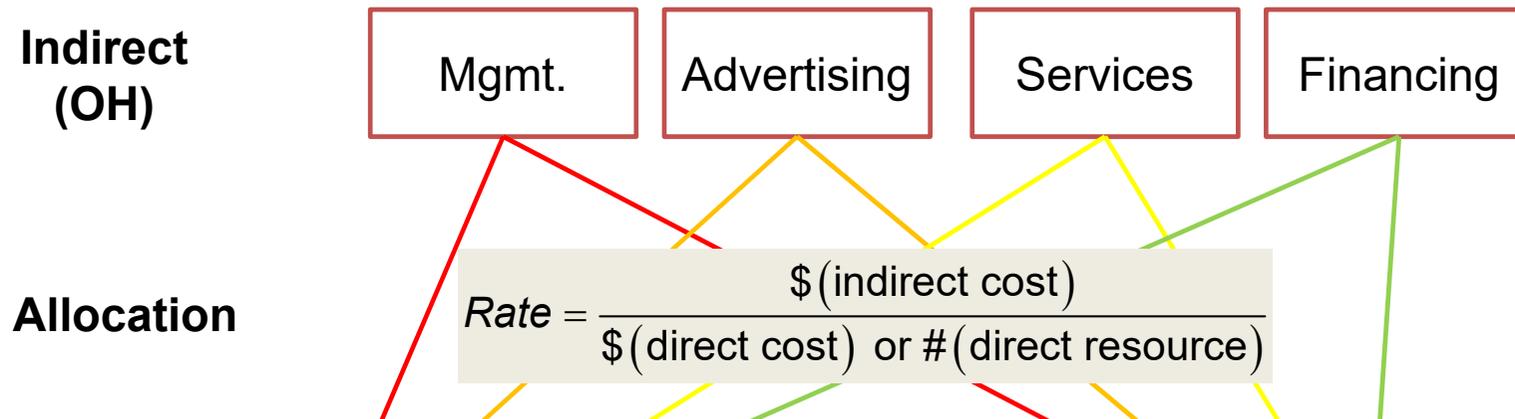


Cost System



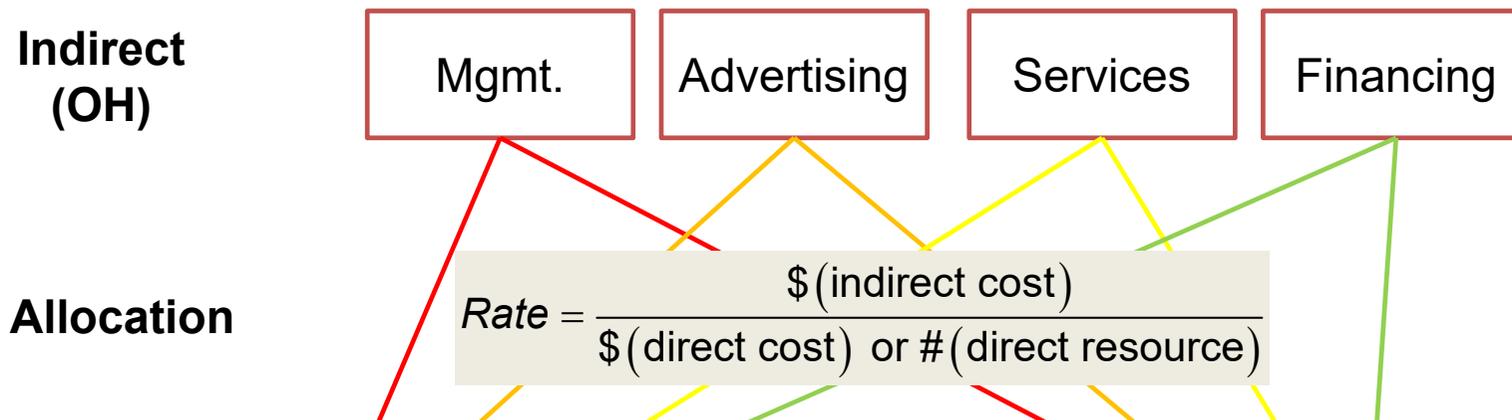
- Structure & processes
 - Algorithm for granular revenue, cost and profit measurement.
 - Assigns cost positions to decision objects, e.g. products, services, customers, in a mechanical way.
 - Based on judgments – not laws of nature – about which cost “belongs” to which object.

Cost System



- Focus: indirect cost (“overhead”).
 - *No obvious link* to the decision object (no precise separation and attribution to cost objects possible).
 - Allocation *imposes a link* (ideally: cause-effect-relationship).
 - Judgments \Rightarrow *possible link*: reason for the cost.

Cost System



- Main issues

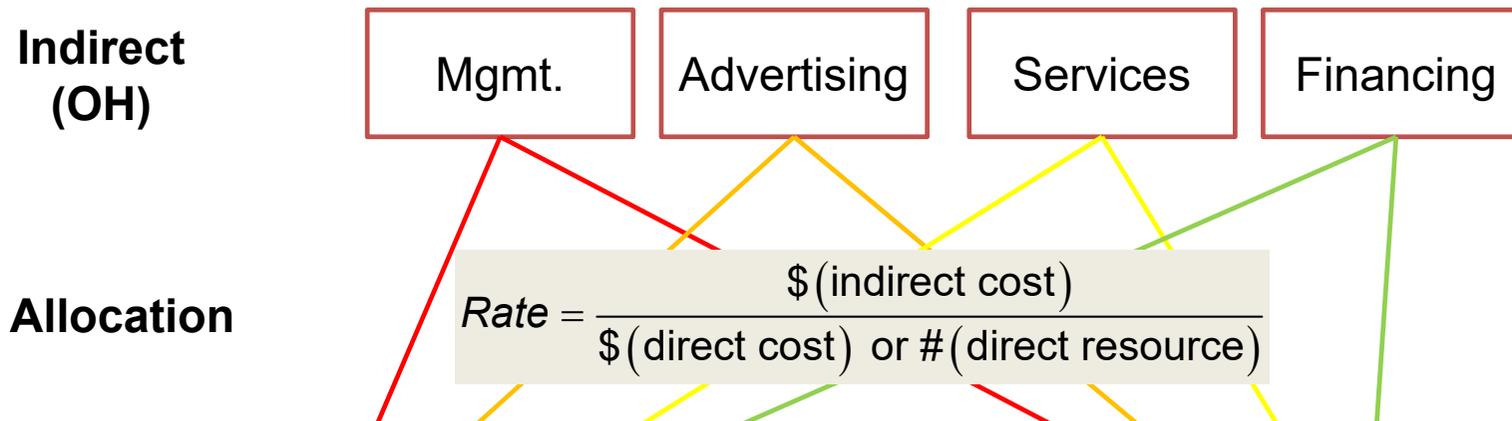
- Which allocation base (link of overhead to the decision object)? [Next session.]
- How to deal with **fixed overhead**?

Cost System: A Pitfall



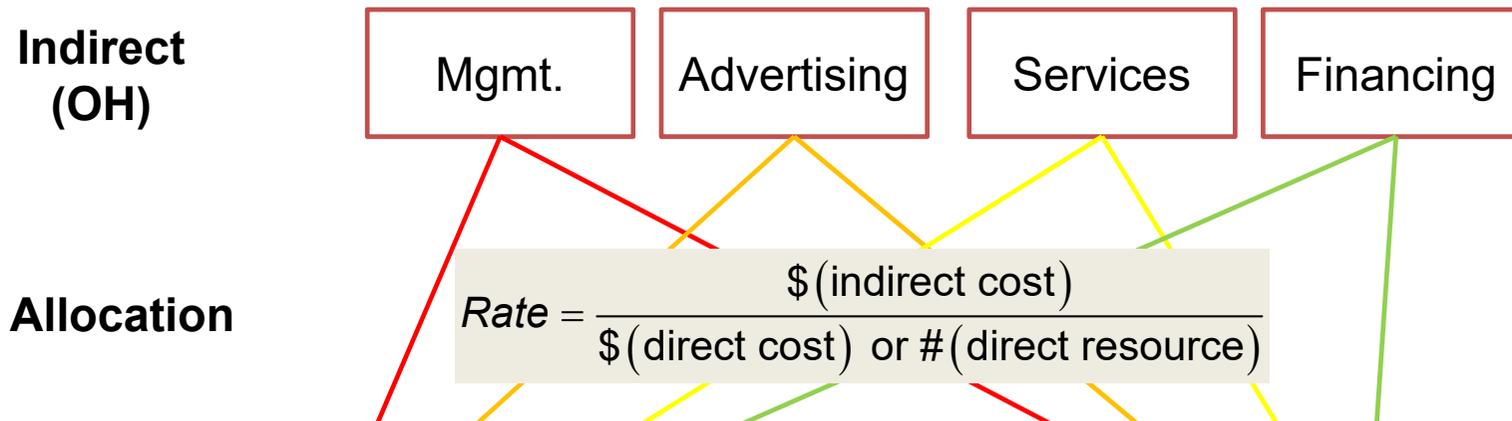
Source: www.worth1000.com, accessed January 9, 2014

Cost System: A Pitfall



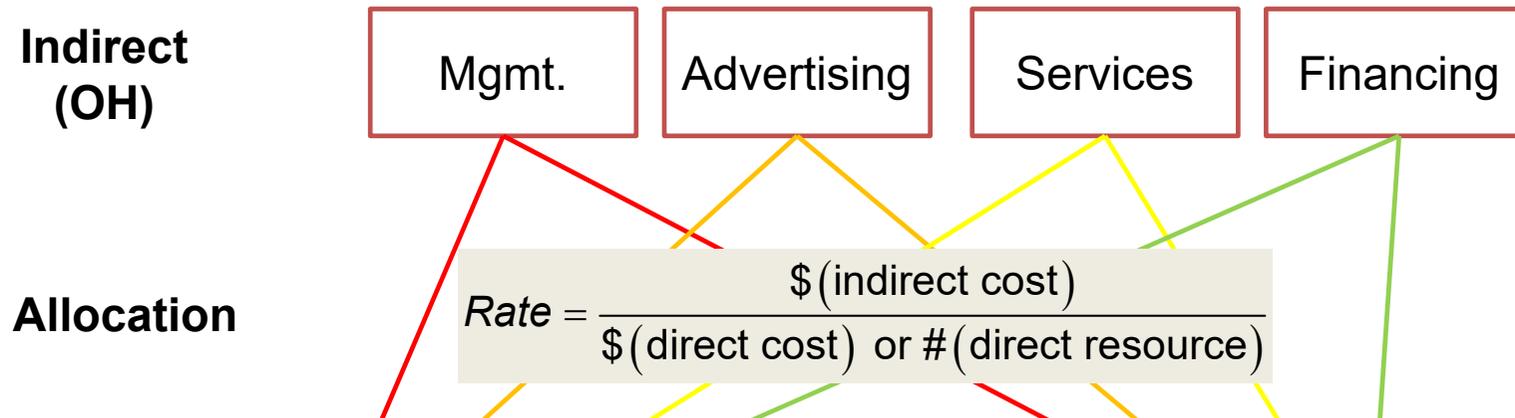
- Possible outcome:
Over-allocation to all cost objects
 = Implicit *profit transfer* to the “*overhead*” business unit.

Cost System: A Pitfall



- Another possible outcome:
Over-allocation to some cost objects
 = *Under-allocation to other cost objects.*

Cost System: A Pitfall

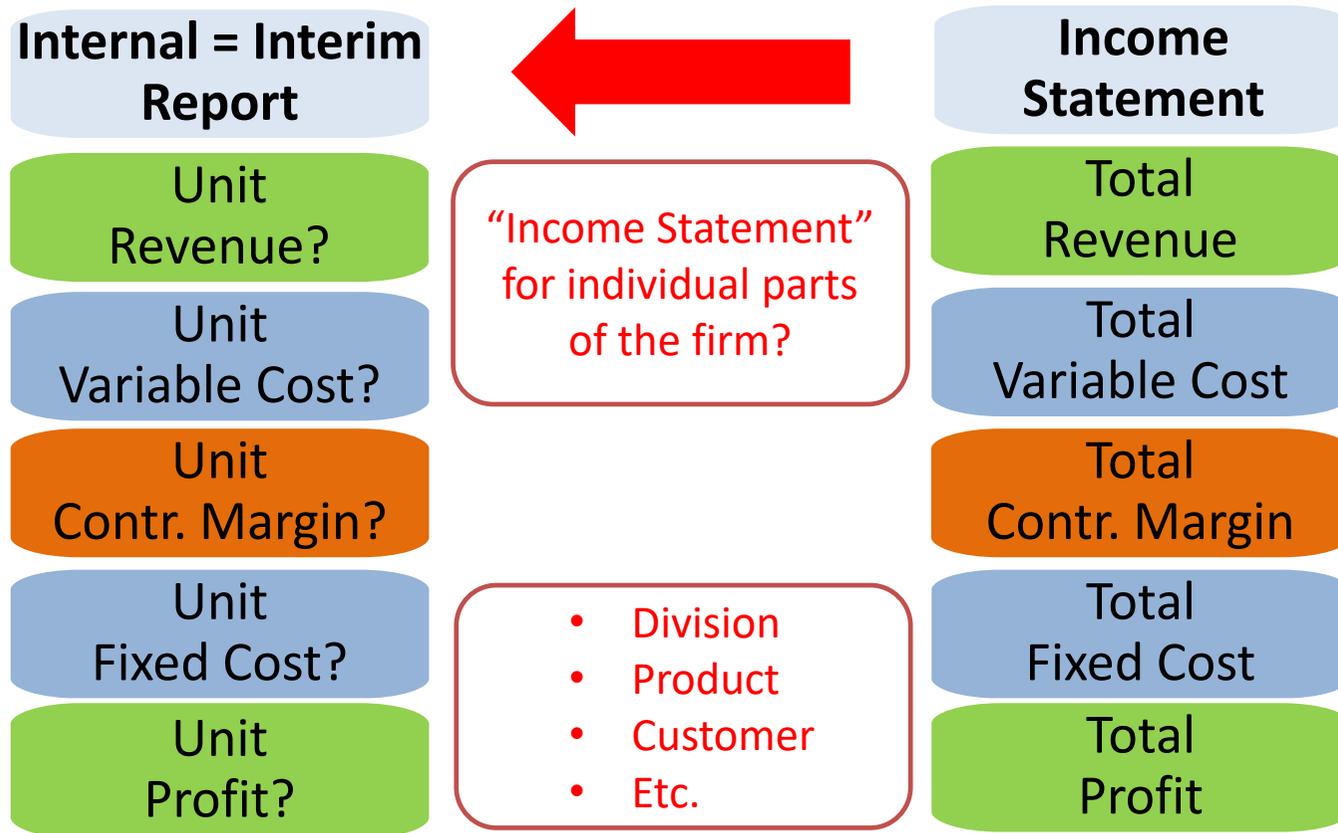


- For now (more to come!):
 - Understand the basic mechanics of cost systems.
 - Be aware of their consequences.
- Caution with this one (problematic) consequence:
accounting behavior ⇔ economic nature.

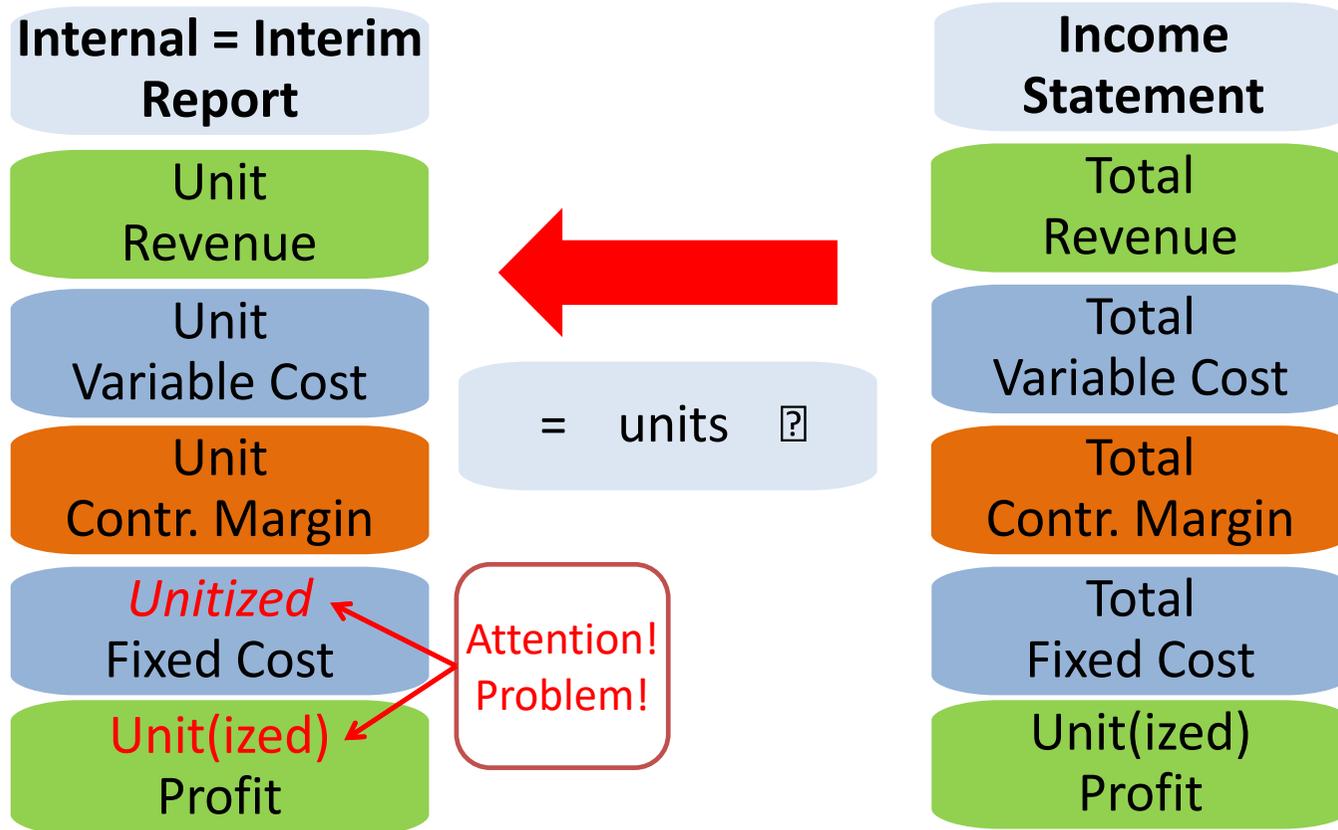
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 1. Granularity: cost specificity.
 2. Reporting: Unit Cost Reports vs. Income Statements.

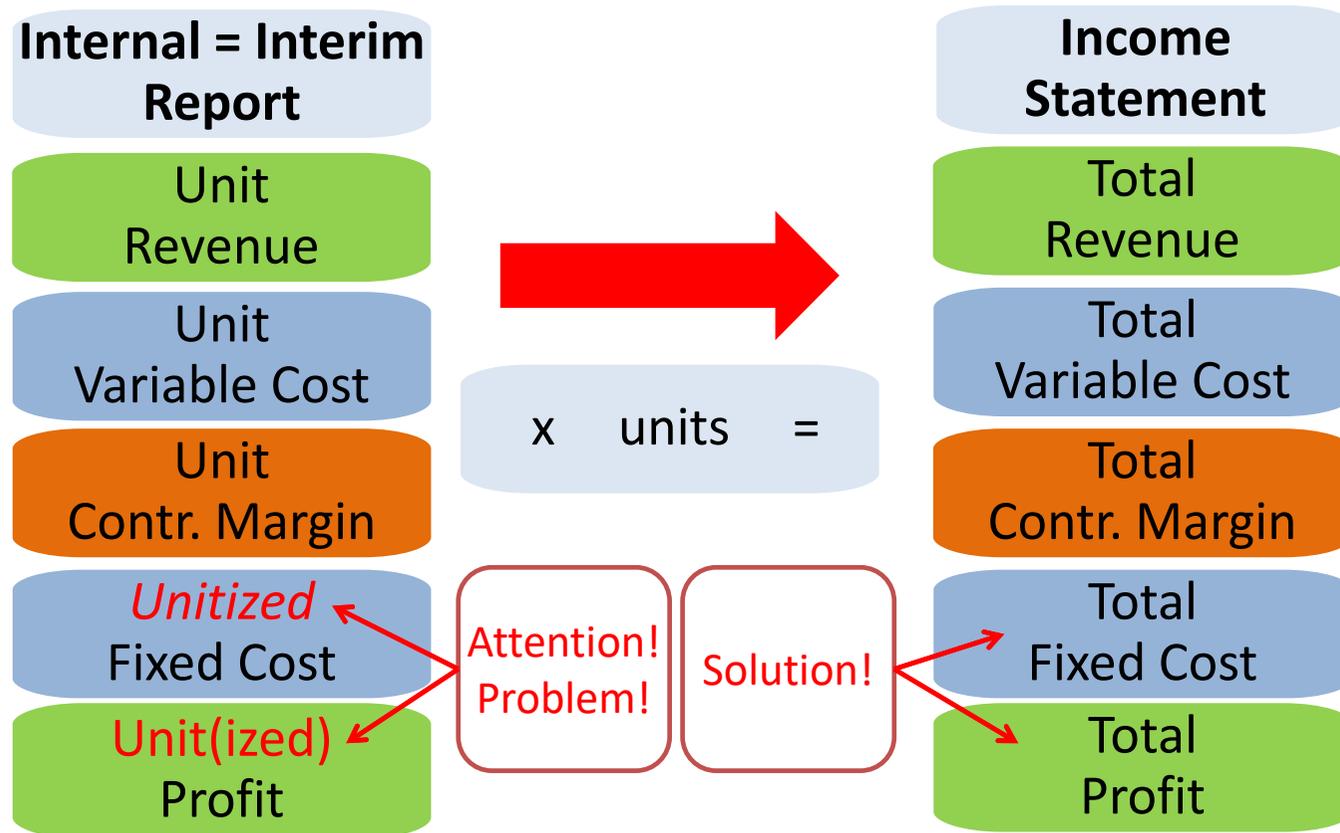
Management with Accounting



Management with Accounting



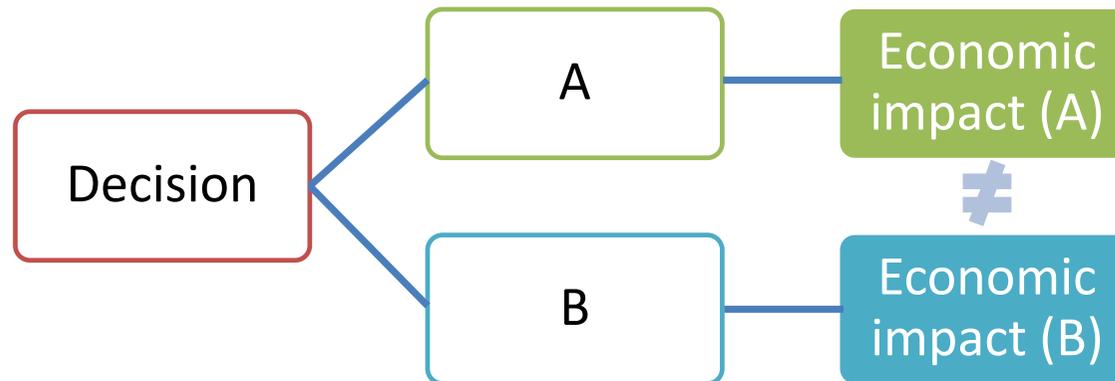
Management with Accounting



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 1. Granularity: cost specificity.
 2. Reporting: Unit Cost Reports vs. Income Statements.
 3. Comparability: cost relevance.

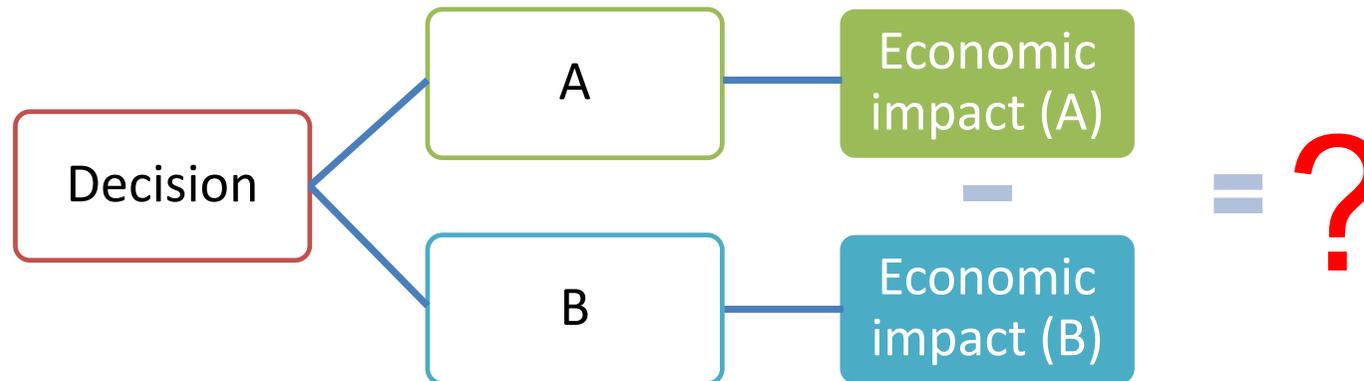
Accounting & Decisions



- Decision:
 - At least two alternatives with different **consequences**.
 - About what you can influence in the **future**.
 - Economic impact (benefits & costs) an important criterion.
 - Which alternative **creates more value**?

To be blunt: what changes and what does not change?

Accounting & Decisions



- *Relevant* economic impact:
 - Relevance = **caused** by the decision.
 - **How much more** value does alternative A create than does its alternative B?
- How **to identify and model** relevant economic impact that follows from choosing alternative A?

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 4. **Best Practice: “build your own Income Statement”.**

P&L Composition: IFRS Alternatives

Nature

Revenues

- Purchases of inventories
- + Change (increase) in inventories
- Wages and salaries
- Depreciation and amortization
- Other expenses
- = Income before Tax
- Tax
- = Net Income

Function

Revenues

- Cost of Goods Sold
- = Gross Margin

- Period Expenses: Sales and General Administration, Finance
- = Income before Tax
- Tax
- = Net Income

P&L Composition by Nature

Nature

Revenues

- Purchases of inventories
- + Change (increase) in inventories
- Wages and salaries
- Depreciation and amortization
- Other expenses
- = Income before Tax
- Tax
- = Net Income

- Presentation of costs as of **type of resources**:
 - For which concept/content/resource have you incurred costs?
 - Perspective: resource supply.
 - Focus: resource management.
- **Problematic** suggestion:
 - Inventories create value ... but they don't.
 - Purchases destroy value but they don't.

P&L Composition by Function

- Presentation of costs as of **purpose of resources**.

- Towards which concept/ content/ goal have you incurred the cost?
- Perspective: resource demand.
- Focus: value creation management.

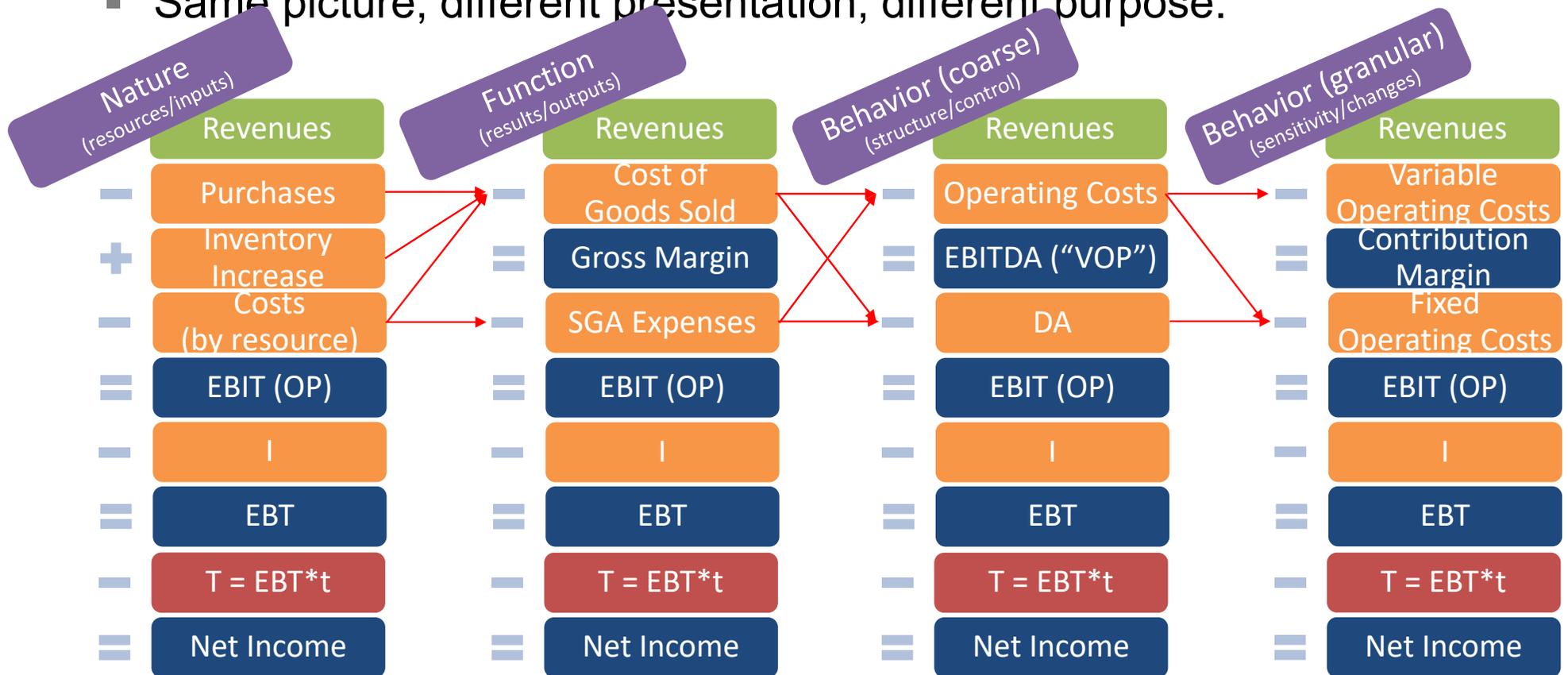
- **Useful** distinction:

- Product cost: transferrable cost (buyer “acquires” the cost).
- Period expense: facilitation cost (firm does not rescind ownership).

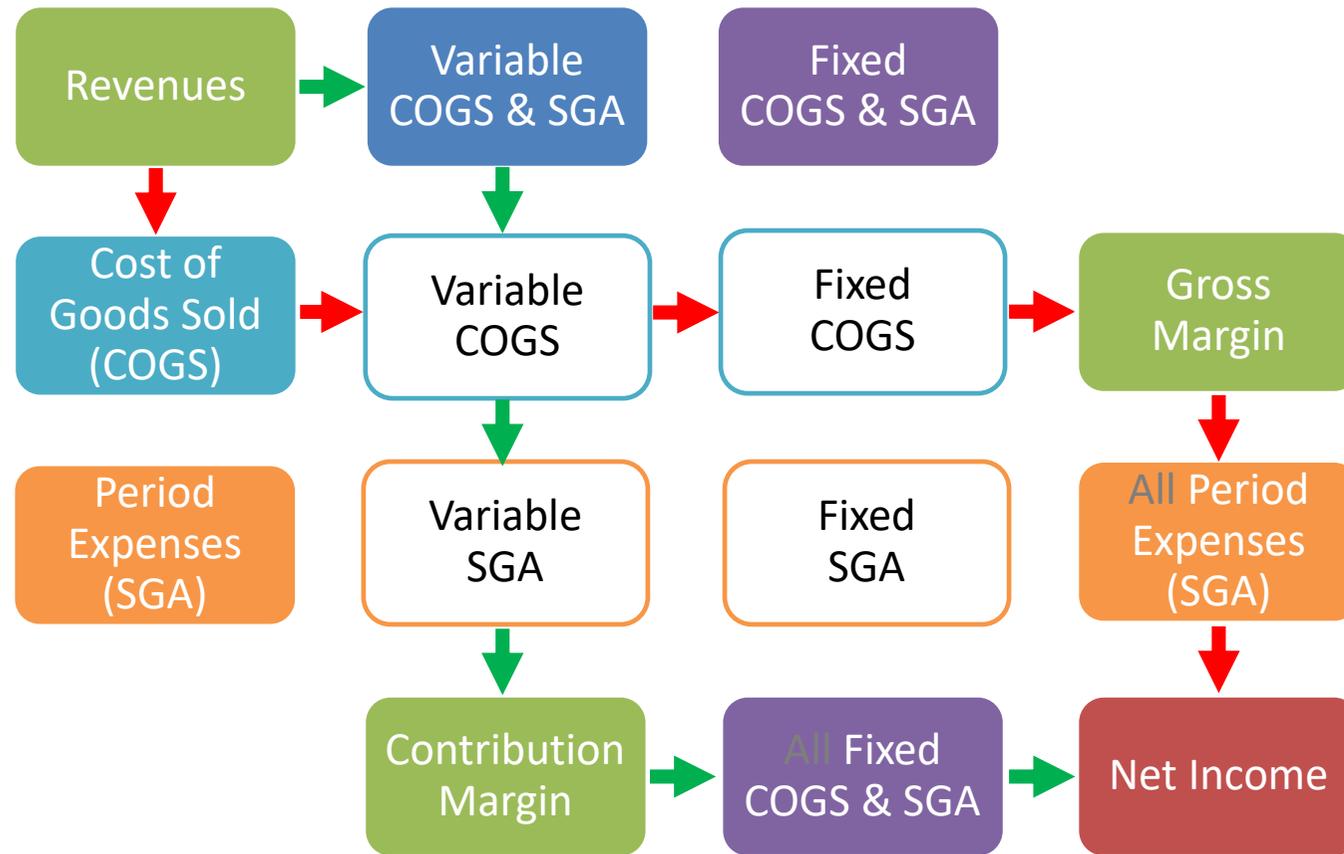
Function
Revenues
- Cost of Goods Sold
= Gross Margin
- Period Expenses: Sales and General Administration, Finance
= Income before Tax
- Tax
= Net Income

P&L Presentation: 3rd Way & 4th Way

- Same picture, different presentation, different purpose.



P&L / Income Statement



FYI: IFRS 18 for “better” P&Ls

Home > News > New IFRS Accounting Standard will aid investor analysis of companies' financial performance

09 April 2024

New IFRS Accounting Standard will aid investor analysis of companies' financial performance

The International Accounting Standards Board (IASB) today completed its work to improve the usefulness of information presented and disclosed in financial statements. The new Standard, IFRS 18 *Presentation and Disclosure in Financial Statements*, will give investors more transparent and comparable information about companies' financial performance, thereby enabling better investment decisions. It will affect all companies using IFRS Accounting Standards.

IFRS 18 introduces three sets of new requirements to improve companies' reporting of financial performance and give investors a better basis for analysing and comparing companies:

Improved comparability in the statement of profit or loss (income statement)

Currently there is no specified structure for the income statement. Companies choose their own subtotals to include. Often companies report an operating profit but the way operating profit is calculated varies from company to company, reducing comparability.¹

IFRS 18 introduces three defined categories for income and expenses—operating, investing and financing—to improve the structure of the income statement, and requires all companies to provide new defined subtotals, including operating profit. The improved structure and new subtotals will give investors a consistent starting point for analysing companies' performance and make it easier to compare companies.

<https://www.ifrs.org/news-and-events/news/2024/04/new-ifrs-accounting-standard-will-aid-investor-analysis-of-companies-financial-performance/>,
published April 9, 2024,
accessed April 14, 2024

Focus: Operations vs Investments ...

Figure 3—Statement of profit or loss (extract from the Illustrative Examples on IFRS 18)⁴

Statement of profit or loss	20X2	20X1	Categories ⁵
Revenue	367,000	353,100	Operating
Cost of sales	(241,600)	(224,100)	
Gross profit	125,400	129,000	
Other operating income	12,200	4,100	
Selling expenses	(28,900)	(27,400)	
Research and development expenses	(25,100)	(25,900)	
General and administrative expenses	(20,900)	(22,400)	
Goodwill impairment loss	(4,500)	–	
Other operating expenses	(1,200)	(5,600)	
Operating profit	57,000	51,800	
Share of profit and gains on disposal of associates and joint ventures	5,300	7,300	
Profit before financing and income taxes	62,300	59,100	Financing
Interest expenses on borrowings and lease liabilities	(13,000)	(13,200)	
Interest expenses on pension liabilities and provisions	(6,500)	(6,000)	
Profit before income taxes	42,800	39,900	Income taxes
Income tax expense	(10,700)	(9,975)	
Profit from continuing operations	32,100	29,925	Discontinued operations
Loss from discontinued operations	–	(5,500)	
Profit	32,100	24,425	

IFRS Foundation (2024),
Effects Analysis IFRS 18,
<https://www.ifrs.org/content/dam/ifrs/publications/ amendments/english/2024/effects-analysis-ifs18-april2024.pdf>,
downloaded April 14, 2024

Ancillary: ... vs Financing

Case study: Statement of profit or loss

This case study illustrates changes in the classification of six items of income and expenses for a manufacturer that does not have any specified main business activities.

Statement of profit or loss applying IAS 1	
Revenue	350,000
Cost of sales	(200,000)
Gross profit	150,000
Other operating income	15,000
Selling expenses	(30,000)
General and administrative expenses	(45,000)
Research and development expenses	(20,000)
Share of profit from associates and joint ventures	3,500
Other operating expenses	(6,000)
Operating profit	67,500
Finance income	500
Finance costs	(7,500)
Profit before income taxes	60,500
Income tax expense	(15,500)
Profit	45,000

Statement of profit or loss applying IFRS 18 ³¹	
Revenue	350,000
Cost of sales	(200,000)
Gross profit	150,000
Other operating income	10,500
Selling expenses	(30,000)
General and administrative expenses	(44,000)
Research and development expenses	(20,000)
Other operating expenses	(7,500)
Operating profit	59,000
Share of profit from associates and joint ventures	3,500
Other investment income	5,000
Profit before financing and income taxes	67,500
Income and expenses on borrowings	(6,000)
Interest expense on lease and pension liabilities	(1,000)
Profit before income taxes	60,500
Income tax expense	(15,500)
Profit	45,000

Change in the classification of income and expenses after applying IFRS 18	
1	Fair value gains and rental income from investment properties will be classified in the investing category (included in other operating income before IFRS 18)
2	Net interest expense on net defined benefit liabilities will be classified in the financing category (included in general and administrative expenses before IFRS 18)
3	Income and expenses from associates and joint ventures accounted for using the equity method will be classified in the investing category (included in operating profit before IFRS 18)
4	Interest income on cash and cash equivalents will be classified in the investing category (included in finance income before IFRS 18)
5	Foreign exchange differences arising from trade receivables will be classified in the operating category (included in finance costs before IFRS 18)
6	Foreign exchange differences arising from borrowings will be classified in the financing category (included in finance costs before IFRS 18)

IFRS Foundation (2024),
Effects Analysis IFRS 18,
<https://www.ifrs.org/content/dam/ifrs/publications/ame/ndments/english/2024/effect-analysis-ifs18-april2024.pdf>,
downloaded April 14, 2024

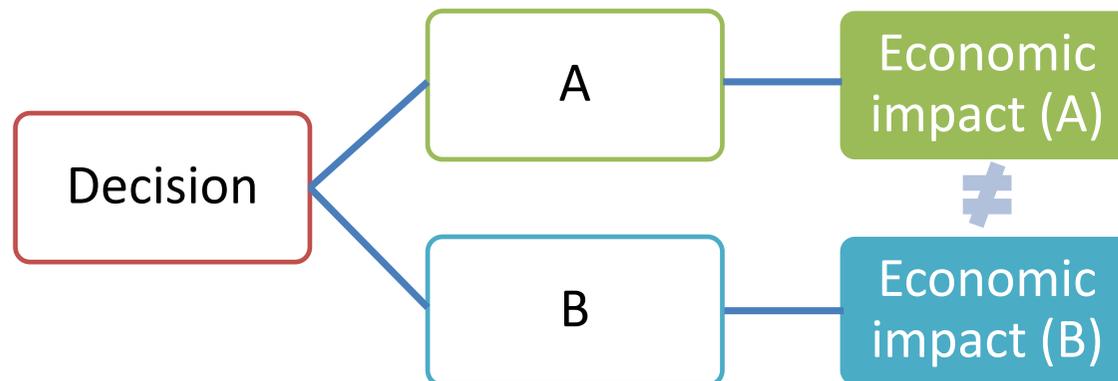
³¹ The line items illustrate what is included in each category and do not denote line items that any particular company would present. Gross profit and profit before income taxes are presented as additional subtotals because they are necessary for the statement of profit or loss to provide a useful structured summary of income and expenses.

Industrial Grinders: Agenda

1. Context & Objective
2. Review: Salem Telephone
3. Industrial Grinders NV
 1. Situation
 2. Pitfalls of fixed cost allocation: example(s).
 3. Solution
4. Perspectives: Income Statement
 1. Granularity: cost specificity.
 2. Reporting: Unit Cost Reports vs. Income Statements.
 3. Comparability: cost relevance.
 4. Best Practice: “build your own Income Statement”.
5. Summary

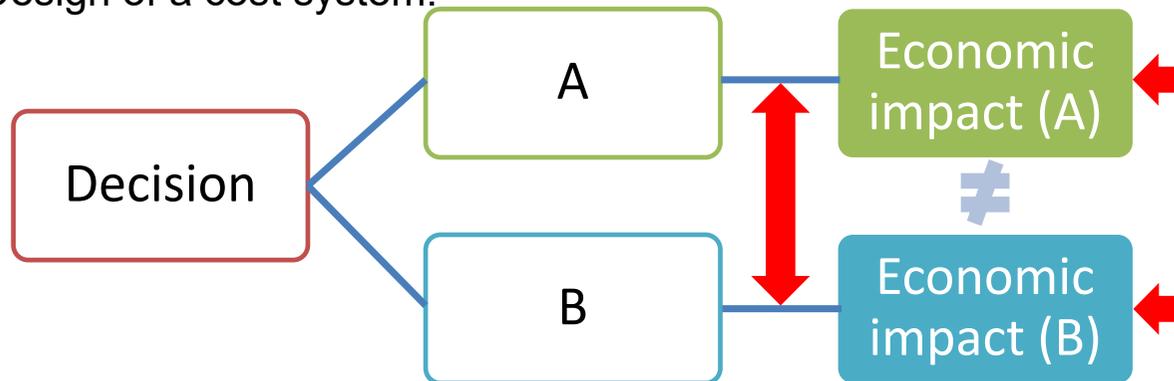
Timeless Issues

- Business decision grounded in an **analysis of the expected accounting outcomes** as a measure of economic value creation.



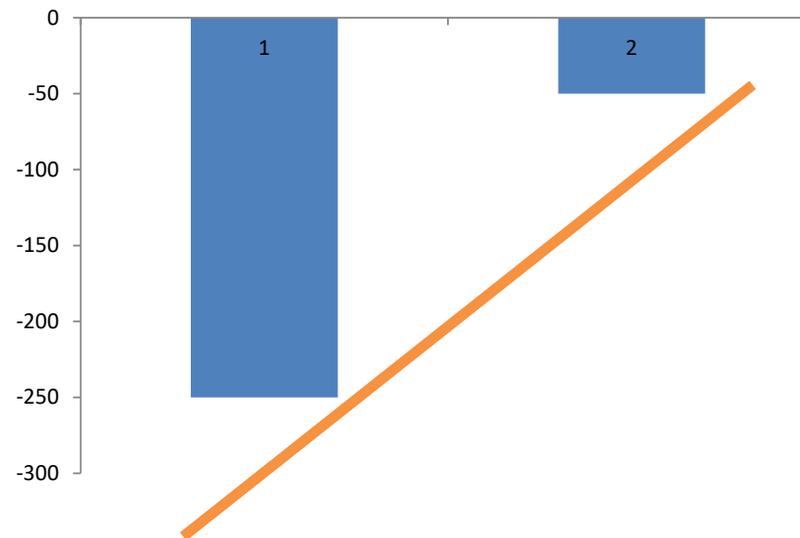
Timeless Issues

- Benefits of “good use of good accounting” ...
 - Identification of the “relevant” revenues & costs:
 - Underlying economics.
 - Decision at hand.
 - Effect of accounting on the **quality** of the decision:
 - Design of the accounting report.
 - Design of a cost system.



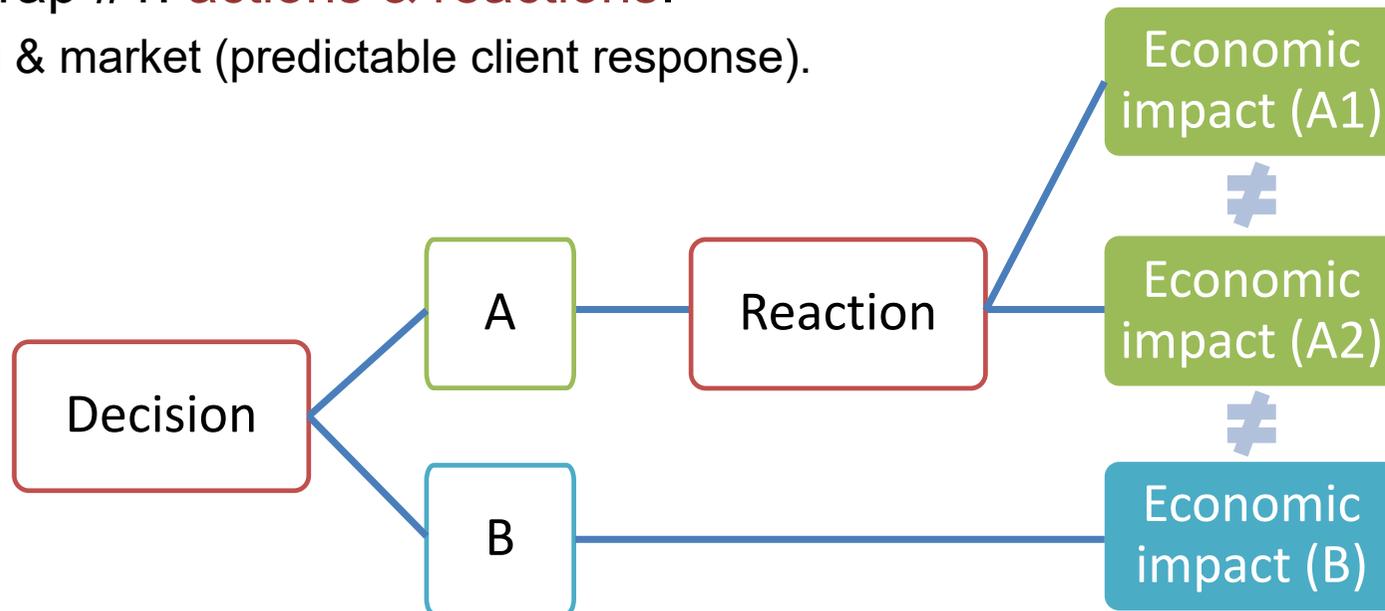
Timeless Issues

- ... and benefits of **common sense**.
 - Some cash is better than no cash.
 - A small accounting loss is better than a large accounting loss.



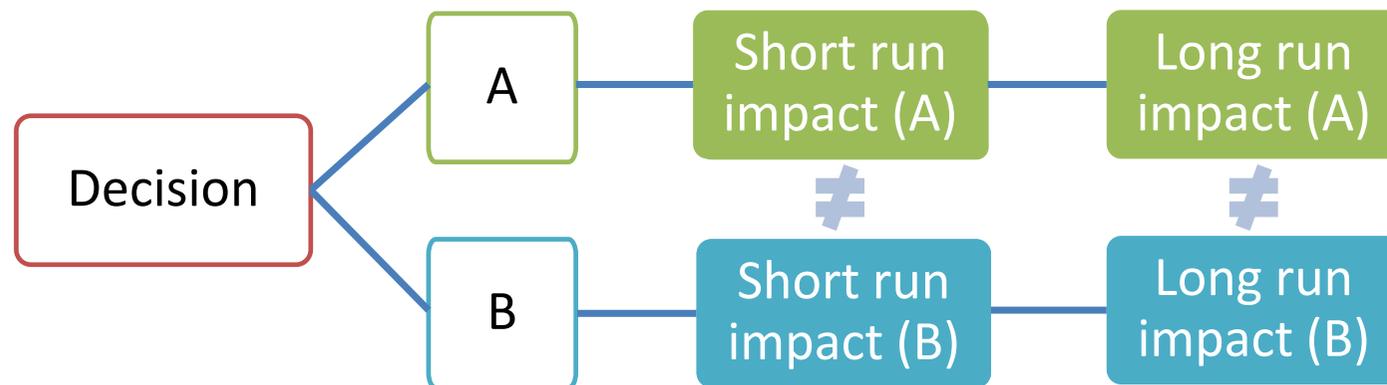
Perspectives on Accounting

- Framing the problem is more important than crunching the numbers!
- Case trap #1: actions & reactions.
 - Firm & market (predictable client response).



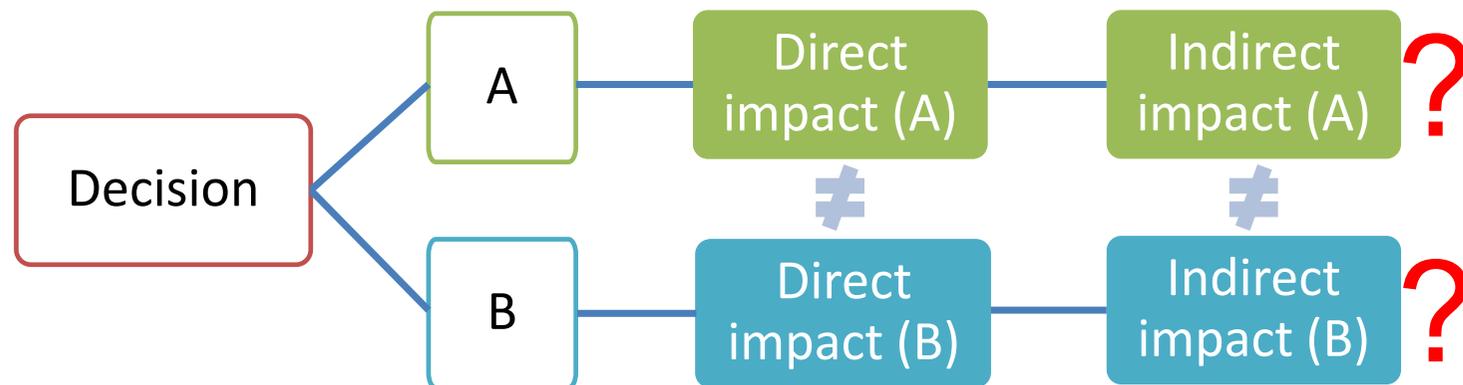
Perspectives on Accounting

- Framing the problem is more important than crunching the numbers!
- Case trap #2: myopia/short-sightedness.
 - There are only decisions, no short-run or long-run decisions.
 - At some point in time, the short run becomes the long run. \$1m question: at which point in time?



Perspectives on Accounting

- Framing the problem is more important than crunching the numbers!
- Case trap #3: decision object.
 - Not really the no-brainers: plastic vs. steel, produce or not.
 - Rather the challenges for superior and sustainable value creation: *now what?*



Cost Management ...

October 2016

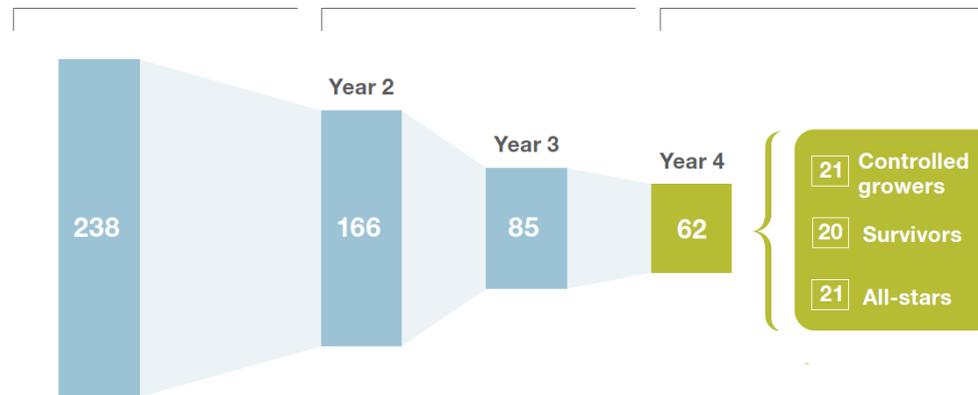
McKinsey Quarterly **CAN YOU ACHIEVE AND SUSTAIN G&A COST REDUCTIONS?**

Only one in four companies were able to sustain their improved rates of G&A spending relative to sales.

Companies in S&P Global 1200 (2003–14) that report G&A¹ and announced reduction initiatives by 2010

Number of companies continuing to sustain improvements

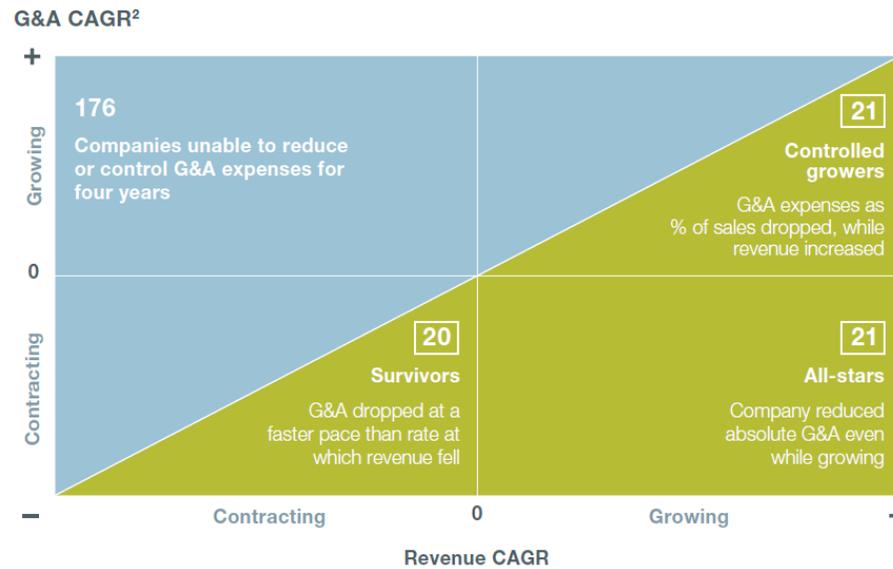
Companies that sustained G&A improvement for 4 years



... Quite difficult!

October 2016

McKinsey Quarterly **CAN YOU ACHIEVE AND SUSTAIN G&A COST REDUCTIONS?**



¹ General and administrative expenses.

² For 4-year period beginning with a company's announcement of G&A-reduction initiative; CAGR = compound annual growth rate.

Cost Management in the 2020s: Products

'Shrinkflation' isn't a trend – it's a permanent hit to your wallet



By Alexis Benveniste 28th September 2023

Products are getting smaller, and you're paying the same. The problem won't go away, even if the economy rebounds and inflation abates.

<https://www.bbc.com/worklife/article/20230922-shrinkflation-isnt-a-trend-its-a-permanent-hit-to-your-wallet>,

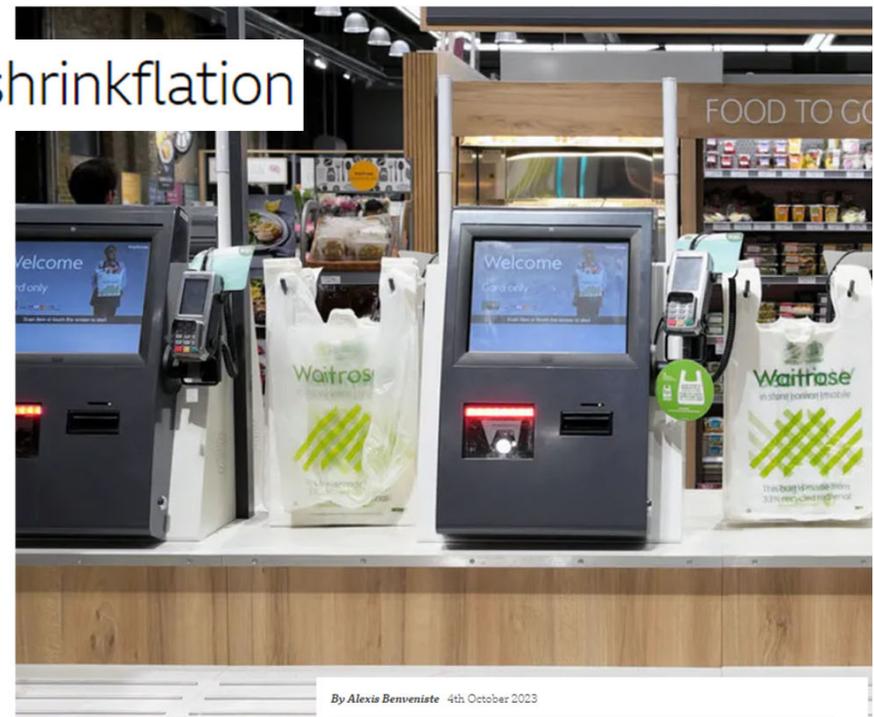
published September 28, 2023
accessed January 16, 2024

Cost Management in the 2020s: Services

'Skimpflation': An even sneakier form of shrinkflation

<https://www.bbc.com/worklife/article/20231003-skimpflation-an-even-sneakier-form-of-shrinkflation>,

published October 4, 2023,
accessed January 16, 2024



By Alexis Benveniste 4th October 2023

Amid inflation, businesses are cutting services and quality. It's called skimpflation, and you may not even notice it's happening.

Not Always Successful

(Image credit: Alamy)



'It hasn't delivered': The spectacular failure of self-checkout technology

By Sam Becker 15th January 2024

Unstaffed tills were supposed to revolutionise shopping. Now, both retailers and customers are bagging many self-checkout kiosks.

<https://www.bbc.com/worklife/article/20240111-it-hasnt-delivered-the-spectacular-failure-of-self-checkout-technology>,
published January 15, 2024,
accessed January 16, 2024

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