



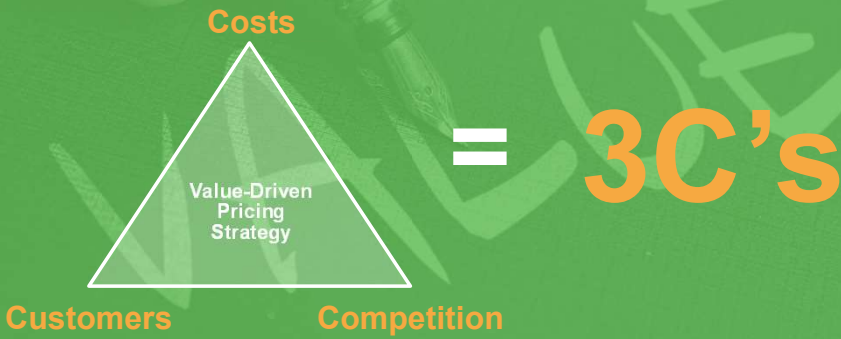
Costing for Pricing

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Class 2

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Profit Driven Pricing



Costs

Value-Driven Pricing Strategy

Customers

Competition

= 3C's

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Pricing...the Power of 1%

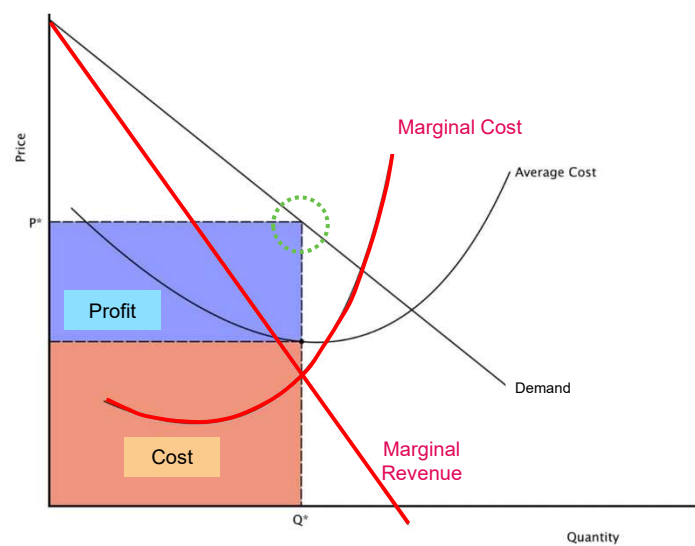
	Current	:
Revenues	\$100.0	
COGS	\$60.0	
GM	\$40.0	
SGA	\$30.0	
Profit	\$10.0	

Change in Profit

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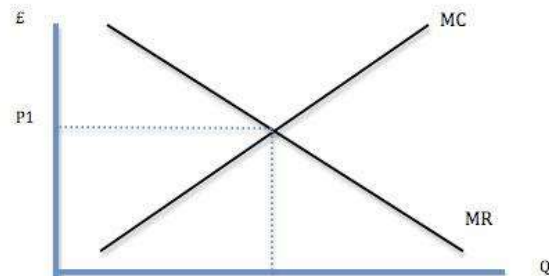
Profit Maximizing Economic Theory of the Firm



Adapted from: Intelligent Economist

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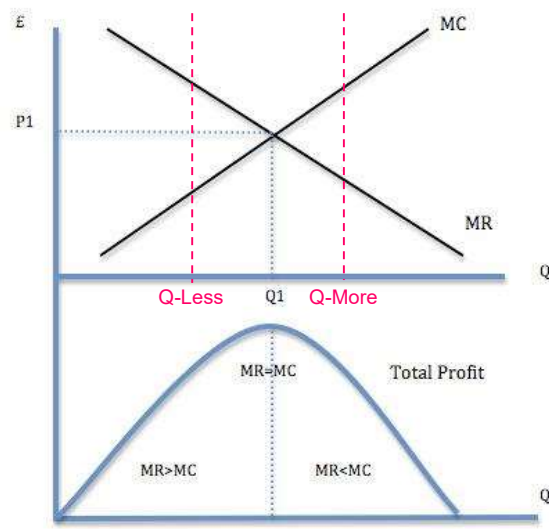
Profit Maximizing Economic Theory of the Firm



Adapted from: EconomicsHelp

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Profit Maximizing Economic Theory of the Firm



Adapted from: EconomicsHelp

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PROFITABLE PRICING REQUIRES

UNDERSTANDING THE TRUE COST

The true cost is the cost incurred if a sale is made, or the cost *not incurred* if a sale is not made.

IDENTIFYING TRUE COSTS

Incremental (not the “full cost”)

Avoidable (not the “sunk cost”)

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Identify costs that change when price changes

Price	\$10
Unit Sales Volume	100,000
Total Revenue	\$1,000,000
Unit Variable Costs	\$3
Total Variable Costs	\$300,000
Unit Contribution	\$7
Total Contribution	\$700,000
Fixed Costs	\$500,000
Net Income Before Taxes	\$200,000

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Identify costs that change when price changes

Price	\$10	△
Unit Sales Volume	100,000	△
Total Revenue	\$1,000,000	△
Unit Variable Costs	\$3	—
Total Variable Costs	\$300,000	△
Unit Contribution	\$7	△
Total Contribution	\$700,000	△
Fixed Costs	\$500,000	—
Net Income Before Taxes	\$200,000	△

1. To identify costs relevant to pricing, identify costs that change when price changes.
2. In general: VC are incremental and relevant, FC that are sunk are irrelevant.
3. Note: Total Contribution = Net Income Before Taxes
4. Therefore, focus on **Changes**

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IDENTIFY INCREMENTAL **VARIABLE** COSTS

VARIABLE COSTS ARE ALWAYS INCREMENTAL

But be careful of averages! The incremental variable cost for a change in sales is often not equal to the average variable cost.

Examples:

- Overtime vs. average cost production;
- Costs from multiple sources using different technologies (joint product vs. prime sourcing);
- Average over different types of customers.

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IDENTIFY INCREMENTAL FIXED COSTS

SOME FIXED COSTS ARE ALSO INCREMENTAL

They are the fixed costs incurred to implement a change in pricing.

MOST FIXED COSTS ARE NOT INCREMENTAL

Since they do not change with a change in price or sales, they are not incremental. They have no impact on the relative profitability of alternative pricing strategies.

Examples:

- Product Development Costs;
- Advertising

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IDENTIFY INCREMENTAL OPPORTUNITY COSTS

BEWARE OF OVERLOOKING OR IGNORING OPPORTUNITY COSTS.

They are often incremental, even when associated with otherwise “fixed” assets.

Examples:

- Alternative uses of capacity, funds, or
- Management time.

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Ace Manufacturing

- Ace Manufacturing earns revenues of \$2,100,000 annually on 150,000 unit sales of an industrial part. The part is priced at \$14 each.
- A potential customer, in an industry that the company has not previously served, asks ACE to submit a bid for a similar product that ACE could produce in the same facility using much of the same capital equipment. The new customer would purchase 30,000 units annually. After evaluating this customer's needs and identifying the substitute product, ACE's sales engineers conclude that a bid in the range of \$10 per unit would be required to win this account.
- Since the durability required by this customer was below ACE's usual standards, the engineers felt that cheaper materials could be used. ACE's engineers estimate that the variable cost of manufacturing this product, using the cheaper materials, will be \$2.50 /unit.
- ACE will also require some additional production capacity that will increase fixed costs by \$90,000. G&A costs to service this account will be approximately \$60,000 annually.

What is the relevant unit cost for making this pricing decision?

Is this business sufficiently profitable to make bidding worthwhile?

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ACE MANUFACTURING: Identifying True Costs for Pricing

	Total Dollars			Dollars Per Unit		
	150,000 units A	30,000 units B	180,000 units C	150,000 units D	+30,000 E	+30,000 F
Revenues	\$2,100,000			\$14.00		
Costs						
Direct Var. Costs	\$450,000			\$3.00		
Direct Fixed Costs	\$750,000			\$5.00		
Gen. & Adm. Costs	\$675,000			\$4.50		
Total Costs	\$1,875,000			\$12.50		
Profits	\$225,000			\$1.50		

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ACE MANUFACTURING: Identifying True Costs for Pricing

	Total Dollars			Dollars Per Unit		
	150,000 units A	30,000 units B	180,000 units C	150,000 units D	+30,000 E	+30,000 F
Revenues	\$2,100,000	\$300k	\$2.4m	\$14.00	\$10.00	\$10.00
Costs						
Direct Var. Costs	\$450,000	\$75k	\$525k	\$3.00	\$2.50	\$2.50
Direct Fixed Costs	\$750,000	\$90k	\$840k	\$5.00	\$4.67	\$3.00
Gen. & Adm. Costs	\$675,000	\$60k	\$735k	\$4.50	\$4.08	\$2.00
Total Costs	\$1,875,000	\$225k	\$2.1m	\$12.50	\$11.25	\$7.50
Profits	\$225,000	\$75k	\$300k	\$1.50	- \$1.25	\$2.50

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Boscot is considering targeting and selling to a new customer segment. It is operating at full capacity. What are the true costs to serve this new segment?

Direct Labor	Overtime pay is 1.5 times normal pay.
Plant & Equipment	Depreciated according to IRS rules.
Marketing & Sales	New salespeople must be hired, and a new promo program produced to target new buyers. Expected cost \$6,000, regardless of sales actually generated.
Order Process & Ship	Buyers in new market segment order in quantities half the size of orders of current customers.
Warehousing	Owns and rents warehouse space. Warehousing for 1,500 units is charged at \$4,500/week of original building & maintenance. To warehouse 1,500 more units, either <ul style="list-style-type: none"> • Build addition to warehouse at charge of \$6,500/week, or • Stop leasing space to other companies, which earns rents of \$6,000 per week.
General & Admin	Corporate overhead, R&D, etc

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Cost Analysis For Pricing Decisions

Boscot Corporation

	TOTAL	\$/UNIT	TRUE COST
Direct Labor	\$144,000	\$24	_____
Materials	42,000	7	_____
Plant & Equipment	216,000	36	_____
Sales & Marketing	12,000	2	_____
Order Process & Ship	24,000	4	_____
Warehousing	18,000	3	_____
General & Admin	66,000	11	_____
TOTAL	\$522,000	\$87	

What is the relevant unit cost?

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Cost Analysis For Pricing Decisions

Boscot Corporation

	TOTAL	\$/UNIT	TRUE COST
Direct Labor	\$144,000	\$24	_____ \$36
Materials	42,000	7	_____ \$7
Plant & Equipment	216,000	36	_____ ---
Sales & Marketing	12,000	2	_____ \$6,000
Order Process & Ship	24,000	4	_____ \$8
Warehousing	18,000	3	_____ \$6,000
General & Admin	66,000	11	_____ ---
TOTAL	\$522,000	\$87	

What is the relevant unit cost?

Do customer costing, not product costing,
the incremental cost to serve customers

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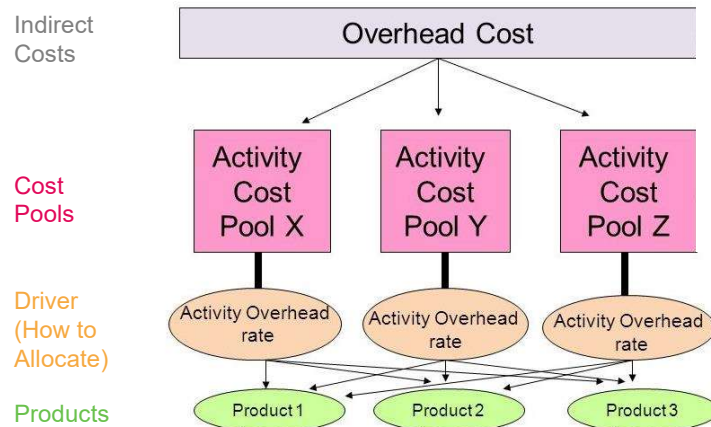
Approximately right, or precisely wrong

- Determining the true cost of a product or service — the incremental, avoidable cost — requires making adjustments to the full, average costs as calculated for financial purposes
- These adjustments often require you to make judgments about which you are uncertain, and that are debatable
- This is not, however, a reason to avoid making such judgments

It is better to make pricing decisions based on a rough idea of the true unit cost of your product or service than on precise accounting of costs that are irrelevant to its profitability!

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ABC Costing



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