



Managerial accounting the TOC way.

*Comparison of three formats:
standard costing, direct costing and TOC.*

Boris Starinsky



Boris Starinsky

Entrepreneur, manager and consultant

A fan of Deming and Goldratt

Managing Partner at Intalev Ukraine
Ukraine



bn@intalev.com.ua



What is taught in school?



✓ If a company's margin is 10%

■ cost can be decreased by 2%

by 20%

20%

JUST 2% << 20%

Accounting and
Cost accounting
are VERY
IMPORTANT!!!



What is the main objective of management accounting?

Provide the management with the information that helps make right / effective decisions!

There are many managers and decisions

- ✓ DECENTRALIZE decision-making
- ✓ Assure achievement of the business GOAL

(global and not local efficiency)



How management accounting influences performance?

What kind of factors determine the performance?

*Strategy? Policy? Economics? Marketing? Personnel?
Processes?*

The cause of poor performance is accounting!!!???

Wrong accounting gives a wrong base to the management decision-making

And we are making our decisions looking at funfair mirror!

Accounting costs, cost allocation, cost of products and services –
This is the basis of the management accounting

But, there is a methodological error is embedded in this basics!



Managerial accounting. Options:

Standard costing
Cost allocation
Total cost

Direct costing
Direct cost allocation
Cost in process

Margin analysis
fixed and direct
costs For modelling
of "What if?"...

ABC – cost allocation by
operations. Total cost

**TOC. Megadirect cost
Focus on evaluation of
decisions.**

Mix: Standard+Direct+....



ROI and management styles

$$\text{ROI} = (\text{revenue} - \text{expenditures}) / \text{Assets}$$

style	Western management style	Oriental management style	Theory of Constrains
focus	EXPENDITURES	ASSETS	REVENUE
method	Budgeting	KAIZEN	TOC



TOC approach to performance measures

GLOBAL
EFFICIENCY
MEASUREMENTS

Bottom-line financial measure – net
profit (NP)

Relative indicator - return on
investment
(Return on Investment – ROI)

Can managers make decisions using these
measures?

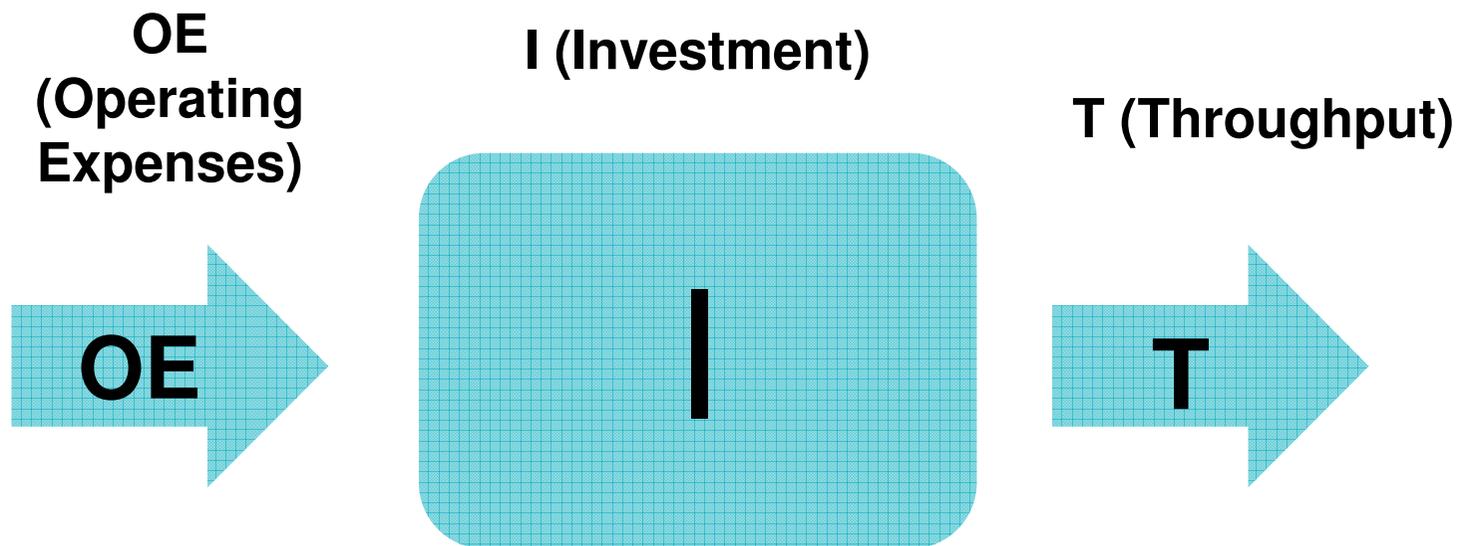
- YES - in theory
- practically - NO

There is a need to have simple and understandable
measures that help managers make daily decisions



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simple and clear measures that help managers make daily decisions





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Throughput, T –
can be described as added value
created by the organization

$$\text{THROUGHPUT} = \text{Sales revenue for a period} - \text{Totally Variable Costs}$$

(Totally Variable Costs – TVC).

Totally variable costs are expenses for raw materials and components purchase for the production, i.e. those expenses that are increasing in direct proportion of each additional sold unit



Managerial accounting the TOC way.

INVESTMENT (I) is money tied in the organization

- usually, it is the value of assets at the time of purchase minus depreciation
- Investment also includes inventory

Operating Expenses (OE) are the proportion to each sale.

(Expenses that organization incurs in order to support its operations)

!!!!!!!!!!!!!!!!!!!!!!
Both work in process and
finished goods are measured as
TVC
!!!!!!!!!!!!!!!!!!!!!!



Managerial accounting the TOC way.

Linkage of global and
operational measures



$$NP = T - OE$$

$$ROI = (T - OE) / I$$



Managerial accounting the TOC way.

Focus on:
we evaluate the **DECISIONS**, but not the products

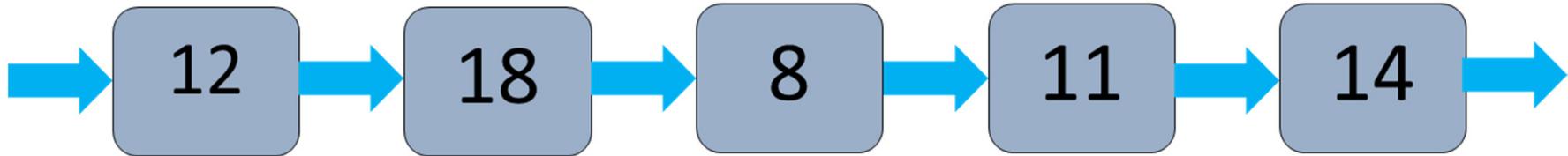
1. How the decision will influence **T**?
2. How the decision will change **I** ?
3. How the decision will change **OE**?

We can evaluate ROI decisions: $ROI = (dT - dOE)/dI$



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What kind of reports are required?



Product	Price	TVC	Throughput per unit	Constraint time	Throughput per Constraint time



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How will classical reports look like
in TOC?

Balance

Cash Flow
Budget will
be the same
in any
methods

БДР/ОПУ/P&L

Cash Flow
Budget/Cash
Flow



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Let's consider a VERY simple example

	jan	feb	mar	apr	may	jun	Total
Purchase	1 400	1 000	800	1 000	1 200	1 400	6 800
Production	1 000	900	1 000	1 100	1 200	1 300	6 500
Sales	500	800	1 100	1 000	1 300	1 000	5 700
Price	7	7	7	7	7	7	

	jan	feb	mar	apr	may	jun	Total
Production exp.	4 900	4 760	4 900	5 040	5 180	5 320	30 100
Salary	2 200	2 180	2 200	2 220	2 240	2 260	13 300
Energy	700	680	700	720	740	760	4 300
Raw	1 000	900	1 000	1 100	1 200	1 300	6 500
Amort.	1 000	1 000	1 000	1 000	1 000	1 000	6 000
Sales exp.	605	668	731	710	773	710	4 197
Admin	1 000	1 000	1 000	1 000	1 000	1 000	6 000
Total exp.	6 505	6 428	6 631	6 750	6 953	7 030	40 297



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Let's consider a VERY simple example

We exclude:

- Credits
- Taxes
- Other revenues and expenses

Simplify:

- There is no any accounts receivable or payable



Managerial accounting the TOC way.

ОПУ / БДР / P&L

24,2%	Standart						7,41%
KPI	jan	feb	mar	apr	may	jun	Total
Income	3 500	5 600	7 700	7 000	9 100	7 000	39 900
Cost of sales	2 450	4 120	5 493	4 711	5 782	4 191	26 747
Gross margin	1 050	1 480	2 207	2 289	3 318	2 809	13 153
Sales exp.	605	668	731	710	773	710	4 197
Admin exp.	1 000	1 000	1 000	1 000	1 000	1 000	6 000
Profit	-555	-188	476	579	1 545	1 099	2 956
19,2%	Direct						5,81%
Income	3 500	5 600	7 700	7 000	9 100	7 000	39 900
Cost of sales	1 950	3 263	4 364	3 765	4 650	3 394	21 385
Gross margin	1 550	2 337	3 336	3 235	4 450	3 606	18 515
Sales exp.	605	668	731	710	773	710	4 197
Amort	1 000	1 000	1 000	1 000	1 000	1 000	6 000
Admin	1 000	1 000	1 000	1 000	1 000	1 000	6 000
Profit	-1 055	-331	605	525	1 677	896	2 318



Managerial accounting the TOC way.

ОПУ / БДР / P&L

3,5%	TOC						1,01%
KPI	jan	feb	mar	apr	may	jun	Total
Income	3 500	5 600	7 700	7 000	9 100	7 000	39 900
TVC	605	968	1 331	1 210	1 573	1 210	6 897
Throughput	2 895	4 632	6 369	5 790	7 527	5 790	33 003
OE	5 400	5 360	5 400	5 440	5 480	5 520	32 600
Profit	-2 505	-728	969	350	2 047	270	403

The profit estimation according to TOC in this case the estimate was the most conservative As all expenditures are allocated to the production costs immediately, instead of FG cost increase.

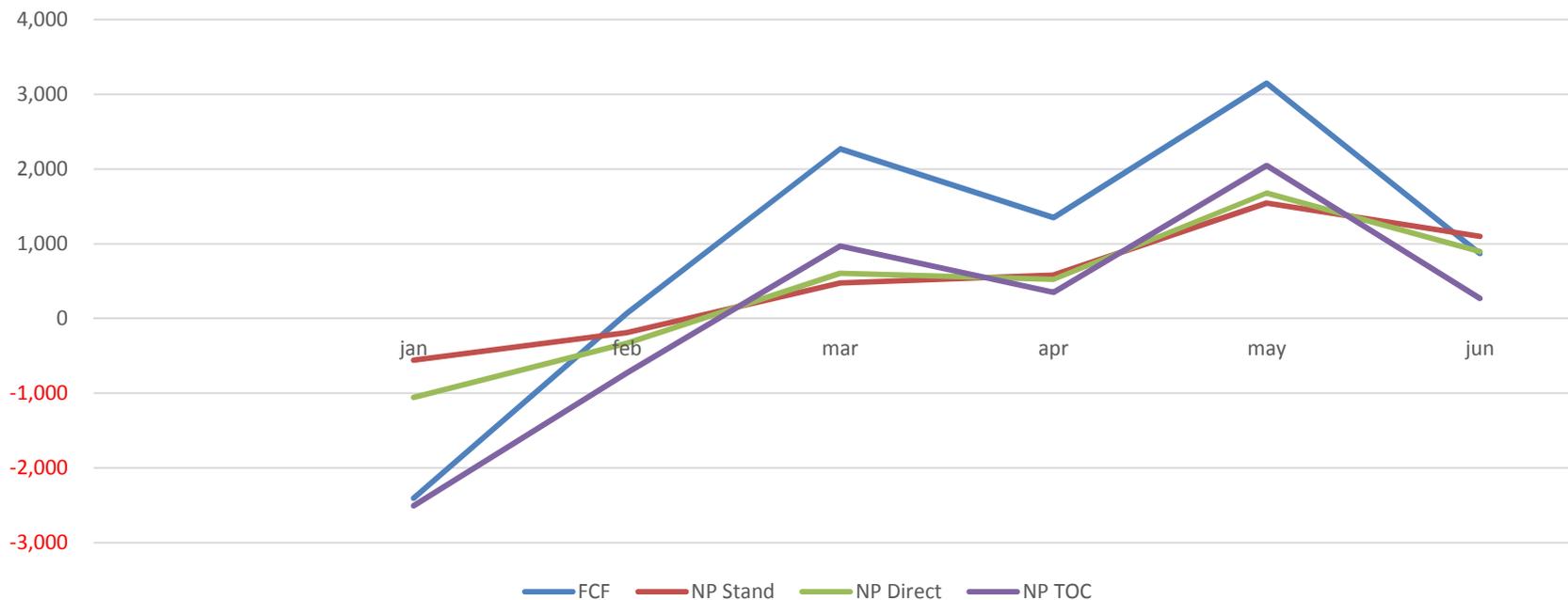


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Managerial accounting the TOC way.

Comparison of Net Profit by different accounting methods

KPI	jan	feb	mar	apr	may	jun	Total	Sales Margi	ROI
FCF	-2 405	72	2 269	1 350	3 147	870	5 303		
NP Stand	-555	-188	476	579	1 545	1 099	2 956	7,4%	24,2%
NP Direct	-1 055	-331	605	525	1 677	896	2 318	5,8%	19,2%
NP TOC	-2 505	-728	969	350	2 047	270	403	1,0%	3,5%

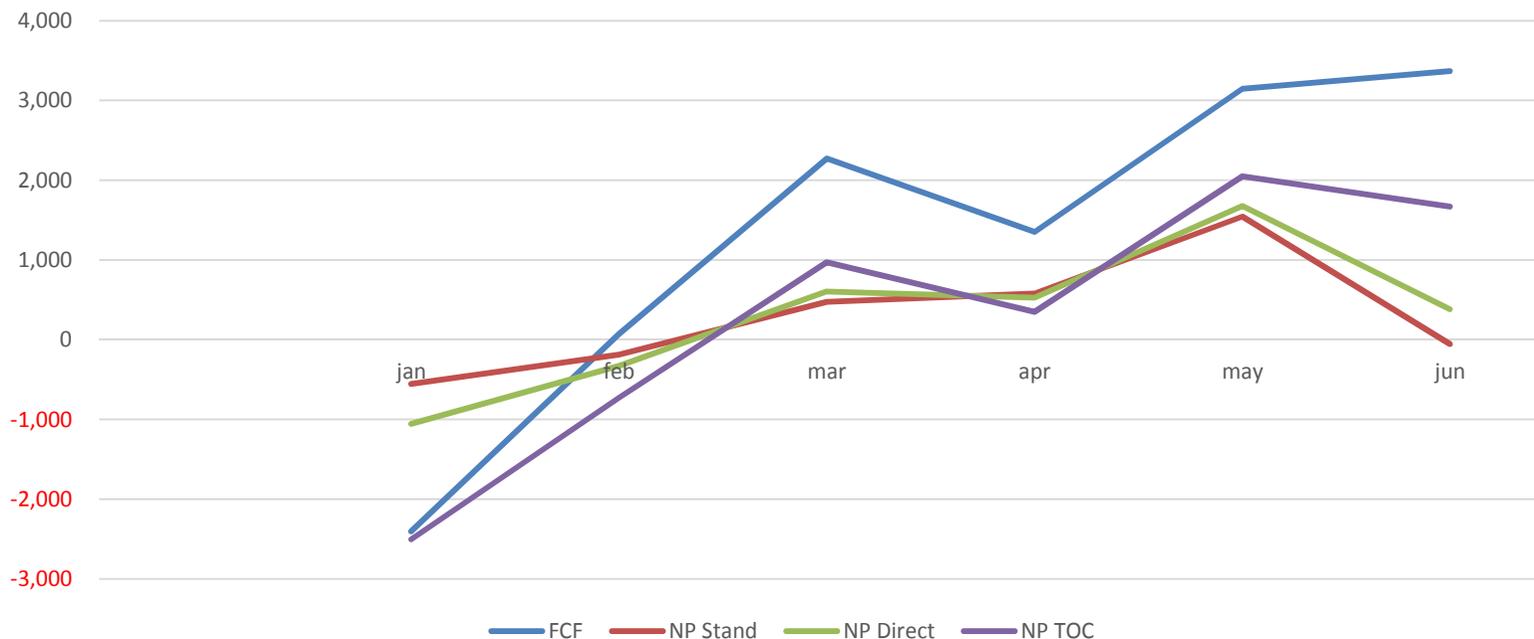




Managerial accounting the TOC way.

Comparison of NP by different accounting methods provided all stocks are sold out

KPI	jan	feb	mar	apr	may	jun	Total
FCF	-2 405	72	2 269	1 350	3 147	3 368	7 801
NP Stand	-555	-188	476	579	1 545	-56	1 801
NP Direct	-1 055	-331	605	525	1 677	379	1 801
NP TOC	-2 505	-728	969	350	2 047	1 668	1 801





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Conclusions

Profit calculation using TOC methods is more conservative and pessimistic

Accounting according to TOC is clearer to the management and owners

Accounting according TOC helps to make more adequate business decisions