Controller

Operations Controlling

Kurt Rommel & Ben Reynaert

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Wie zijn wij ?

Kurt Rommel

Lead expert – SAP Controlling

Experienced implementor of controlling models in SAP

- High business integration to setup a correct system
- SME and Public industry
- Standardize controlling systems & Reporting

Ben Reynaert

Lead expert – Finance & Business Controlling

Expert in the area of Management Accounting & Control:

- Management Accounting in line with organizational structures & responsibilities
- Budgeting & Planning processes
- Customer profitability & Cost to serve systems

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Wie zijn jullie ?

Tour de table:

- Wie ben jij?
- Wat is jouw organisatie?
- Wat is jouw rol?
- Wat zijn jouw verwachtingen?
- Wat is jouw grootste uitdaging binnen Controlling?

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Delaware in a few words

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ABOUT DELAWARE

delaware is a fast-growing, global company that delivers advanced solutions and services to organizations striving for a sustainable, competitive advantage.

We guide our customers through their business transformation, applying the ecosystems of our main business partners, SAP and Microsoft. We continue to service our customers afterwards, assuring continuity and continuous improvement.

In all perspectives, we apply our own sustainable business model that aims for the long-term. Our future leaders are already among us. They are driving our clients' success, shaping them to stand out today and preparing them for tomorrow.

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SUMMARY

HISTORY

Founded in 1981
Has been part of Bekaert, Andersen and Deloitte
Management Buy Out with 124 professionals in 2003

TODAY

2600 professionals
28 offices
14 countries
4 continents
€ 330 million revenue

RECIPE

Aligning business and technology
Combining strengths, delivering solutions
Delivering tomorrow, today

PHILOSOPHY

Entrepreneurship, Care, Respect, Team Spirit, Commitment

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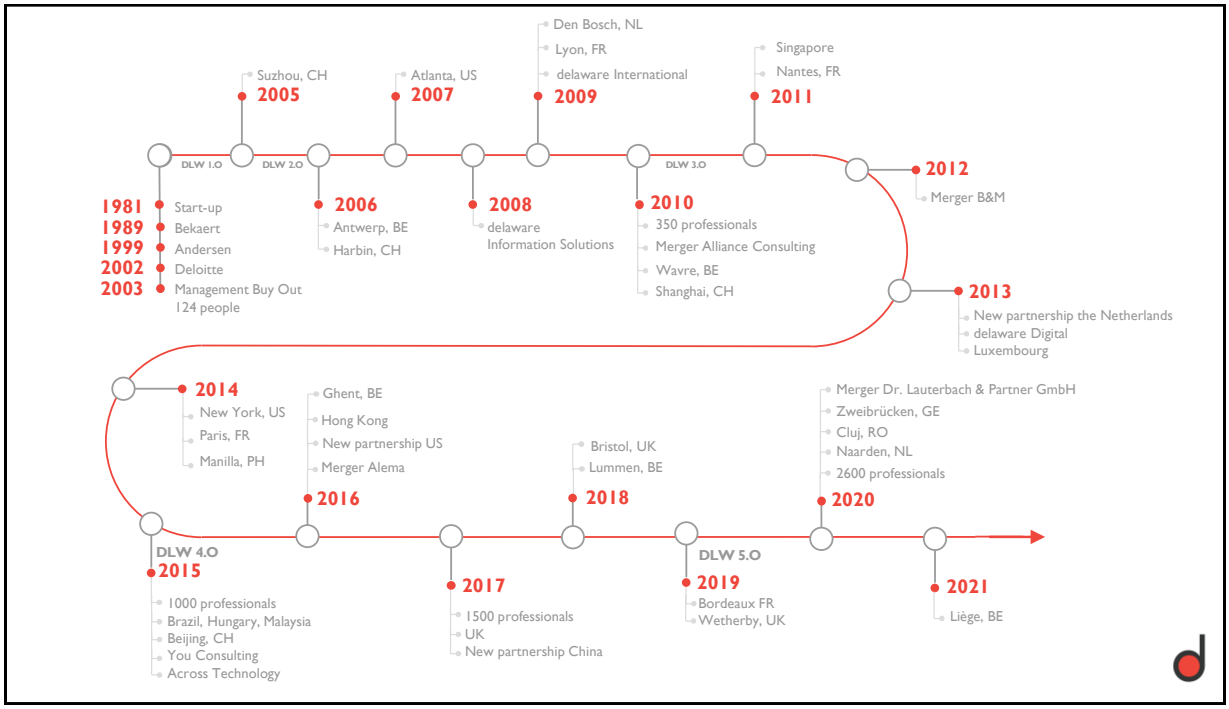
1981 Start-up
1989 Bekaert
1999 Andersen
2002 Deloitte
2003 Management Buy Out
124 people
DLW 1.0
DLW 2.0
DLW 3.0
DLW 4.0
DLW 5.0
2005 Suzhou, CH
2006 Antwerp, BE
Harbin, CH
2007 Atlanta, US
2008 delaware
Information Solutions
2009 Den Bosch, NL
Lyon, FR
delaware International
2010 350 professionals
Merger Alliance Consulting
Wavre, BE
Shanghai, CH
2011 Singapore
Nantes, FR
2012 Merger B&M
2013 New partnership the Netherlands
delaware Digital
Luxembourg
2014 New York, US
Paris, FR
Manilla, PH
2015 1000 professionals
Brazil, Hungary, Malaysia
Beijing, CH
You Consulting
Across Technology
2016 Ghent, BE
Hong Kong
New partnership US
Merger Alema
2017 1500 professionals
UK
New partnership China
2018 Bristol, UK
Lummen, BE
2019 Bordeaux FR
Wetherby, UK
2020 Merger Dr. Lauterbach & Partner GmbH
Zweibrücken, GE
Cluj, RO
Naarden, NL
2600 professionals
2021 Liège, BE

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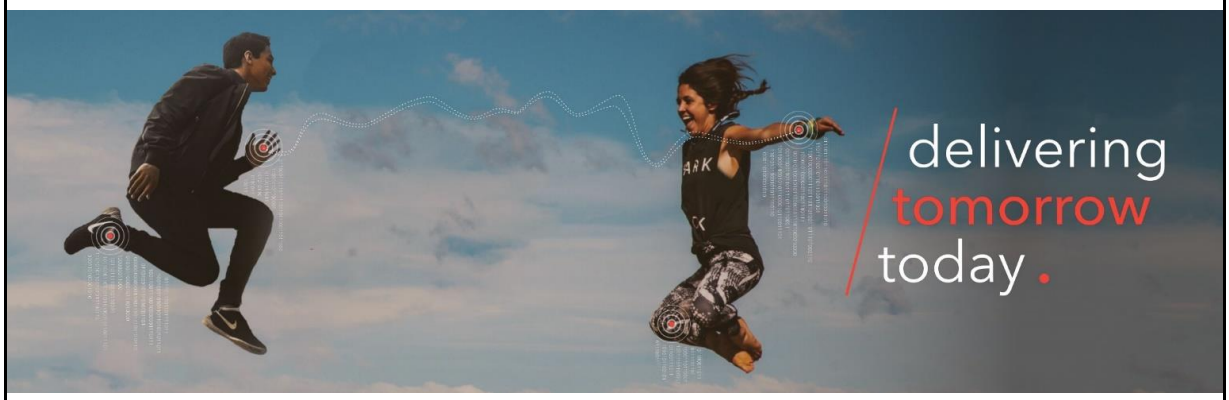
delivering
tomorrow
today.

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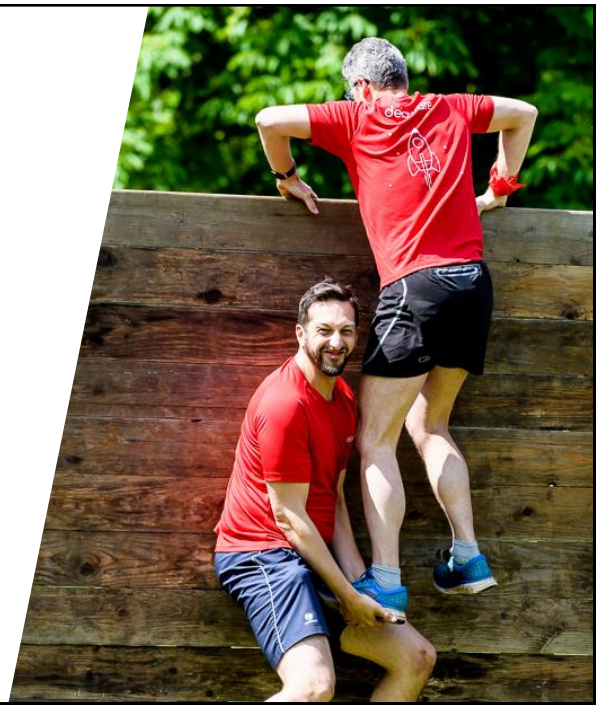
VALUE PROPOSITION

To guide our customers to the top in their respective domains, realizing operational excellence, increasing business insights and improving their own customers' experience



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DELAWARE TODAY

2600 professionals
28 offices in 14 countries
€330 mio revenue

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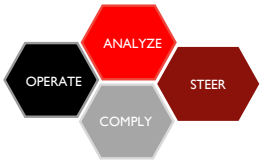
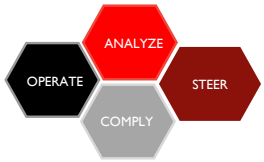
The delaware Finance Transformation Roadmap

WAVE 01
EFFICIENCY



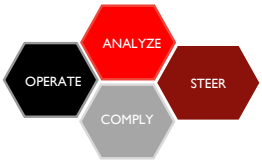
- Finance Operations
- Analytical Accounting
- Product Costing
- Financial budgeting
- Functional reporting
- Statutory and Regulatory

WAVE 02
EFFECTIVENESS



- Fast / Soft Close
- Next Level Controlling
- Net Margin Analysis (Cost To Serve)
- Rolling Forecast / Driver Based
- Performance reporting
- Managerial governance & controls

WAVE 03
VALUE CREATION



- Robo – Accounting
- Business / Scenario Modelling
- Competing on Analytics
- Integrated Business Planning
- Strategic Reporting
- Strategic compliance

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AGENDA

- Intro
- Financial vs Management Accounting
- Management control
  - Structure
  - Coordination mechanisms
- The costing problem
  - Standards & Actuals
- Cost estimation methodologies
  - Full Costing
  - Direct Costing
  - Customer profitability & Activity Based Costing
    - Case De Kaarsfabriek
  - Time Driven Activity Based Costing

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EXECUTION PREMIUM

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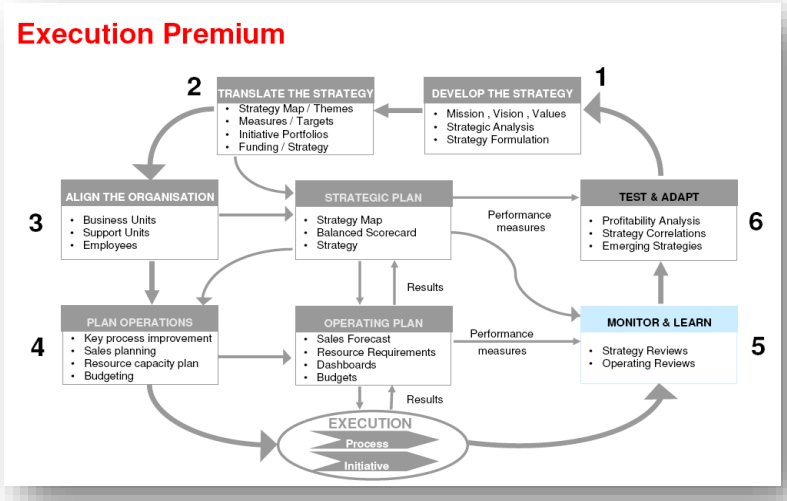
The Integrated Performance Management Process



Kaplan & Norton – The execution premium

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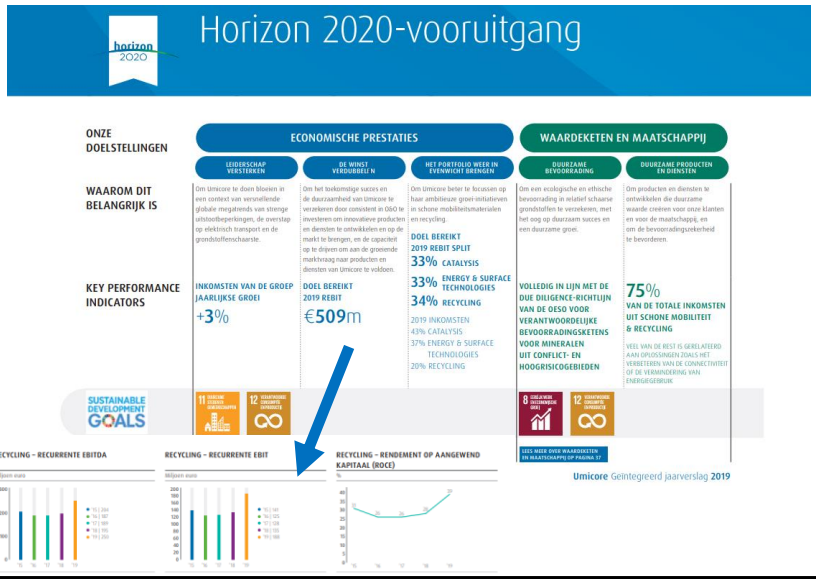
Strategic Themes: Umicore example



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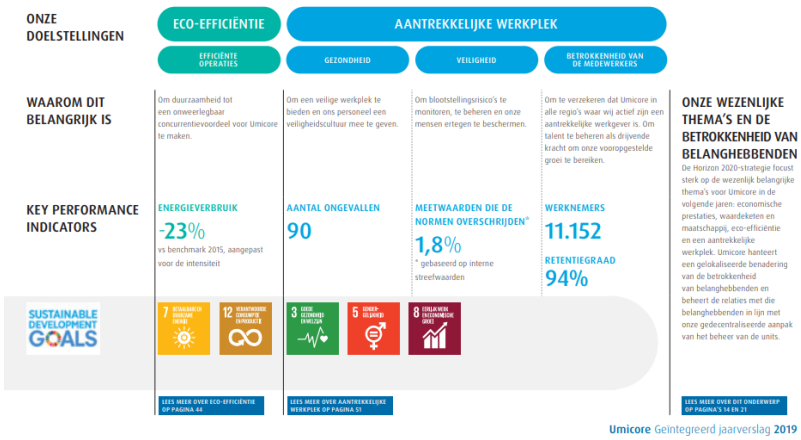
Strategic Themes – Umicore example



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Role of the **Controller**

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General role of the **Controller**

- **Motivate** managers for behaviour *in line with* the strategy
- Install and maintain best fit management control **structure**
- Optimize performance management **processes and systems**
- **Value creation**, become an internal business consultant
- Contributie to **strategy** development

→ **Performance Management**

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Different controllers for different purposes

COMPANY SPECIFIC

How are my BU organized?
Central or Local
Large or Small Organization
RESPONSIBILITY

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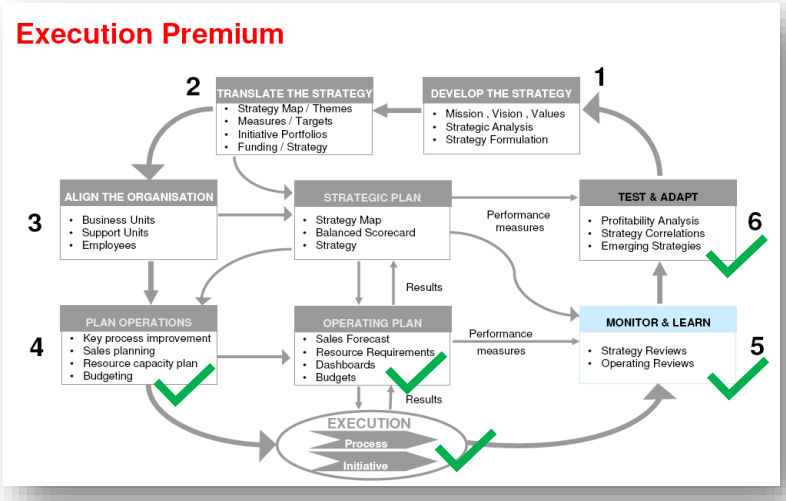
The Integrated Performance Management Process



Kaplan & Norton – The execution premium

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Financial Accounting

Vs

Management Accounting

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Different types – different purposes

	Financial accounting	Management accounting
Purpose of information		
Primary users		
Focus & emphasis		
Rules of measurement & reporting		
Time span & type of reports		
Behavioral implications		

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Different types – different purposes

	Financial accounting	Management accounting
Purpose of information	Communicate an organization's financial position to investors, banks, regulators,…	Help managers make decisions to fulfill an organization's goals
Primary users	External users such as investors, banks, regulators & suppliers	Managers of the organization
Focus & emphasis	Past-oriented, Fiscal	Future-oriented, Economic
Rules of measurement & reporting	Financial statements need to be audited and comply with accounting standards	Internal measures and reports
Time span & type of reports	Annual & quarterly reports primarily on the company as a whole	Varies from hourly information to forecasts & time series of 10-20 years
Behavioral implications	Primarily report economic events, but also influences behavior	Designed to influence the behavior of managers & employees

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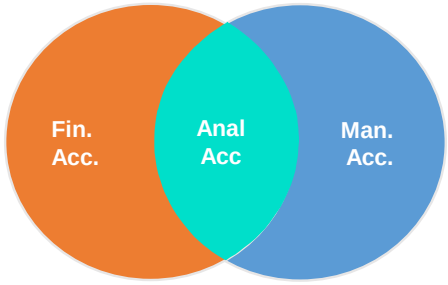
Different views – one system

Financial Accounting
- Hindsight oriented
- Aggregate
- Formal framework
- External



Management Accounting
- Foresight oriented
- Analytical
- Informal
- Internal

Management control Structure
- Organization
- Structure
- Responsibility
- Accountability

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MANAGEMENT

CONTROL

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3 Pillars of business controlling

Structure

Process

Culture

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MANAGEMENT CONTROL STRUCTURE

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Optimal management control structure

An **optimal structure**

is one that

contributes maximally to **desired managerial behaviour**

and **discourages dysfunctional behaviour.**

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Responsibility Centers

- A responsibility center is any **organizational unit** that is headed by a **responsible** manager.
- A responsibility center exists to accomplish one or more purposes, its **objectives**.
- Responsibility centers consume resources (inputs) and produce outputs. The task of a responsibility center manager is to improve **efficiency** and **effectiveness**.
- *Efficiency* = outputs/inputs → *"doing the things right"*
  Effectiveness = how well do outputs contribute to the objectives. → *"doing the right things"*
- **Measurability** of inputs and/or outputs determines the nature of responsibility centers.

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Responsibility Centers

- Responsibility
- Authourity
- Controllability
- Accountability

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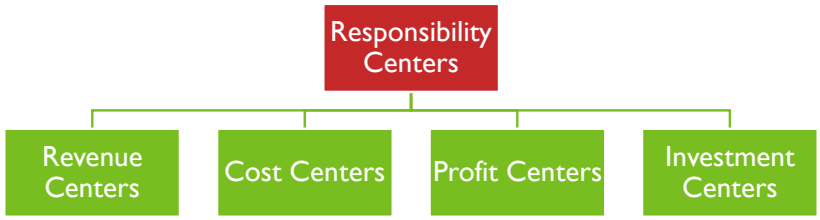
Responsibility Centers



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Revenue centers

- In a revenue center, outputs are measured in monetary terms, but no formal attempt is made to relate inputs or expense to outputs.
- A good example is the Sales department (cf., sales budgets).
- No answer as to the profitability of sales

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Cost centers

- Cost centers are responsibility centers for which inputs or expenses are measured in monetary terms, but in which outputs are not measured in monetary terms.

- **Engineered Cost Centers**
  (e.g., Manufacturing Plant)
  Costs are engineered when the amount of costs that should be incurred can be specified with a reasonable degree of reliability (e.g., direct labor and material costs in a factory).

  Cost efficiency (inputs) versus other aspects of performance
  (e.g., quality of outputs).

- **Discretionary Cost Centers** (e.g., R&D)
  Cost budget versus actual budget. No monetary measure of efficiency nor effectiveness.

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Profit centers

- Responsible for both revenues & costs
- Questions to ask:
  - Which are my business units? → Go to market !
  - What are their responsibilities?
  - What are their restrictions?
  - How can we align their behaviour?
  - What transfer price system is most useful?
  - What about corporate overheads?
  - Who should lead the profit centers, and how will we evaluate and reward them?
  - How do we set up reporting to help management control?

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Investment Centers

- Added responsibilities for (part of) the balance sheet
  - Working capital
  - Operational assets (Machines, fleet, etc…)
  - Facilities
  - Liquidity
  - R&D assets
- Split between controllable & non-controllable assets

- Profitability is compared with the assets employed in earning it.
- Return on Investment is the guiding measure.

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COÖRDINATION MECHANISMS

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Responsibility Accounting Framework

Periodic Accounting

- Sales Revenue
- - Sales Costs
- - Inventory changes
- - Capitalized internal activities
- - Work in process
- **Total activities**
- - Material costs
- - Machine costs
- - Personnel costs
- - Other costs
- **EBIT**
- - Financial Result & Taxes
- **= Net Result**

Cost Of Sales Reporting

- Sales Revenue
- - Sales Costs
- - COGS
- - Production variance
- **Gross Contribution Margin**
- - Fixed Costs
- **Net Contribution Margin**
- - Period Costs
- - Freight & Warehousing
- **Gross Profit**
- - SG&A
- **Operating Profit**
- - Other Income, Expenses
- **EBIT**
- - Financial Result & Taxes
- **= Net Result**

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Responsibility Accounting Framework

Cost Of Sales Reporting

- Sales Revenue
- - Sales Cost
- - COGS
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- - Other Income, Expenses
- **EBIT**
- - Financial Result & Taxes
- **= Net Result**

Responsibility Accounting Framework

- Sales Revenue
- - Sales Costs
- **Sales Performance**
- Production Revenue - Costs
- **Production Performance**
- Purchase Revenue - Costs
- **Purchase Performance**
- Logistical Revenue - Costs
- **Logistical Performance**
- Marketing Revenue - costs
- **Marketing Performance**
- Overhead Revenue - Costs
- **Overhead Performance**
- Financial Revenue - costs
- **Financial Performance**
- Actualisation Revenue - Costs
- **Actualisation Performance**
- **= Net Result**

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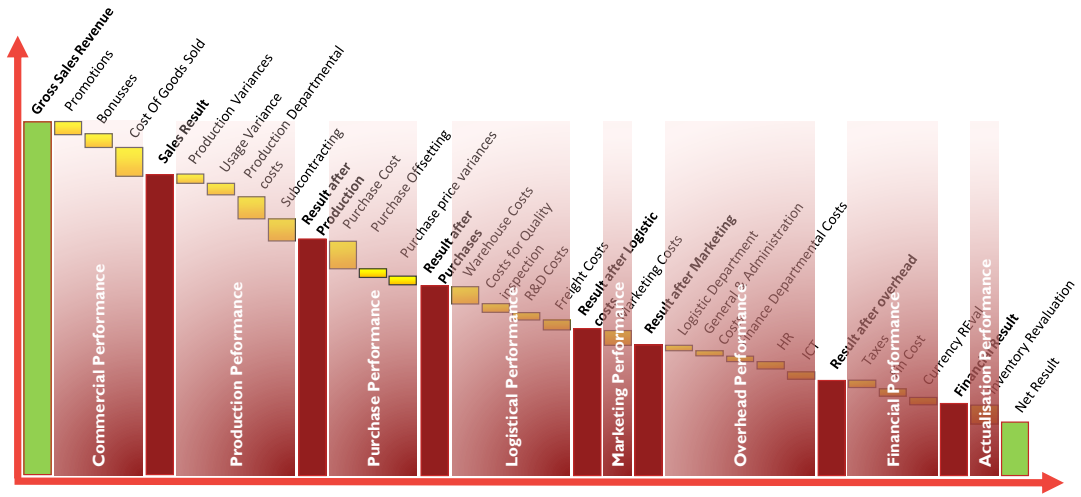
Responsibility accounting



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Responsibility Accounting: An example

product	FP001
Qty Sold	10
Qty Prod	12
Chargeback	5
Lab Cost	5
Machine Cost	5
OH	3
Std Price	18
Sales Price	30

Periodic Accounting	
Sales	-300
Stock Change	-36
Total Activities	-336
Material	60
Machines	60
Personnel	60
Other	36
EBIT	-120

COS Reporting	
Sales	-300
COGS	180
Material	50
Machines	50
Personnel	50
Other	30
Contribution	-120

RAF	
Sales Rev	-300
Sales Cost	180
Sales Perf	-120
Prd Rev	-216
Prd Cost	216
Prd Result	0
net result	-120

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Responsibility Accounting: Hogere materiaalkost

Product	FP001
Qty Sold	10
Qty Prod	12
Material Price	5
Lab Cost	5
Machine Cost	5
OH	3
Std Price	18
Act Mat Price	6
Sales Price	30

Periodic Accounting	
Sales	-300
Stock Change	-36
Total Activities	-336
Material	72
Machines	60
Personnel	60
Other	36
EBIT	-108

COS Reporting	
Sales	-300
COGS	180
Material	*50*
Machines	*50*
Personnel	*50*
Other	*30*
PRD Variance	-12
Contribution	-108

RAF	
Sales Rev	-300
COGS	180
Sales Perf	-120
Prd Rev	-216
Prd Cost	216
Prd Result	0
Purchase Diff	-12
net result	-108

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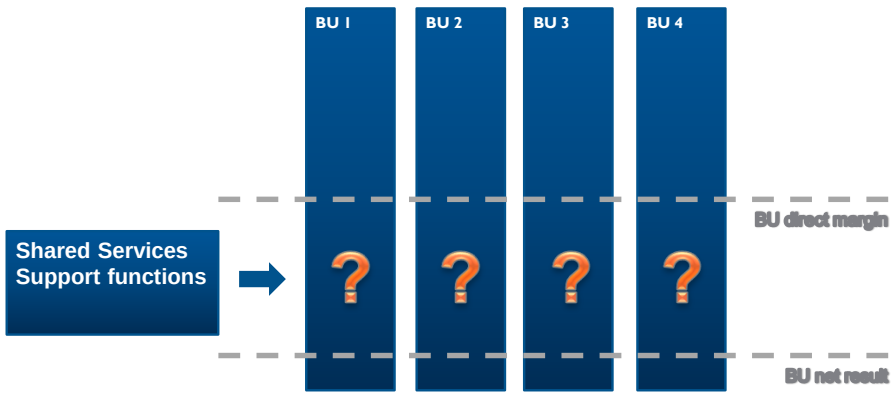
Shared service centers
The 'stripped down' problem (1)



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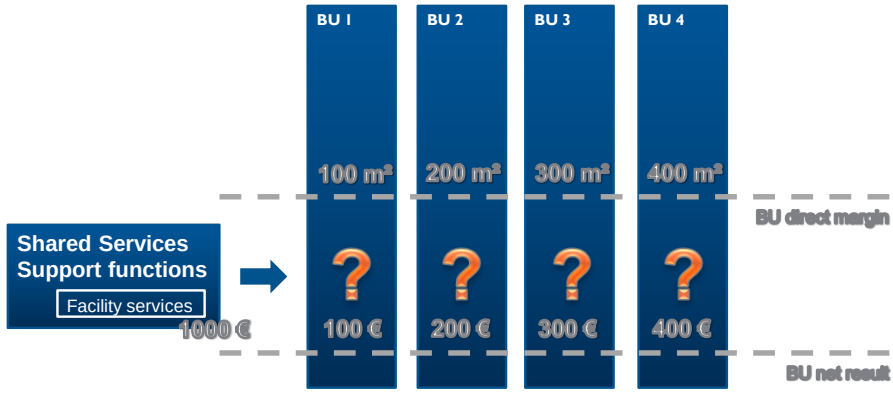
Shared service centers
The 'stripped down' problem (2)



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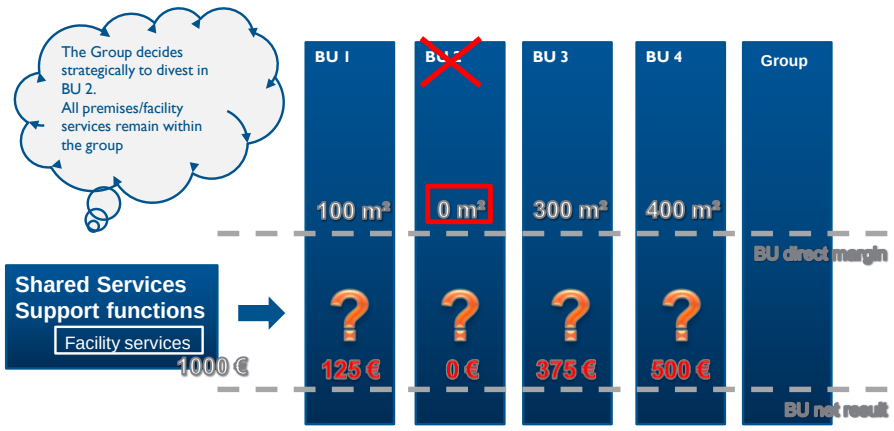
Shared service centers
The 'stripped down' problem (3)



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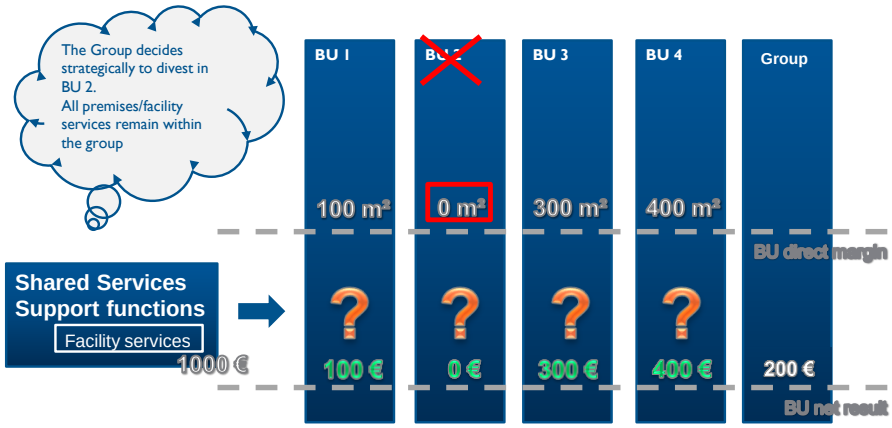
Shared service centers
The 'stripped down' problem (3)



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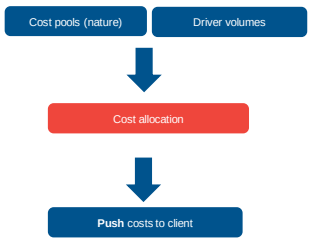
Shared service centers

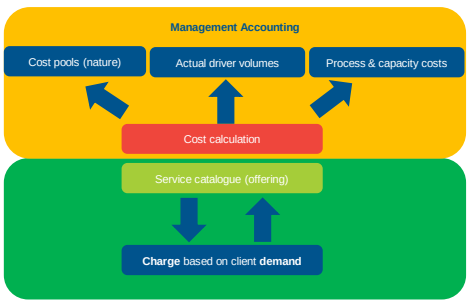
Most common



Main characteristics

- Little alignment between SSC and customer
- Disbelief in SSC due to lack of transparency
- Service fee is increasing year after year
- Negative rumors about SSC delivery and effectiveness
- Client control is absent
- No fairness perceived due to mismatch driver volumes-cost allocation
- Us vs. them ...

Best practices



Main characteristics

- Increased **alignment** due to dialogue on services portfolio (catalogue)
- **Transparency** in the definition and recognition of the services
- SSC **Cost containment** possible
- High client control
- Customer knows in **advance** exactly what he will pay for his service demand
- SSC becomes a **value adding business partner**

Service catalogue

- Services well defined
- Terms & conditions clear
- Upfront/yearly determined price
- Supplier-client relationship

Governance

- Group function is strategic buffer
  - Overcapacity
  - Strategic investments
- Increased dialogue
- Escalation procedures needed

Financial systems

- In the financial accounting systems
- PO/PR process and procedures

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Shared Service Center: Example in managerial P&L

SCENARIO: Sales BU

	BU1 General Sales		BU3 Sales BU3	PrdCtr1	PrdCtr2	PrdCtr3	PrdCtr4	PrdCtr8	PrdCtr9	PrdCtr10	PrdCtr11	SC1	SC2	SC3	SC4	SC5	SCx	SC7	SC8	SC9	Corp 1	Corp 2	Corp 3	Corp 4
	BEL	ROU	BEL	BEL	BEL	BEL	BEL	ROU	ROU	CHN	BEL	Engin.	IT	Maint	Quality	Proc	...	CME	Program Mgt	SES	Fin	HR	GMgt	Corporate
Sales Performance	**-21.500**	**-200**																Central Manuf E						
Production Charge-out				-8.500	-17.000	-11.500	-70.000	-2.000	-2.400															
Charge out to Sales				-500	-2.000	-1.500	-54.000		-200															
Charge out to other PrdCtr				-8.000	-15.000	-10.000	-16.000	-2.000	-2.200															
Production Cost	6.000		10.000	6.855	17.330	11.315	65.870	2.035	2.200															
Primary production cost				6.500	17.000	11.000	30.000	1.900	15															
Charge in - SF							35.200		2.000															
Charge in - Engineering				100	100	100	200																	
Charge in - IT				50	50	60	140																	
Charge in - Maintenance				75	75	50	100	100	100															
Charge in - Quality				50	25	25	150	25	75															
Charge in - Procurement				10	10	10	10	10	10															
Charge in - Competence Center				5	5	5	5																	
Charge in - CME				25	25	25	25																	
Charge in - Program Mgt				25	25	25	25																	
Charge in - SES				15	15	15	15																	
On Stock	6.000		10.000																					
Production Performance				**-1.645**	**330**	**-185**	**-4.130**	**35**	**-200**															
Engineering Chargeout												-1.000												
Charge out to Sales												-500												
Charge out to other												-500												
Engineering Cost												1.000												
primary cost												1.000												
Charge in IT																								
Engineering Performance												0												
IT Performance													0											
Maintenance Performance														0										
Quality Performance															0									
Procurement Performance																-10								
Comp. Center Performance																	0							
CME Performance																		0						
Program Mgt Performance																			-10					
SES Performance																				0				
Corporate Costs																					575	370	2.010	50
Result	**-21.500**	**-200**	**10.000**	-1.645	330	-185	-4.130	35	-200	0	0	0	0	0	0	-10	0	0	-10		575	370	2.010	50

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MANAGEMENT CONTROL CULTURE

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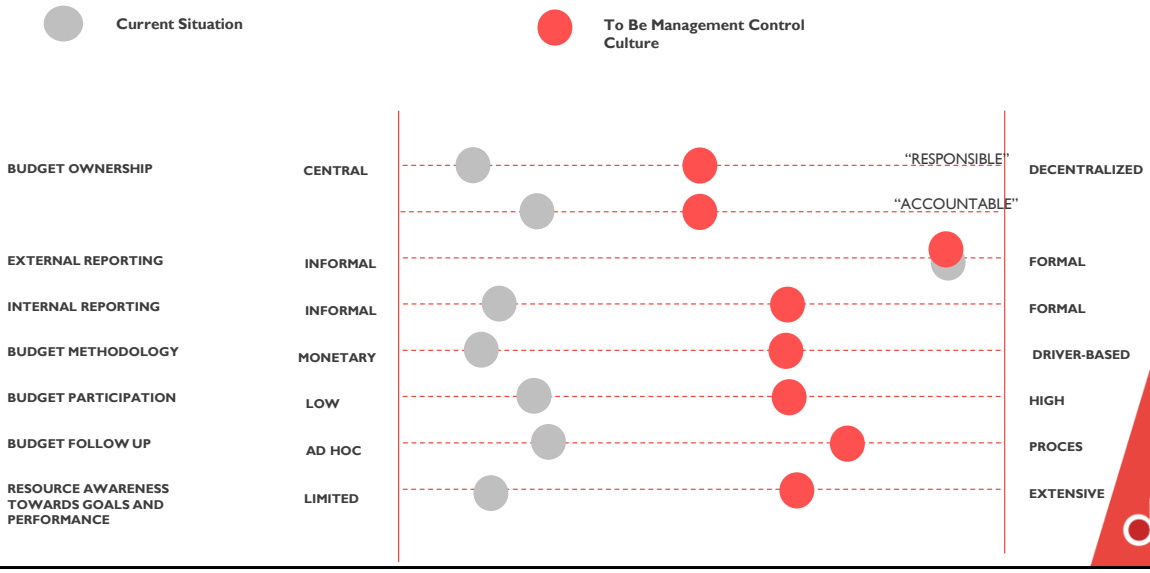
Management Control Culture & Change management



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THE COSTING PROBLEM

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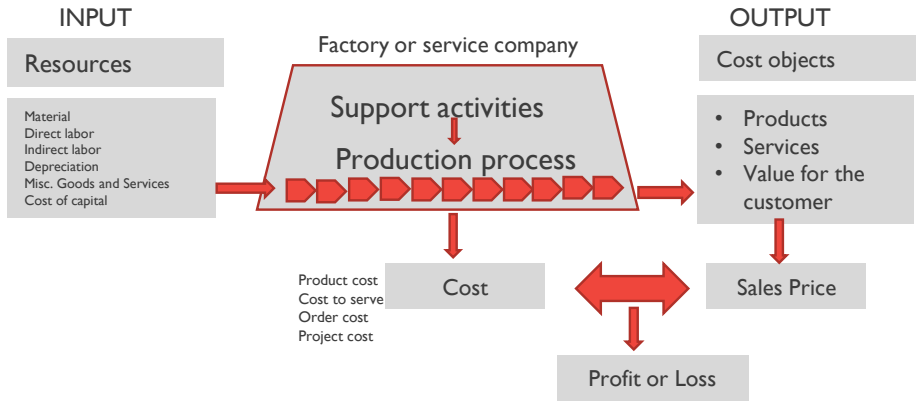
The Costing Problem



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Cost accounting …

" ... is het accumuleren van kosten van productie en/of andere functionele processen, waarbij deze geïdentificeerd worden naar kostobjecten of kostendragers (bv. Producten, diensten of klanten)."

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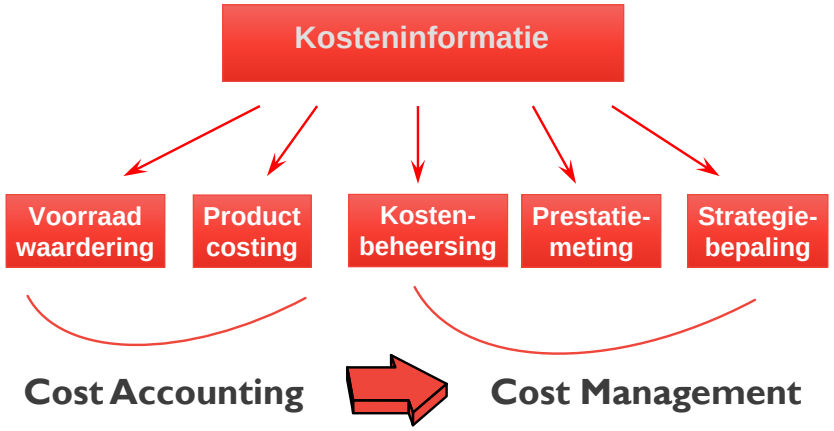
Gewijzigde toepassing



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Terminologie

- **Cost**: the monetary value of a **resource sacrificed (consumed)** when producing a product or delivering a service.
- **Direct cost:** costs that are related to the cost object and **can be traced** to it in an economically feasible way.
- **Indirect cost**: Costs that are related to the cost object but **cannot be traced** to it in an economically feasible way.
- **Cost allocation**: the assigning of indirect costs to the chosen cost object
- **Variable cost:** cost that changes in total in proportion to changes in volume
- **Fixed cost:** Costs that does not change in total, despite changes in volume

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Voorbeelden

Assignment of costs to cost objects

Cost behavior pattern	Direct costs	Indirect costs
Variable costs		
Fixed costs		

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Voorbeelden

Assignment of costs to cost objects

Cost behavior pattern	Direct costs	Indirect costs
Variable costs	e.g. Material Cost Directe kosten die rechtstreeks gelinkt zijn aan productie (service) Q	e.g. Energy Cost Indirecte kosten die onrechtstreeks gelinkt zijn aan productie (service) Q
Fixed costs	e.g. IT systeem voor specifiek product Direct kosten zijn rechtstreeks gelinkt aan de “metric” maar niet variabel	e.g. Finance departement Indirecte kosten zijn onrechtstreeks gelinkt aan de “metric” maar niet variabel

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Enkele begrippen

Tijd	Historische *vs* Gebudgetteerde *kosten*	Productie	Productiekosten *vs* Niet-productie *kosten*
Toewijzing	Directe *vs* Indirecte *kosten*	Gedrag	Variabele *vs* Vaste *kosten*
Controle	Beheersbare *vs* Niet-beheersbare *kosten*	Beleid	Relevante *vs* 'Verzonken' *kosten*
Standaard vs Reële kosten			

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STANDARD COSTING

&

ACTUAL COSTING

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Standard Costing versus Actual Costing

- **Standard costing:** costing method that traces direct costs to a cost object by using the standard prices or rates times the standard inputs allowed for actual outputs achieved and allocates indirect costs on the basis of the budgeted indirect rates times the standard inputs allowed for the actual outputs achieved.
- **Actual Costing**: Costing method that traces costs to cost objects based on actual volumes and actual prices.
- **Variance Analysis:** identification of inefficient resource usage and spending

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Determination of standards

- Average Standards
  - Avoiding slack in the standards
- Optimized Standards

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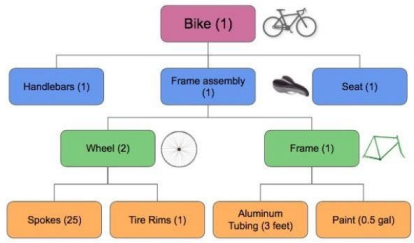
Direct Cost Elements

- Raw Material
- Consumables
- Packaging

Bill of material



- Direct Labor

Bill of labour

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Calculating material costs

Quantity:

- standard quantity (using the BOM); back flushing — Standard costing
- direct measurement (counting) — Actual costing

Price:

- standard purchase price — Standard costing
- Actual purchase price — Actual costing
  - FIFO
  - LIFO
  - Average price
  - market price of the day

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Calculating direct labor costs

Quantity:

- standard time (based on the routing) — Standard costing
- direct measurement: time registration — Actual costing

Price

- standard wage per hour (work center) — Standard costing
- Actual wage per hour **(work center mid-point average** — Actual costing

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BOM Costing: Oefening

MAT F001

What?	Code	Qty	Qty	Tot Value	EUR
Mat	SF001	1	PC		EUR
Mat	SF002	2	PC		EUR
Mach (15EUR/u)	M001	3	HR		EUR
Labor (120EUR/u)	L001	20	Min		EUR
Overhead (5% on total)					EUR
Total					**EUR**

Question:
What is the total material cost of F001
What is the total labor cost of F001
What is the total machine cost of F001
What is the total Overhad cost of F001

MAT SF001

What?	Code	Qty	Qty	Tot Valu	EUR
Mat	RM001	1	PC	5,00	EUR
Mat	RM002	2	PC	10,00	EUR
Mach	M002	20	min	7,50	EUR
Labor	L001	5	Min	7,50	EUR
Overhead				1,50	EUR
total				**31,50**	**EUR**

MAT SF002

What?	Code	Qty	Qty	Tot Valu	EUR
Mat	RM003	1	PC	9,50	EUR
Mach	M002	28	min	10,50	EUR
Labor	L001	10	Min	15,00	EUR
Overhead				1,75	EUR
total				**36,75**	**EUR**

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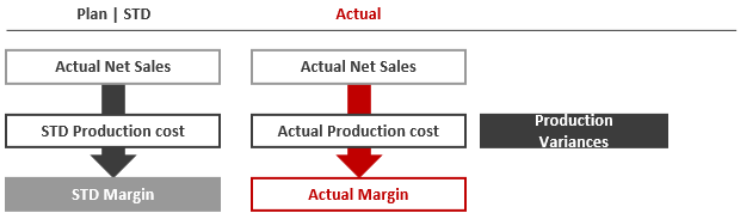
Sales

Production

The Costing Problem
Activity Controlling – Target vs Actual



FEEDBACK

- Price leak
  - Quoted vs actual price
  - Credit & discounts
- Corrective actions margin / mark up matrix

- STD cost assumption is not achievable, too ambitious, wrong

Corrective actions, team reviews:
- Surplus waste vs STD
- BOM component substitutions
- Set-up vs STD
- Fixed cost: spend vs absorption variance
- …

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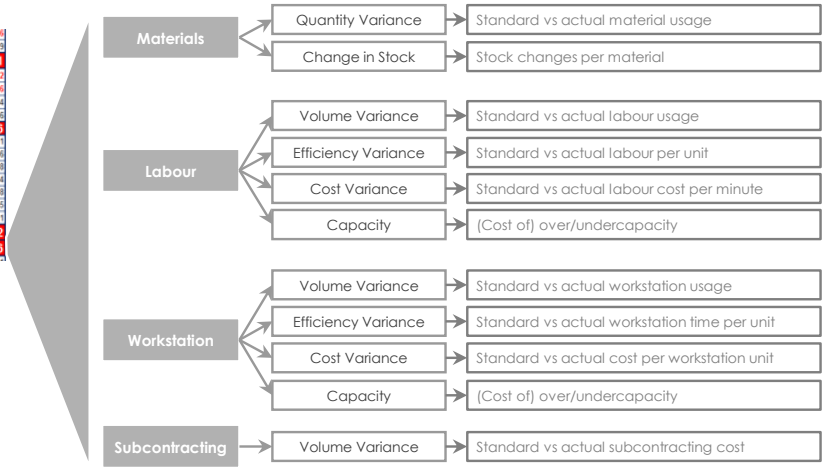
Standard costing & Variance analysis

- Std cost of sales	-58.636
- Cost of (Semi) Finished Product	-345
Std margin	**14.221**
+Std cost of production (incl count/price adj)	69.042
- Actual sheet consumption	-11.256
- Cost of Raw Material **gross**	-31.504
- Auxiliaries and Packaging	-3.236
Material Cost	**-45.996**
Direct labour	-9.311
Energy	-1.916
Maintenance	-4.038
Factory overhead	-4.454
Production support	-1.048
Depreciation machinery & equipment	-2.575
Depreciation buildings	-501
Production cost (incl in STD cost)	**-23.842**
Manufacturing variance	**-796**



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Standard Costing & Production Variance

Order for Finished Product

What?	Code	Target	Actual	Varian
Mat	SF001	31,50	31,50	0,00
Mat	SF002	73,50	73,50	0,00
Mach	M001	45,00	45,00	0,00
Labor	L001	30,00	40,00	10,00
Overhead		9,00	9,00	0,00
Total		189,00	199,00	10,00

MAT SF002

What?	Code	Target	Actual	Varian
Mat	RM003	9,50	9,50	0,00
				0,00
Mach	M002	10,50	8,75	-1,75
Labor	L001	15,00	20,00	5,00
Overhead		1,75	1,75	0,00
total		36,75	40,00	3,25

total Variance

What?	Variance
Mat	0,00
Mach SF (2st)	3,50
Labor SF (2st)	10
Labor F	10,00
Overhead	0,00
Total	10,00

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COST ESTIMATION METHODOLIGIES

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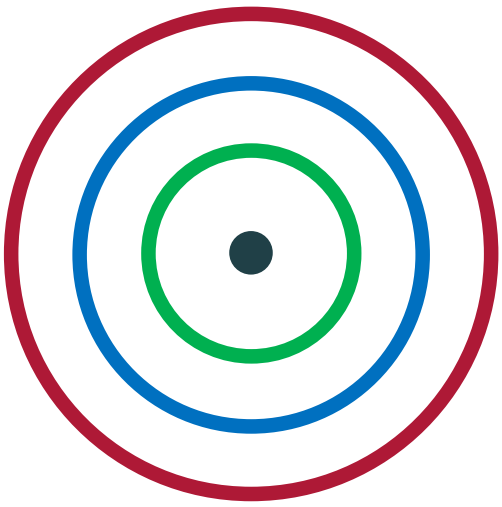
The Cost Estimation Problem

More advanced costing techniques approach better the true cost



True cost

Time Drive Activity based costing

Traditional Activity Based Costing

Full Costing

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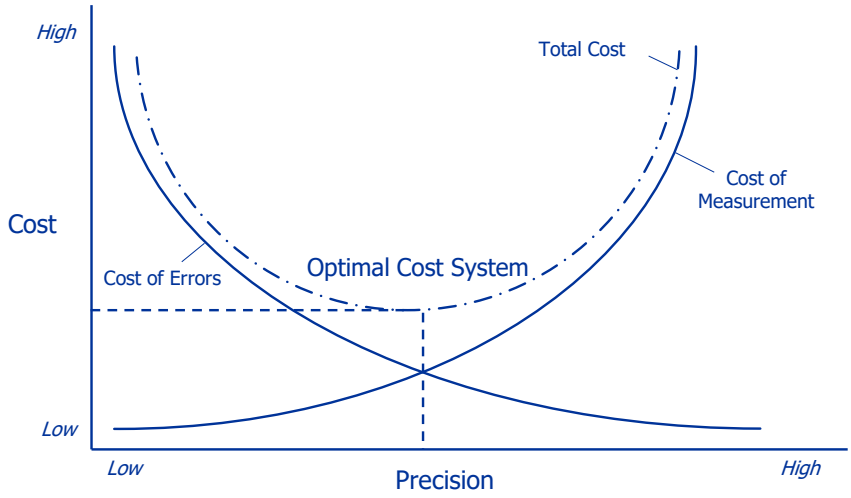
The Cost Estimation Problem

What is the cost of your cost estimation?



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COST ESTIMATION METHODOLIGIES

Full Costing

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Full Costing

Overhead costs: 7.500.000 Euro

Production data bookcase		Production data wardrobe	
Raw materials	150 kg/pc	Raw materials	75 kg/pc
Direct labor	20 h/pc	Direct labor	30 h/pc
Total production	2.000 pieces	Total production	3.000 pieces

Determine the costs that will be allocated to the 2 product groups by using the allocation keys below

		Bookcase	Wardrobe
Key 1: Raw Materials			
Key 2: Labor hours			
Key 3: Output			

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Full Costing

Overhead costs: 7.500.000 Euro

Production data bookcase		Production data wardrobe	
Raw materials	150 kg/pc	Raw materials	75 kg/pc
Direct labor	20 h/pc	Direct labor	30 h/pc
Total production	2.000 pieces	Total production	3.000 pieces

What if our Sales Price is € 1.500?

	Rate	Bookcase	Wardrobe
Key 1: Raw Materials	€ 14,29	€ 2 142,86	€ 1 071,43
Key 2: Labor hours	€ 57,69	€ 1 153,85	€ 1 730,77
Key 3: Output	€ 1 500,00	€ 1 500,00	€ 1 500,00

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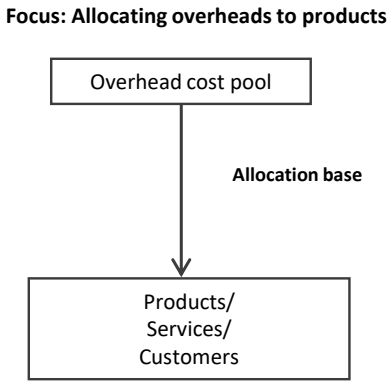
How accurate are traditional cost systems?



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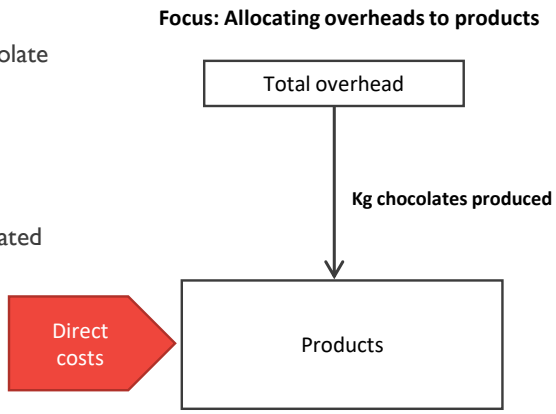
Case chocolate factory

- **Strategy**: Mass production of chocolate
- **Costing**: overhead allocated based on volume (kg)



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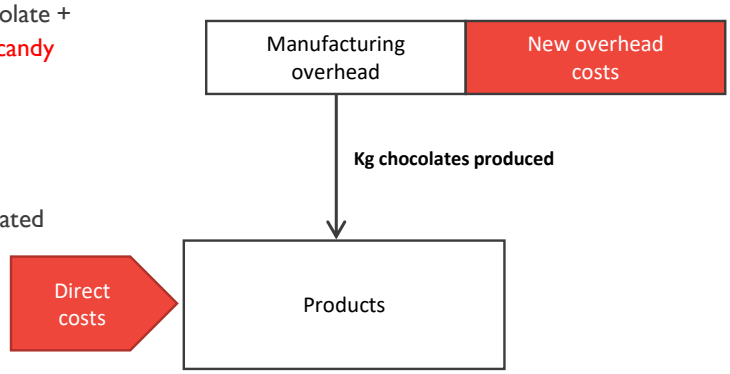
Case chocolate factory

- **Strategy**:
  Mass production of chocolate +
  New business of special candy boxes

- **Costing**: overhead allocated based on volume (kg)

Focus: Allocating overheads to products



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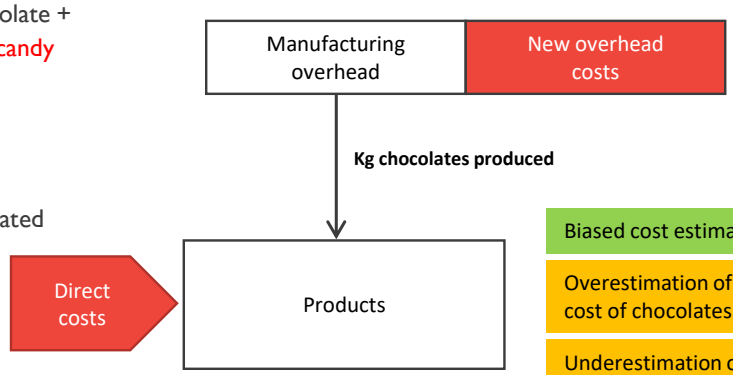
Case chocolate factory

- **Strategy**:
  Mass production of chocolate +
  New business of special candy boxes

- **Costing**: overhead allocated based on volume (kg)

Focus: Allocating overheads to products



Biased cost estimates:

Overestimation of the cost of chocolates

Underestimation of the cost of complex candy boxes

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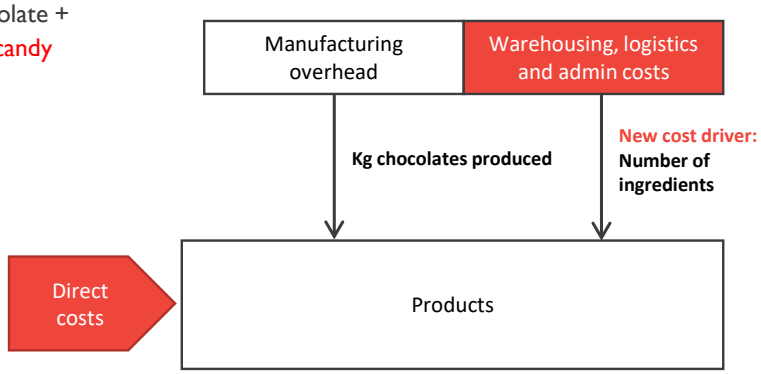
Case chocolate factory

- **Strategy**:
  Mass production of chocolate +
  New business of special candy boxes

- **New costing method**

Focus: Allocating overheads to products



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"Indirekte kosten moeten verdeeld worden"

- elke kost moet naar een kostenobject
- er moeten verdeelsleutels zijn
- verdeelsleutels zijn belangrijk

- Discussies over verdeelsleutels
- Te veel intern gericht
- Te weinig klant & leverancier gericht

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COST ESTIMATION METHODOLIGIES

Direct Costing

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Direct costing

How much do we need to sell to be profitable?

Revenue	16.000.000	100 %
Variable costs	12.000.000	75 %
Contribution	4.000.000	25 %
Fixed costs	3.000.000	

Minimum revenue (Break-Even)

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Direct costing

How much do we need to sell to be profitable?

Revenue	16.000.000	100 %
Variable costs	12.000.000	75 %
Contribution	4.000.000	25 %
Fixed costs	3.000.000	
Target profit	1.500.000	

Minimum revenue (Break-Even)

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Direct costing

Supermarket-case

Product group	Mix	Contribution
Non-food	25 %	30 %
Health & Beauty	5 %	25 %
Food	60 %	15 %
Beverages	10 %	27,5 %
	100 %	

Fixed costs

Employees	3.500.000
Depreciations facility	1.125.000
General fixed costs	500.000
	5.125.000

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What & how much do we need to sell?

Direct costing

Supermarket-case

Average contribution =

(25 % x 30 %) + (5 % x 25 %) + (60 % x 15 %) +
(10 % x 27,5 %) = 20,5 %

Minimum break-even revenue =

5.125.000 / 20,5 % = 25.000.000

Product group	Mix	Minimum revenue
Non-food	25 %	6.250.000
Health & Beauty	5 %	1.250.000
Food	60 %	15.000.000
Beverages	10 %	2.500.000
		25.000.000

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Direct costing: use of cost information for commercial decision making

Direct Costs	
- Material	20
- Labor	20
- Other	10
+ Allocated overhead	30
= Full Cost	80
+ Profit margin 20%	16
= Sales Price	96

Consider the opportunity of a customer order:
- 1000 additional units
- but the customer only can pay 70€

Do we want to accept the order ?

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Direct costing paradigm

Sales Price	**70**
Variable Costs	
- Material	**20**
- Direct Labor costs	**20**
- Other variable costs	**10**
Variable Cost	**50**
Contribution	**20**

Direct Costing: decision: Accept the order
The order generates additional revenue of 70€ and a variable cost of 50€ per unit
The order generates contribution to the overhead of 20€ per unit
Potential opportunity loss: 20 x 1000 = 20 000 €

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Direct costing paradigm

Optimal conditions:

- It is a short term decision
- Availability of unused capacity
- There is no unfavorable impact on other parts of the business
- We deal with a separate market or the market is not transparent

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"Indirekte kosten zijn vast en moeten gedekt worden"

- vaste kosten moeten niet verdeeld worden
- geen verdeelsleutels geen verdeeldiscussies
- contributiemaximalisatie en knelpuntmanagement

- Korte termijn - denken
- Niet relevant voor strategische beslissingen

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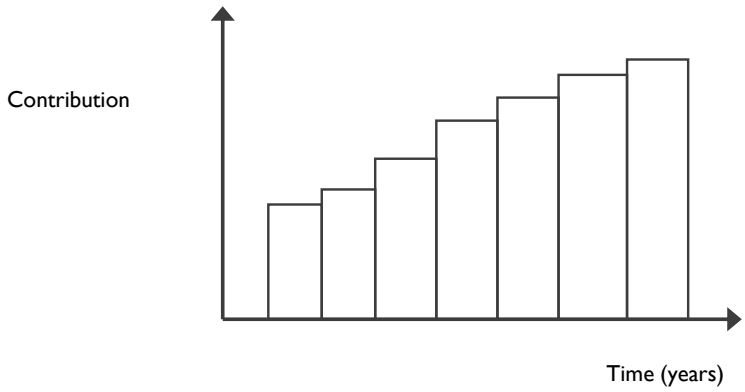
Case: using direct costing for strategic decisions



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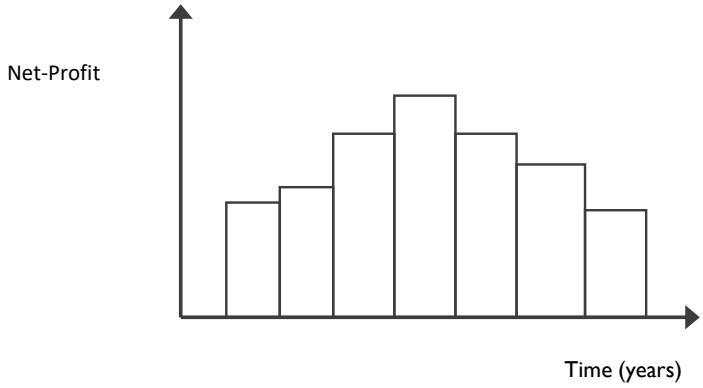
Case: using direct costing for strategic decisions



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Strategic profitability management

- In the long term all cost are variable
- Costs are driven by cost drivers
- Some products/services/customers drive more costs than others
- The long run profitability is the difference between the price and the long run driven cost
- Companies that choose strategies that drive more costs than revenues destroy long term profitability
- Need to know the long run driven cost: back to full costing?
- Traditional costing is unable to provide the long run driven cost

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COST ESTIMATION METHODOLIGIES

Customer profitability through Activity Based Costing

Managing Strategic Profitability

Long Term Profit Management

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Customer profitability ?

- Goal:
  - Identify relative profitability of different customers or customer segments
- Design strategies to:
  - Add value to most profitable customers
  - Increase profitability for less profitable customers
  - Stop profit erosion from unprofitable customers

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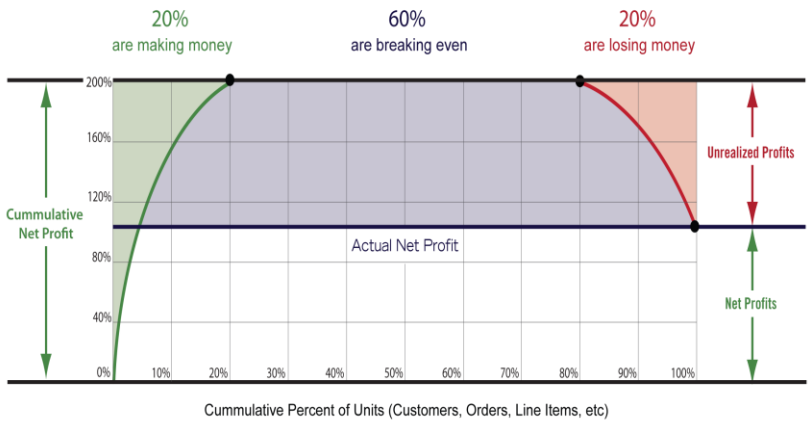
3 types of customers



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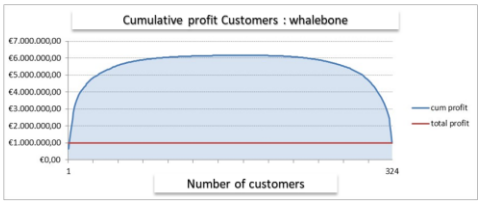
Example from the real world

- Customer X has a customer profitability of €800K today, but has a profit potential of €6mio
- The most profitable customer is XYZ, the worst customer -€600K loss-making



Customer Name	
Row Labels	Amount Default Income Statement
Net Income	€670.112,28
Gross Profit	€740.885,42
Total Revenue	€3.059.720,61
Gross_Sales	€3.137.109,61
Rebates	-€68.929,06
Other_Sales_Deductions	-€8.459,93
Total Direct Cost	€2.318.835,20
COGS	€2.318.835,20
Total Indirect Cost	€70.773,13
Shipping_Administration	€1.468,39
Handling	€8.160,73
Loading	€2.042,82
Storage	€1.603,86
Transportation	€7.591,63
Overhead	€49.905,70
Grand Total	€670.112,28

Customer Name	
Row Labels	Amount Default Income Statement
Net Income	-€604.840,96
Gross Profit	€82.004,84
Total Revenue	€506.668,30
Gross_Sales	€519.483,38
Rebates	-€11.414,17
Other_Sales_Deductions	-€1.400,91
Total Direct Cost	€424.663,47
COGS	€424.663,47
Total Indirect Cost	€686.845,80
Shipping_Administration	€53,85
Handling	€226.072,84
Loading	€67.823,80
Storage	€54.704,62
Transportation	€336.067,04
Overhead	€2.123,65
Grand Total	-€604.840,96

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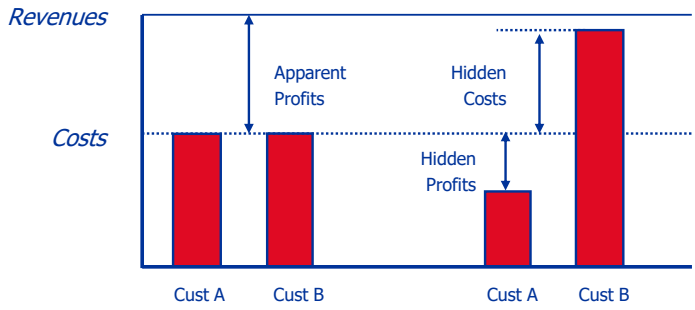
Hidden profits & costs



R.S. Kaplan (1989), Kanthal Case, Harvard Business School Case, 190-002

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So how do we reveil customer profitability ?

Traditional Cost Breakdown	
Process engineering department	
Salaries	€ 600.000
Equipment	€ 150.000
Travel expense	€ 60.000
Supplies	€ 40.000
Use & occupancy	€ 30.000
Total	€ 880.000

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So how do we reveil customer profitability ?

Activity-based costing unbundles the traditional cost view and restates costs in the way resources are consumed

Traditional Cost Breakdown	
Process engineering department	
Salaries	€ 600.000
Equipment	€ 150.000
Travel expense	€ 60.000
Supplies	€ 40.000
Use & occupancy	€ 30.000
Total	€ 880.000

Activity-Based view	
Process engineering department	
Create BOM's	€ 31.500
Maintain BOM's	€ 121.000
Create routings	€ 32.500
Maintain routings	€ 101.500
Process special orders	€ 83.000
Improve processes	€ 45.000
Study capacities	€ 119.000
Design tooling	€ 145.500
Train employees	€ 43.000
Administer department	€ 158.000
Total	€ 880.000

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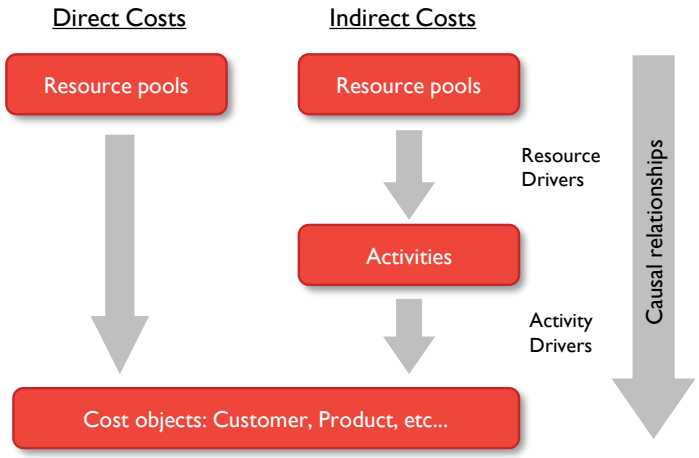
Cost to serve



Cost-to-Serve is the process analysis of all activities and costs incurred to fulfill customer demand for a product or service through the supply chain. This includes sales, order fulfilling, customer support, customer service and other customer identifiable costs.

(Martin, Arino 2016 MIT)

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Cost to serve

Activities of the department **Order Entry**

- Order intake
- Customer complaint follow up
- Credit check of customers

Activity Based Costing systems

1. Identify the resource pools
2. Assign the resource pools to activities
3. Determine driver volume
4. Calculate the cost per unit "cost driver"

Activity	%	Assigned costs	Driver volume	Cost per unit "cost driver"
Order intake	70%	€ 392 000	7 000	€ 56/order
Customer complaint follow up	10%	€ 56 000	200	€ 280/complaint
Credit check of customers	20%	€ 112 000	350	€ 320/check-up
TOTAL	100%	€ 560 000		

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COST ESTIMATION METHODOLIGIES

ACTIVITY BASED COSTING

Case - De Kaarsfabriek

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Diversity and complexity

High Cost-to-Serve Customers	Low Cost-to-Serve Customers
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.

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Diversity and complexity

High Cost-to-Serve Customers	Low Cost-to-Serve Customers
1. Order custom products	1. Order standard products
2. Small order quantities	2. High order quantities
3. Unpredictable order arrivals	3. Predictable order arrivals
4. Customised delivery	4. Standard delivery
5. Change delivery requirements	5. No changes in delivery requirements
6. Manual processing	6. Electronic processing (EDI)
7. Large amounts of pre-sales support (marketing, technical and sales resources)	7. Little to no pre-sales support (standard pricing and ordering)
8. Require specialised inventory	8. Little inventory support required
9. Pay slowly (high accounts receivable)	9. Pay on time
10. Large amounts of post-sales support (installation, training, warranty, field service)	10. No post-sales support

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Business transformation actions → Activity based management

Operational Activity Based Management

- Performing activities more efficiently
- Doing the things right
  - Activity management
  - Business Process re-engineering
  - Total quality management
  - Performance management

Strategic Activity Based Management

- Choosing the activities to perform
- Doing the right things
  - Product / Customer Mix
  - Customer relationships & behavior
  - Customer segmentation
  - Distribution channels
  - Supplier relationships

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Siloed Metrics Can Hurt Overall Performance

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Focus On The Bottom Line

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Gartner on "Cost-To-Serve"

- "Analysis that calculates the profitability of products, customers and routes to market, and provides a fact-based focus for decision making on service mix and operational changes for each customer.
- Many companies would like to understand how specific customer requirements drive supply chain costs, but they often struggle to obtain and transform the data required to perform this type of analysis.
- Cost-To-Serve models are an increasingly used capability to drive supply chain improvements and customer value sharing opportunities."

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Problems with traditional ABC

- Hidden cost of unused capacity
  - Need for accurate resource used costing
- Maintainability / resource intensive
  - Need for continuous resource allocation alignment with activity output
- Not scalable
  - Complexity – Accuracy → Averages upon averages !
    - Multiple factors influence the used resources
      - e.g. Invoicing
  - No multi-dimensional approach of cost objects (Customers, Products, Orders, Deliveries Transactions...)

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COST ESTIMATION METHODOLIGIES

TIME DRIVEN ACTIVITY BASED COSTING

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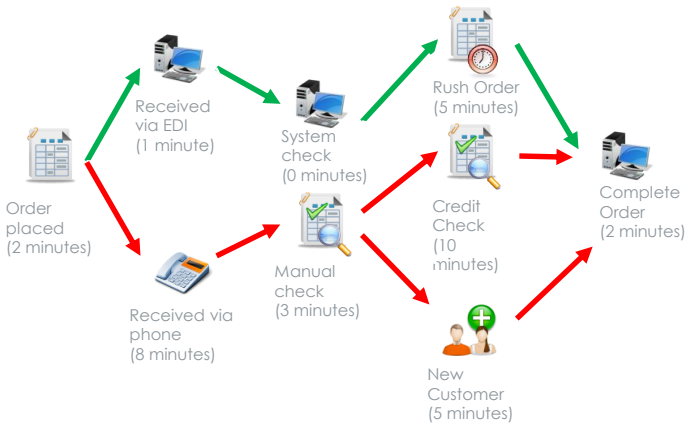
Time Driven Activity Based Costing



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1. Calculate the cost of capacity

$$\text{Unit cost of capacity} = \frac{\text{Cost of capacity supplied}}{\text{Practical capacity of resources supplied}}$$

- Total department cost: 500.000 € per year
- 10 FTE work 230 days a year with an average workday of 7.6 hours per day
  - Theoretical capacity = FTE x workdays x hours/day = 17480 hours per year or 1.048.800 minutes
  - Practical capacity : ~ 80% on average available for productive work on departmental activities

    = ~ 840.000 minutes

Unit cost of capacity =

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1. Calculate the cost of capacity

$$\text{Unit cost of capacity} = \frac{\text{Cost of capacity supplied}}{\text{Practical capacity of resources supplied}}$$

- Total department cost: 500.000 € per year
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  - Theoretical capacity = FTE x workdays x hours/day = 17480 hours per year or 1.048.800 minutes
  - Practical capacity : ~ 80% on average available for productive work on departmental activities

    = ~ 840.000 minutes

$$\text{Unit cost of capacity} = \frac{500.000\ €}{840.000\ \text{minutes}} = 0.6\ € \text{ per minute}$$

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2. Estimate the time required to perform each activity

Customer Order Handling:	20 minutes per order
Customer Complaint Handling:	60 minutes per complaint
Customer Credit Check	30 minutes per check

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3. Calculate cost estimates for the department

Activity	Drivers	Time in min	Activity Rate	Activity Driver	Activity Time (min)	Activity Cost €
Customer Order Handling	# Orders	20		25,000		
Complaint handling	# Complaints	60		2,300		
Credit checks	# Credit Checks	30		5,000		
Total					-	-

Capacity:	
Used Capacity:	
Cost of supplied Capacity:	
Cost of unused Capacity:	

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3. Calculate cost estimates for the department

Activity	Drivers	Time in min	Activity Rate	Activity Driver	Activity Time (min)	Activity Cost €
Customer Order Handling	# Orders	20	12	25,000	500,000	300,000
Complaint handling	# Complaints	60	36	2,300	138,000	82,800
Credit checks	# Credit Checks	30	18	5,000	150,000	90,000
Total					**788,000**	**472,800**

Capacity:	840,000
Used Capacity:	94%
Cost of supplied Capacity:	500,000
Cost of unused Capacity:	27,200

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4. Calculate cost of customer service per customer

- Customer 1 places 100 orders per year, files complaints on half of them and requires 12 credit checks per year...

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4. Calculate cost of customer service per customer

- Customer 1 places 100 orders per year, files complaints on half of them and requires 12 credit checks per year...

Activity	Drivers	Time in min	Activity Rate	Activity Driver	Activity Time (min)	Activity Cost €
Customer Order Handling	# Orders	20	12	100	2,000	1,200
Complaint handling	# Complaints	60	36	50	3,000	1,800
Credit checks	# Credit Checks	30	18	1	30	18
Total					**5,030**	**3,018**

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5. Handling complexity

- De activiteit 'orderverwerking', wordt uitgevoerd door een team medewerkers met een capaciteitskost van 0.6 € per minuut
- Veronderstel
  - Alle orders vragen 10 minuten administratie tijd
  - Elke orderlijn ingave duurt 2 minuten
  - Goederen die uit stock zijn vragen 8 minuten extra tijd per product
  - Spoedorders vragen 5 minuten extra verwerkingstijd
  - Voor klanten uit het Verenigd Koninkrijk moet een extra formulier ingevuld worden ter declaratie aan de douane wat 30 min in beslag neemt.
- Klant X uit Londen plaatst een spoedorder met 2 orderlijnen, waarvan 1 product niet in voorraad is. Hoeveel bedraagt de kost van de orderverwerking ?

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5. Handling complexity: Time equations

Order Handling time =

10 min

+ 2 min x [#Orderlines]

+ 8 min x [#OutOfStock]

+ 5 x [if rush order]

+ 30 x [if UKCustomer]

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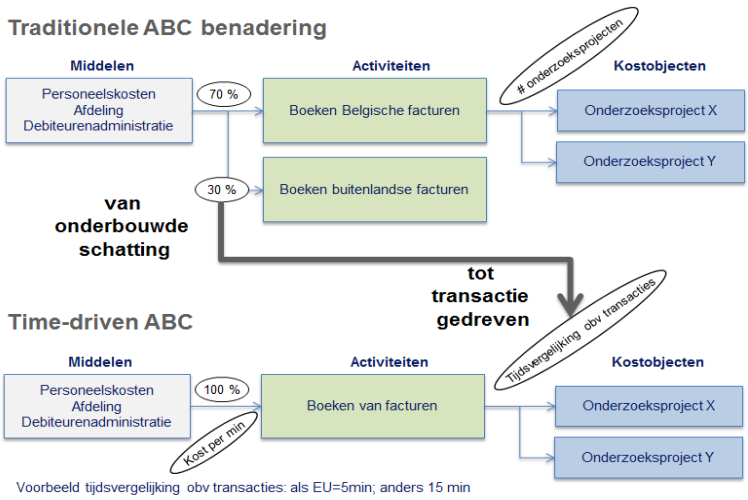
Time Driven Activity Based Costing



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Main Differences between ABC & TDABC

1
- In **Traditional Activity Based Costing**, employees are asked to allocated 100% of their time over the various activities they perform over a representative time period (a quarter, a full year,…);
- In **Time Driven Activity Based Costing**, employees are asked how much time an activity typically takes (so not their % of time for doing this activity).

2
- Activities, transactions etc can vary considerably based on their specificities. For example claim notification can be done by mail or by phone or through the internet.
- In **Traditional Activity Based Costing**, this requires expanding your activity dictionary so each possible variation is a separate activity (ie you would have 3 activities and staff would have to register time against all three of them)
- In **Time Driven Activity Based Costing**, there is no need for such an expansion, the variation is included in the time equation, cfr below example :

  Claim notification handling time (minutes) = 5 minutes + 10 (if by mail) + 15 (if by phone)

3
- With traditional ABC **insight into used and unused capacity is not available** as 100% of FTE time is distributed across all the activities (both used – and unused capacity).
- Time driven ABC explicitly takes into account the **capacity views** and thus provides immediate insight in (un)used capacity

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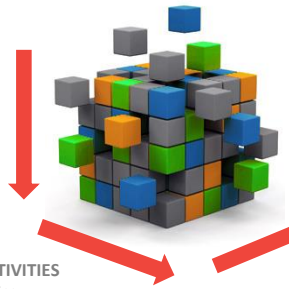
Datamodel behind Time Driven methodology

CORE DIMENSIONS
- Customer
- Product
- Category
- Channel
- DC
- etc.



… For example, we're able to see for a given **Customer**, the **Loading & Transportation cost** incurred per Case & Pallet split out by **Product Category** and source **DC**

BUSINESS ACTIVITIES
- Inbound Handling
- Outbound Handling
- Outbound Transport
- Value Added Services
- Customer Service
- Administration
- Storage

OPERATIONAL DIMENSIONS
- Cases, pallets,
- Weights
- Orders
- Air/Road Fleet
- FTE

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Time Driven ABC

- Fast implementation track
- Scalability
- Accuracy
- Lower cost to maintain than tradional ABC
- Proven methodology

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C2S – critical success factors

- Focus
  - Clearly defined and agreed upon project plan and scope
- Strong executive support
  - Accurate, consistent profitability information at multiple levels is pointless if no business transformation process is embedded in approach
- Data
  - Clean validated financial data
  - IT support and commitment to actively participate
- Pragmatic
  - Minimize number of activities - create a foundation and add increasing levels of detail in future phases

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COST ESTIMATION METHODOLIGIES

COST TO SERVE

Actionable insights

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Profitability Management (1)

ID Name			Financial P&L Spending	
TOTAL REVENUE			**300.000,00**	**100,00%**
* FINANCIERING KLANTENKREDIET			4.100,00	1,37%
KLANTENKORTING			7.000,00	2,33%
Total Direct Cost			**11.100,00**	**3,70%**
GROSS PROFIT			**288.900,00**	**96,30%**
Front office			105.000,00	35,00%
Mid office			30.000,00	10,00%
Back office			140.000,00	46,67%
R&D			20.000,00	6,67%
Marketing & acquisitie			15.500,00	5,17%
PROFIT			**-21.600,00**	**-7,20%**

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Profitability Management (2)

ID Name			Managerial P&L Usage		Financial P&L Spending		% usage/spending Horizontal	Cost of overcapacity
TOTAL REVENUE			**300.000,00**	**100,00%**	**300.000,00**	**100,00%**		
* FINANCIERING KLANTENKREDIET			4.100,00	1,37%	4.100,00	1,37%		
KLANTENKORTING			7.000,00	2,33%	7.000,00	2,33%		
Total Direct Cost			**11.100,00**	**3,70%**	**11.100,00**	**3,70%**		
GROSS PROFIT			**288.900,00**	**96,30%**	**288.900,00**	**96,30%**		
Front office			107.000,00	35,67%	105.000,00	35,00%	**101,90%**	**-2.000,00**
Mid office			23.000,00	7,67%	30.000,00	10,00%	**76,67%**	**7.000,00**
Back office			120.000,00	40,00%	140.000,00	46,67%	**85,71%**	**20.000,00**
R&D			20.000,00	6,67%	20.000,00	6,67%		
Marketing & acquisitie			15.500,00	5,17%	15.500,00	5,17%		
PROFIT			**3.400,00**	**1,13%**	**-21.600,00**	**-7,20%**		
								25.000

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Profitability Management (3)

ID Name	A Total Product		B Total Product		Managerial P&L Usage	
TOTAL REVENUE	**120.000,00**	**100,00%**	**180.000,00**	**100,00%**	**300.000,00**	**100,00%**
* FINANCIERING KLANTENKREDIET	2.500,00	2,08%	1.600,00	0,89%	4.100,00	1,37%
KLANTENKORTING	5.000,00	4,17%	2.000,00	1,11%	7.000,00	2,33%
Total Direct Cost	**7.500,00**	**6,25%**	**3.600,00**	**2,00%**	**11.100,00**	**3,70%**
GROSS PROFIT	**112.500,00**	**93,75%**	**176.400,00**	**98,00%**	**288.900,00**	**96,30%**
Front office	33.000,00	27,50%	74.000,00	41,11%	107.000,00	35,67%
Mid office	15.000,00	12,50%	8.000,00	4,44%	23.000,00	7,67%
Back office	50.000,00	41,67%	70.000,00	38,89%	120.000,00	40,00%
R&D	0,00	0,00%	20.000,00	11,11%	20.000,00	6,67%
Marketing & acquisitie	500,00	0,42%	15.000,00	8,33%	15.500,00	5,17%
PROFIT	**14.000,00**	**11,67%**	**-10.600,00**	**-5,89%**	**3.400,00**	**1,13%**

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Profitability Management (4)

ID Name	X1 Klantengroep		Y1 Klantengroep Y		Managerial P&L Usage	
TOTAL REVENUE	**70.000,00**	**100,00%**	**230.000,00**	**100,00%**	**300.000,00**	**100,00%**
* FINANCIERING KLANTENKREDIET	900,00	1,29%	3.200,00	1,39%	4.100,00	1,37%
KLANTENKORTING	1.500,00	2,14%	5.500,00	2,39%	7.000,00	2,33%
Total Direct Cost	**2.400,00**	**3,43%**	**8.700,00**	**3,78%**	**11.100,00**	**3,70%**
GROSS PROFIT	**67.600,00**	**96,57%**	**221.300,00**	**96,22%**	**288.900,00**	**96,30%**
Front office	25.000,00	35,71%	82.000,00	35,65%	107.000,00	35,67%
Mid office	5.000,00	7,14%	18.000,00	7,83%	23.000,00	7,67%
Back office	22.000,00	31,43%	98.000,00	42,61%	120.000,00	40,00%
R&D	5.000,00	7,14%	15.000,00	6,52%	20.000,00	6,67%
Marketing & acquisitie	15.500,00	22,14%	0,00	0,00%	15.500,00	5,17%
PROFIT	**-4.900,00**	**-7,00%**	**8.300,00**	**3,61%**	**3.400,00**	**1,13%**

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Profitability Management (5)

ID Name	X1 Klantengroep		Y1 Klantengroep Y		Managerial P&L Usage	
TOTAL REVENUE	**70.000,00**	**100,00%**	**230.000,00**	**100,00%**	**300.000,00**	**100,00%**
* FINANCIERING KLANTENKREDIET	900,00	1,29%	3.200,00	1,39%	4.100,00	1,37%
KLANTENKORTING	1.500,00	2,14%	5.500,00	2,39%	7.000,00	2,33%
Total Direct Cost	**2.400,00**	**3,43%**	**8.700,00**	**3,78%**	**11.100,00**	**3,70%**
GROSS PROFIT	**67.600,00**	**96,57%**	**221.300,00**	**96,22%**	**288.900,00**	**96,30%**
Front office	25.000,00	35,71%	82.000,00	35,65%	107.000,00	35,67%
Mid office	5.000,00	7,14%	18.000,00	7,83%	23.000,00	7,67%
Back office	22.000,00	31,43%	98.000,00	42,61%	120.000,00	40,00%
Cost to Serve	**52.000,00**	**74,29%**	**198.000,00**	**86,09%**	**250.000,00**	**83,33%**
OPERATIONAL RESULT	**15.600,00**	**22,29%**	**23.300,00**	**10,13%**	**38.900,00**	**12,97%**
R&D	5.000,00	7,14%	15.000,00	6,52%	20.000,00	6,67%
Marketing & acquisitie	15.500,00	22,14%	0,00	0,00%	15.500,00	5,17%
PROFIT	**-4.900,00**	**-7,00%**	**8.300,00**	**3,61%**	**3.400,00**	**1,13%**

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Profitability Management (6)

ID Name	X1 Klantengroep		A Total Service		B Total Service	
TOTAL REVENUE	**70.000,00**	**100,00%**	**20.000,00**	**100,00%**	**50.000,00**	**100,00%**
* FINANCIERING KLANTENKREDIET	900,00	1,29%	500,00	**2,50%**	400,00	0,80%
KLANTENKORTING	1.500,00	2,14%	1.000,00	**5,00%**	500,00	1,00%
Total Direct Cost	**2.400,00**	**3,43%**	**1.500,00**	**7,50%**	**900,00**	**1,80%**
GROSS PROFIT	**67.600,00**	**96,57%**	**18.500,00**	**92,50%**	**49.100,00**	**98,20%**
Front office	25.000,00	35,71%	6.000,00	**30,00%**	19.000,00	38,00%
Mid office	5.000,00	7,14%	3.000,00	**15,00%**	2.000,00	4,00%
Back office	22.000,00	31,43%	8.000,00	**40,00%**	14.000,00	28,00%
Cost to Serve	**52.000,00**	**74,29%**	**17.000,00**	**85,00%**	**35.000,00**	**70,00%**
OPERATIONAL RESULT	**15.600,00**	**22,29%**	**1.500,00**	**7,50%**	**14.100,00**	**28,20%**
R&D	5.000,00	7,14%	0,00	**0,00%**	5.000,00	10,00%
Marketing & acquisitie	15.500,00	22,14%	500,00	**2,50%**	15.000,00	30,00%
PROFIT	**-4.900,00**	**-7,00%**	**1.000,00**	**5,00%**	**-5.900,00**	**-11,80%**

ID Name	Y1 Klantengroep Y		A Total Service		B Total Service	
TOTAL REVENUE	**230.000,00**	**100,00%**	**100.000,00**	**100,00%**	**130.000,00**	**100,00%**
* FINANCIERING KLANTENKREDIET	3.200,00	1,39%	2.000,00	2,00%	1.200,00	0,92%
KLANTENKORTING	5.500,00	2,39%	4.000,00	4,00%	1.500,00	1,15%
Total Direct Cost	**8.700,00**	**3,78%**	**6.000,00**	**6,00%**	**2.700,00**	**2,08%**
GROSS PROFIT	**221.300,00**	**96,22%**	**94.000,00**	**94,00%**	**127.300,00**	**97,92%**
Front office	82.000,00	35,65%	27.000,00	27,00%	55.000,00	42,31%
Mid office	18.000,00	7,83%	12.000,00	12,00%	6.000,00	4,62%
Back office	98.000,00	42,61%	42.000,00	42,00%	56.000,00	43,08%
Cost to Serve	**198.000,00**	**86,09%**	**81.000,00**	**81,00%**	**117.000,00**	**90,00%**
OPERATIONAL RESULT	**23.300,00**	**10,13%**	**13.000,00**	**13,00%**	**10.300,00**	**7,92%**
R&D	15.000,00	6,52%	0,00	0,00%	15.000,00	11,54%
Marketing & acquisitie	0,00	0,00%	0,00	0,00%	0,00	0,00%
PROFIT	**8.300,00**	**3,61%**	**13.000,00**	**13,00%**	**-4.700,00**	**-3,62%**

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C2S - P&L From a Customer Perspective

CUSTOMER 10271		
Revenues	1 000	100%
Pocket Price Leakage	200	20%
Transportation	100	10%
Cost of Goods Sold	300	30%
Gross Margin	400	40%
Indirect/Support Cost	170	17%
EBITDA	230	23%
Order Management	10	1%
Picking & Loading	30	3%
Storage	20	2%

CUSTOMER 16351		
Revenues	1 100	100%
Pocket Price Leakage	275	25%
Transportation	132	12%
Cost of Goods Sold	330	30%
Gross Margin	363	33%
Indirect/Support Cost	220	20%
EBITDA	143	13%
Order Management	22	2%
Picking & Loading	66	6%
Storage	11	2%

- Similar Revenue Customer, but significant difference on EBITDA P&L.
- CTS solution can provide this report in a timely manner for strategic decision-making.

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