

Finance Accounting and Control

Lecture 3

Management accounting

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Cost accounting

Basic definition

- Variable costs
- Fixed costs

Operational definition

- Direct cost
- Indirect cost
- General cost

Direct cost

Cost whose level is directly (physically) connected to the production of any given product

Examples

- Raw materials, components
- Consumables
- Energy
- Labour

Data are taken from MRP system (raw materials, components), EMS (Enterprise Manufacturing System) and Time-and-Methods techniques for the calculation of labour time at product level. Alternatively, they are approximated on a yearly basis.

Indirect cost

Cost whose level depends on the level of production in general but not on any specific product

Examples

- Depreciation of the equipment
- Factory services (maintenance, industrial services)

General cost

Cost whose level does not depend on the level of production but on the general activities of the firm

Examples

- Administration
- Legal and regulatory affairs
- Corporate communication

The issue of Sales and Marketing costs.

Imputation

The unit cost of a product is computed in the following way

- Direct cost
- Indirect cost as a linear proportion of the direct cost (%)
- General cost on the basis of an imputation principle

Imputation principle = strategic and operational logic underlying the allocation of general costs

Cost centre vs profit centre

Within companies, cost accounting is used to monitor and control the operational activities.

The responsibility is allocated to organizational units that respond to the top management with respect to the indicators imputed to the unit.

Units

- Cost centre- only direct cost + indirect cost
- Profit centre- all costs, including general cost

Cost allocation

The general principle is that each unit should be responsible for activities for which it has power and authority.

Cost centre

- No responsibility for marketing and sales
- No allocation of commercial expenses
- Allocation of indirect costs as a proportion of
- Only responsibility for operational activities

Profit centre

- Full allocation of all costs, including overhead (general expenses)

Operational unit cost configurations

Direct cost

- Direct personnel
- Raw materials, components
- Consumables
- Energy consumption

Industrial cost

- Depreciation
- Factory services

Cost of sales / Commercial cost

- Direct sales personnel
- Sales fees
- Direct promotion & advertising

Full cost

- Administration
- General marketing expenses
- Other general operational expenses

Break even analysis

Key points

- Fixed costs must be covered with revenues- but fixed costs do not depend on volumes
- Variable costs have two regimes of variability
 - Decreasing returns (U-shaped marginal cost function)
 - Constant returns (constant marginal cost)
- Assumption: price is fixed across the volume range
- Under these conditions there is a unique quantity for which profit equals zero- called breakeven point (BEP)
- Below the BEP the firm is suffering losses, beyond the BEP it enjoys profits

Break even analysis

CF = fixed cost

VC= variable cost

$VC = vQ$

v= unit variable cost, or marginal cost

p= product price

$(p-v)$ = contribution margin

TR= total revenues = pQ

$TC = FC + VC$

$TC = TR$

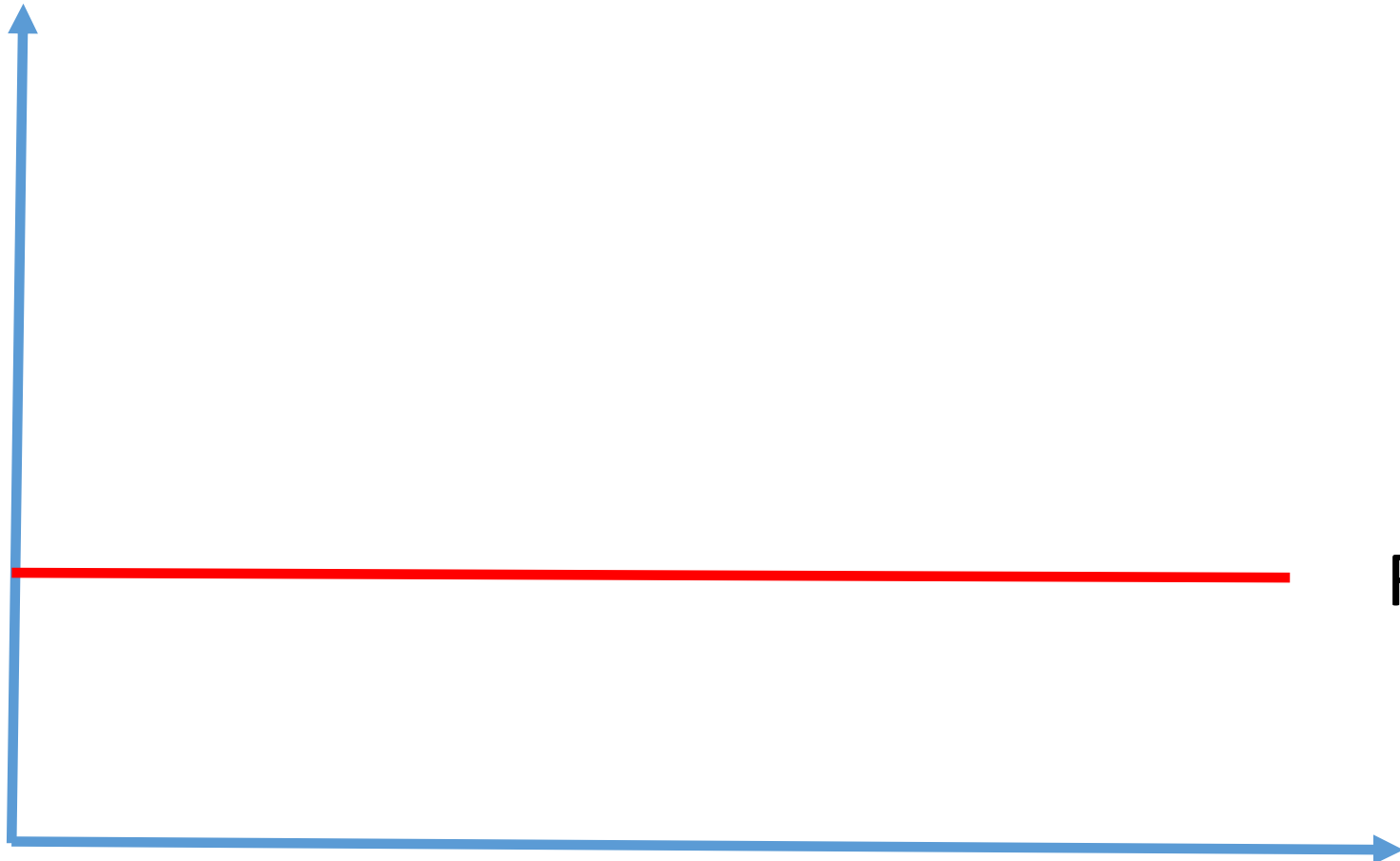
$FC + VC = pQ$

$FC + vQ = pQ$

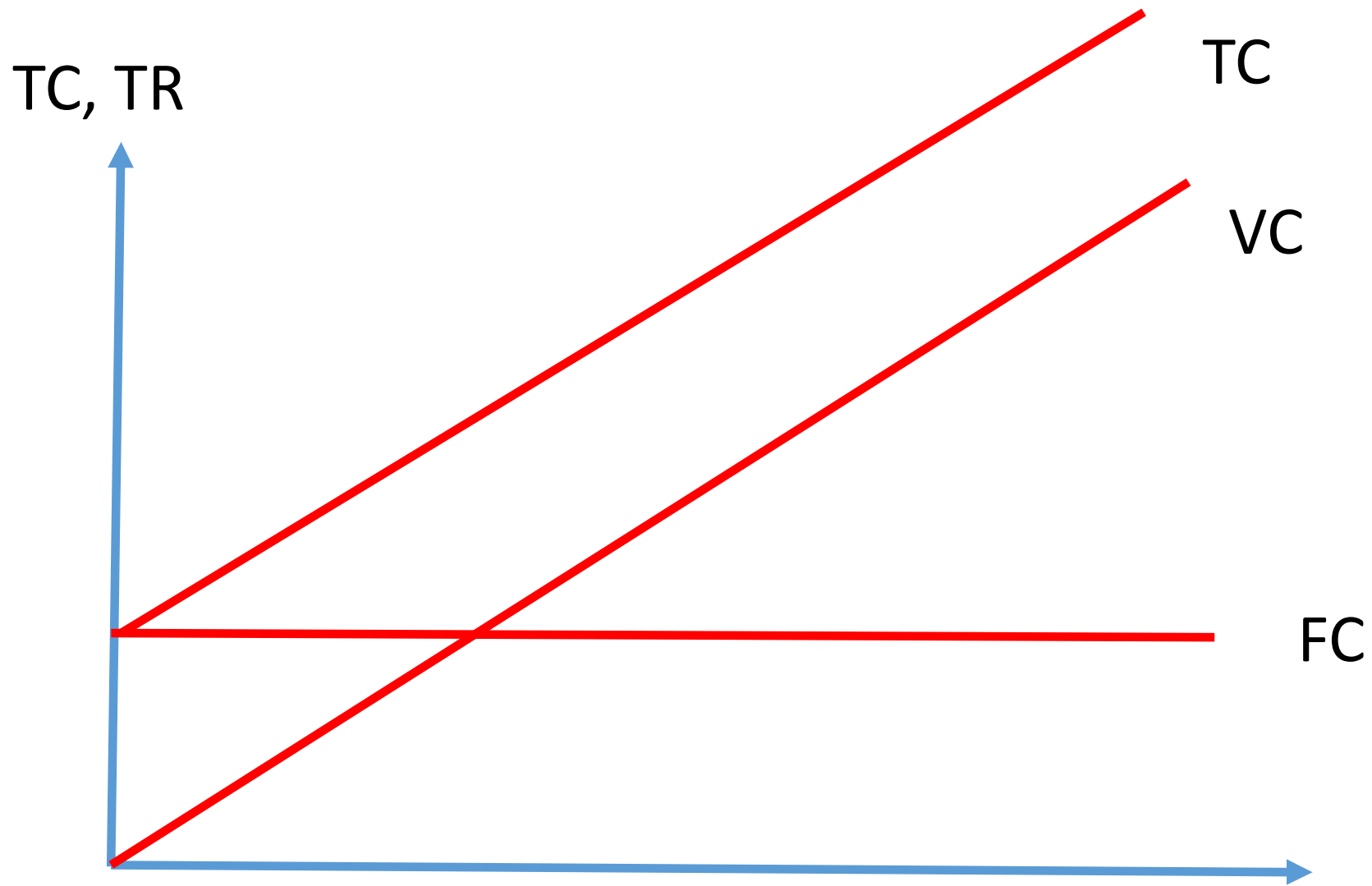
$FC = Q (p-v)$

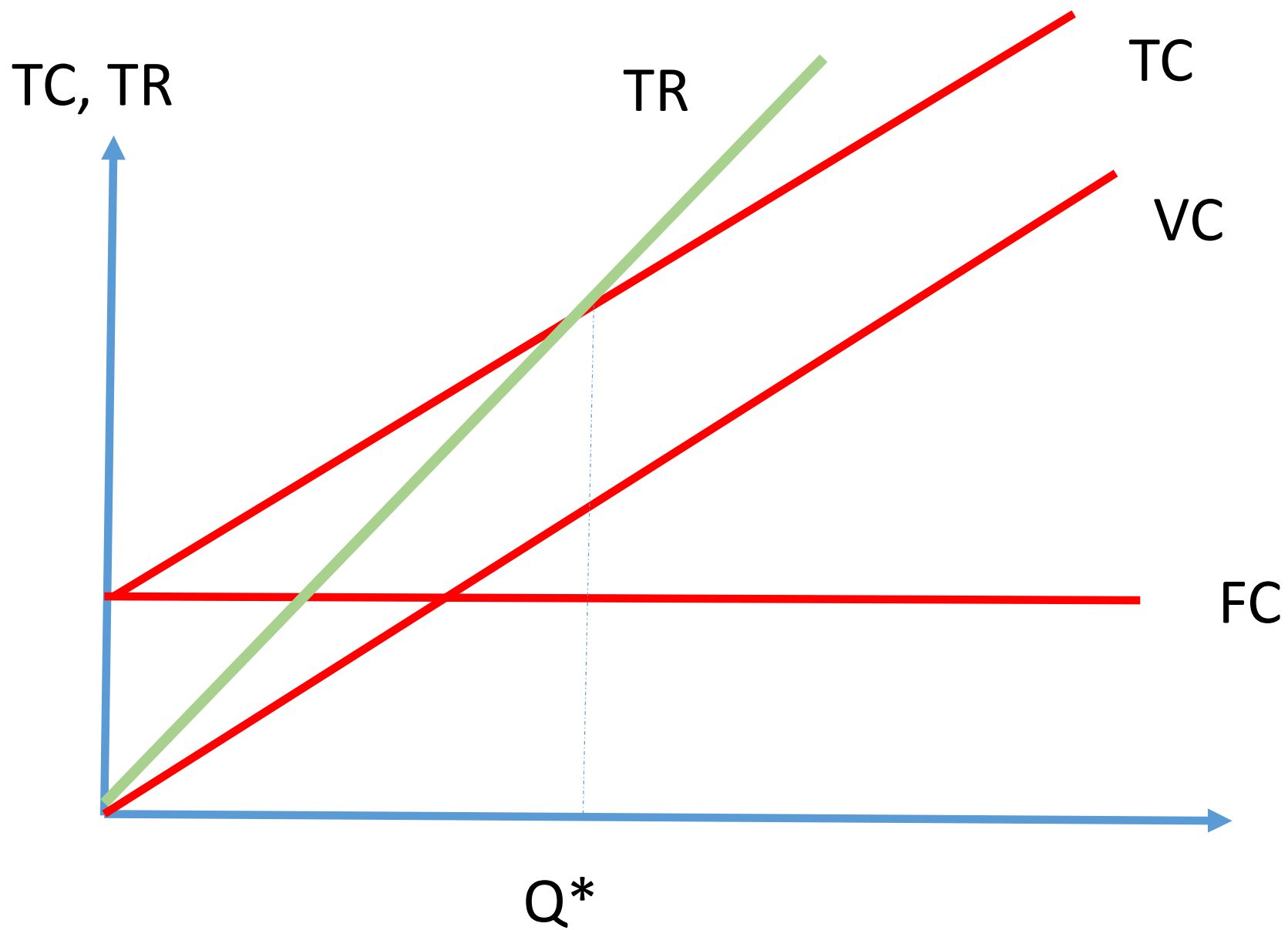
$$Q^* = FC / (p-v)$$

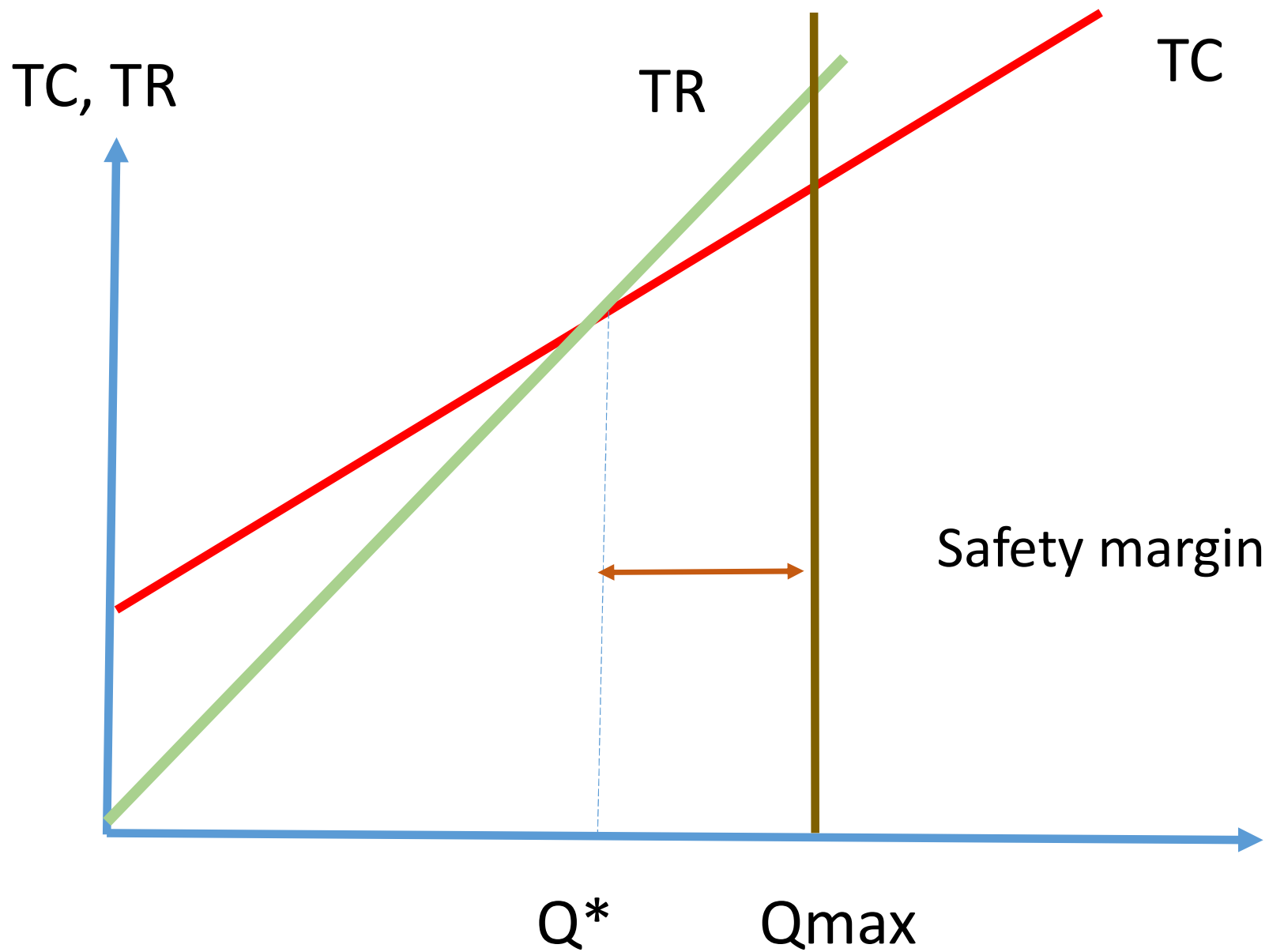
TC, TR



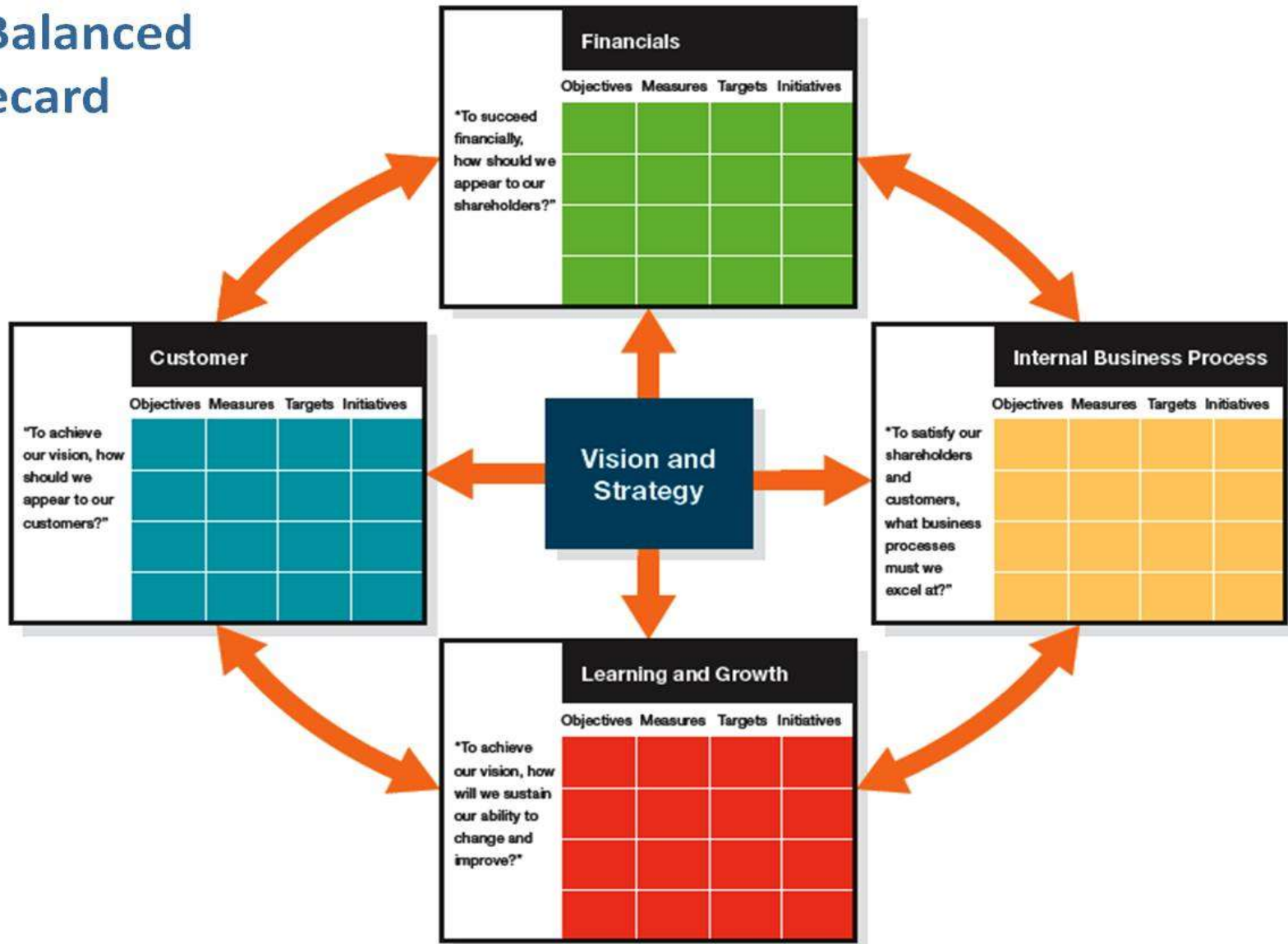
FC







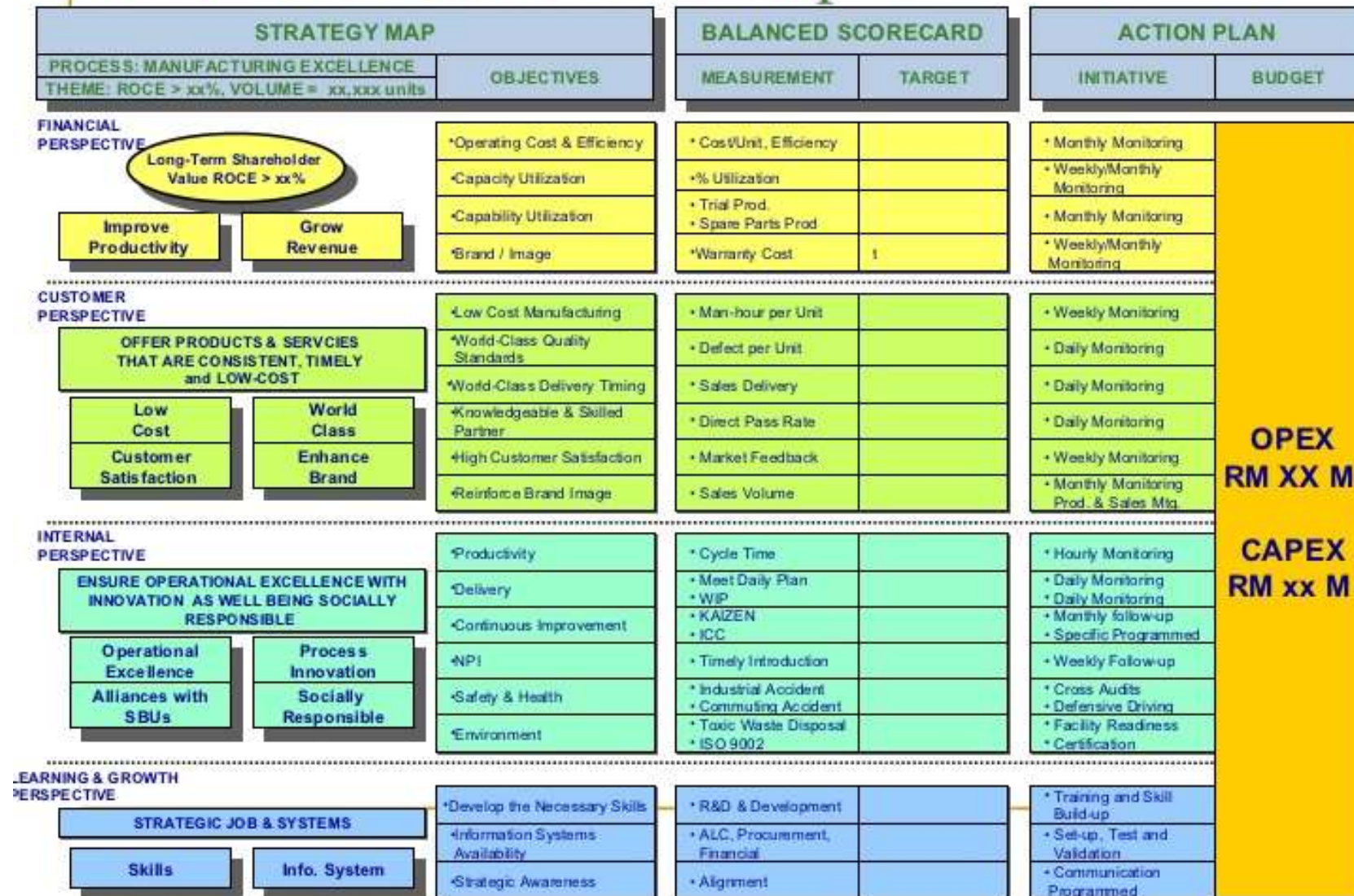
The Balanced Scorecard



Vision	Transforming society through the provision of ultra-high speed mobile information services		
Mission	The number one provider of ultra-high speed mobile information networks across the United Kingdom and Europe		
Strategic Priority	Content Partnerships	Customer Service	Brand Awareness
Strategic Result	Strong supply chain for entertainment and information services, exclusive agreements	Clarity in offering that surpasses anything in the market today, best user interface	Reinvigorated brand based on successes, attract a wider and younger audience

Business Objectives and Strategy Map		Measures	Targets	Initiatives
Financial	<pre>graph BT subgraph Financial IR[Increase Revenue] --> IP[Increase Profitability] IP --> DOC[Decrease Operating Costs] end subgraph Customer ICO[Improve Clarity of Offering] --> IR IMP[Improve Market Perception] --> IP ICS[Improve Customer Satisfaction] --> DOC end subgraph InternalProcesses IOS[Improve Offering Selection] --> ICO IIS[Improve Information Services] --> IMP ISR[Improve Stock Reliability] --> ICS ICC[Improve Cost Control] --> DOC end subgraph OrganisationalCapacity IKS[Improve Knowledge and Skills] --> IOS ITS[Improve Technology] --> IIS ISC[Improve Supply Chain] --> ISR end</pre>	<ul style="list-style-type: none">• Net profit• Operating costs• Revenue in target markets	<ul style="list-style-type: none">• ↑ 5% per year• ↓ 3% per year• ↑ 12% per year	<ul style="list-style-type: none">• Implement new financial accounting system• Simplify billing operations
Customer		<ul style="list-style-type: none">• % Market share index• % Customer satisfaction index• % Focus group user index	<ul style="list-style-type: none">• ↑ 3% per year• 85% this year• > 90% each focus session	<ul style="list-style-type: none">• Competitive end user requirements market studies for new UK regions• “Improve the Offering” two year programme
Internal Processes		<ul style="list-style-type: none">• New products as % of sales• Brand awareness score• Cost efficiency index	<ul style="list-style-type: none">• 12% this year• ↑ 5% per year• > 90% every reporting period	<ul style="list-style-type: none">• Create improved offering selection process• Processes for ‘Improve the Offering’ programme above• Training programme for new offerings and user interface
Organisational Capacity		<ul style="list-style-type: none">• Employee development plans• Technology training index• Supply chain efficiency index	<ul style="list-style-type: none">• 95% in place• 90% efficient• 95%	<ul style="list-style-type: none">• Product and marketing training programme• 2 year football and news supply agreements• Technology improvement programme
CustomerFocus - Integrity - Quality - Helpfulness - Community - Efficiency				

Balanced Scorecard Example



ESC CCAC BALANCED SCORECARD


VARIANCE INDICATOR:



INDICATOR SOURCE:

M-SAA: Multi-sector Accountability Agreement
QIP: Quality Improvement Plan
ESC: CCAC Performance Indicator



Domain	Indicator	Baseline Performance	Target Performance	Target Justification and Comment(s)	Performance Corridor	Q1 (2016-17)	Q2 (2015-16)	Q3 (2015-16)	Q4 (2015-16)
 Quality Patient Care	Goals and Objectives for Engaging with community to learn from the patient experience and deliver patient & family centred care [ESC]	2014/15 Q3/Q4 100%	≥90% of goals and objectives on target for completion	Goals and objectives should be achievable within suggested timeframes.	<div>≥90%</div> <div>80-89%</div> <div><80%</div>	92%	100%	100%	100%
	Goals and Objectives for Chronic Disease Management [ESC]	2014/15 Q3/Q4 100%	≥90% of goals and objectives on target for completion	Goals and objectives should be achievable within suggested timeframes.	<div>≥90%</div> <div>80-89%</div> <div><80%</div>	93%	84%	88%	88%
	Goals and Objectives for Partner of Choice in enhanced Care Coordination [ESC]	2014/15 Q3/Q4 100%	≥90% of goals and objectives on target for completion	Goals and objectives should be achievable within suggested timeframes.	<div>≥90%</div> <div>80-89%</div> <div><80%</div>	86%	80%	100%	100%
	Ratio of Admitted Patients to Discharged Patients [ESC]	2014/15 1.00	= 1.0	Target set by CCAC as objective to support resource management.	<div><1.00</div> <div>1.01-1.05</div> <div>>1.05</div>	1.03	.99	1.00	1.04
	Patient Satisfaction (Overall Experience rating on NRC Picker survey) [QIP]	2014/15 Q1/Q4 93.8	≥ 95.0%	Target to meet or exceed high performer in Province.	<div>≥95%</div> <div>93.2-94.9%</div> <div><93.1%</div>	94.3%	94.3%	94.2%	94.2%
	Patient Risk (Falls) [QIP] / [MSAA]	2014/15 36.5%	≤30.6%	Target to meet or exceed high performer in Province.	<div>≤30.6%</div> <div>30.7-35.7%</div> <div>>35.7%</div>	36.9%	37.6%	39.2%	38.0%
	% of ALC days (closed cases) [MSAA]	2013/14 16.4%	≤15.3%	LHIN MSAA indicator and target (not set).	<div>≤15.3%</div> <div>15.4-16.3%</div> <div>>16.4%</div>	16.6%	16.03%	Estimated availability date is Q1.	Estimated availability date is Q1.
	% of home care patients with unplanned, less urgent ED visit within first 30 days of discharge from hospital [QIP]	2013/14 Q2-2014/15 Q1 7.9%	≤6.5%	Target to exceed provincial average.	<div>≤6.5%</div> <div>6.6-7.8%</div> <div>>7.9%</div>	6.9%	7.7%	6.3%	Estimated availability is Q2.
	% of home care patients who experienced an unplanned readmit to hospital within 30 days of discharge from hospital [QIP]	2013/14 Q2-2014/15 Q1 16.7	≤15.5%	Remain in top quartile in Provincial peer group.	<div>≤15.5%</div> <div>15.6-16.6%</div> <div>>16.7%</div>	14.7%	15.7%	15.2%	Estimated availability is Q2.
	% patients receiving their first nursing visit within 5 days of discharge from community [QIP]	2014/15 93.1%	≥92.4%	Exceed provincial average. *QIP-baseline was not chosen, provincial average chosen.	<div>≥92.4%</div> <div>90.1-92.3%</div> <div><90.0%</div>	93.5%	94.9%	91.4%	92.1%
	% patients receiving their first nursing visit within 5 days of referral from hospital [QIP]	2014/15 96.9%	≥95.2%	Exceed provincial average. *QIP-baseline was not chosen, provincial average chosen.	<div>≥95.2%</div> <div>94.2-95.1%</div> <div><94.1%</div>	96.6%	96.9%	96.9%	96.3%

N/A means baseline performance not available.
TBD means indicator to be developed further using historical performance