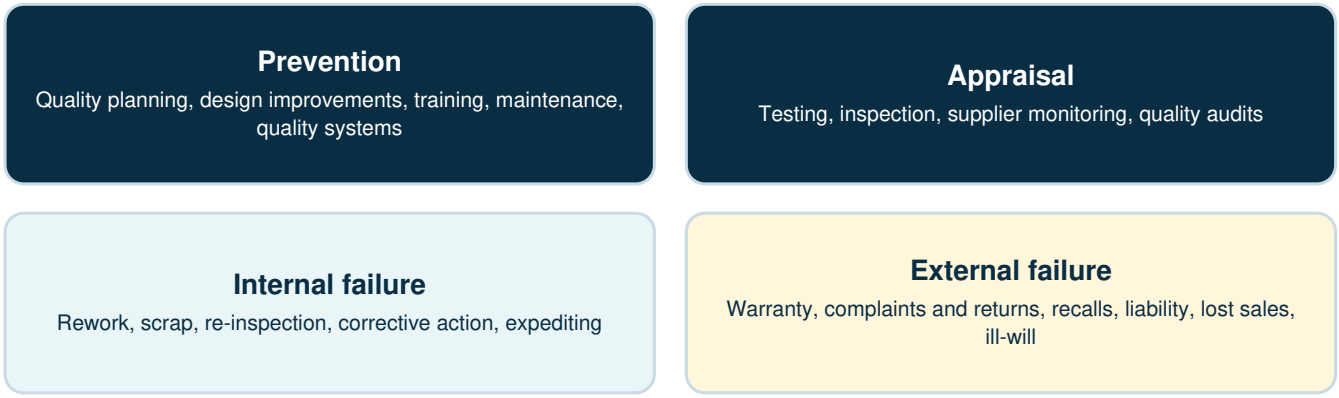
Quality costs and outsourcing

MODULE 6 | PART E.2 | STUDENT COMPANION

Total quality management aims for right first time and zero defects across every department. Quality means conformance to standards (a variance from standard signals a quality problem) and fitness for the customer's purpose.

The four categories of quality cost



Top: costs of controlling quality. Bottom: costs of failing to control it.

Rules for quality costs

Rule	Remember
Classify by nature	In-process inspection is appraisal, even if caused by internal failure
Prevention pays	Spending on prevention and appraisal usually cuts failure costs by many times as much
Shift failures inward	More appraisal swaps recalls and warranty claims for scrap and rework
Timing	Total quality costs may rise at first, before prevention pays off
Rework	Non-value-adding, yet sometimes the best economic choice

Rework or scrap?

Option 1 - scrap the faulty kettle	-$8
Option 2 - rework cost	-$22
Sale as a factory second	+$45
Option 2 net result	**+$23**
Advantage of reworking over scrapping	**$31**

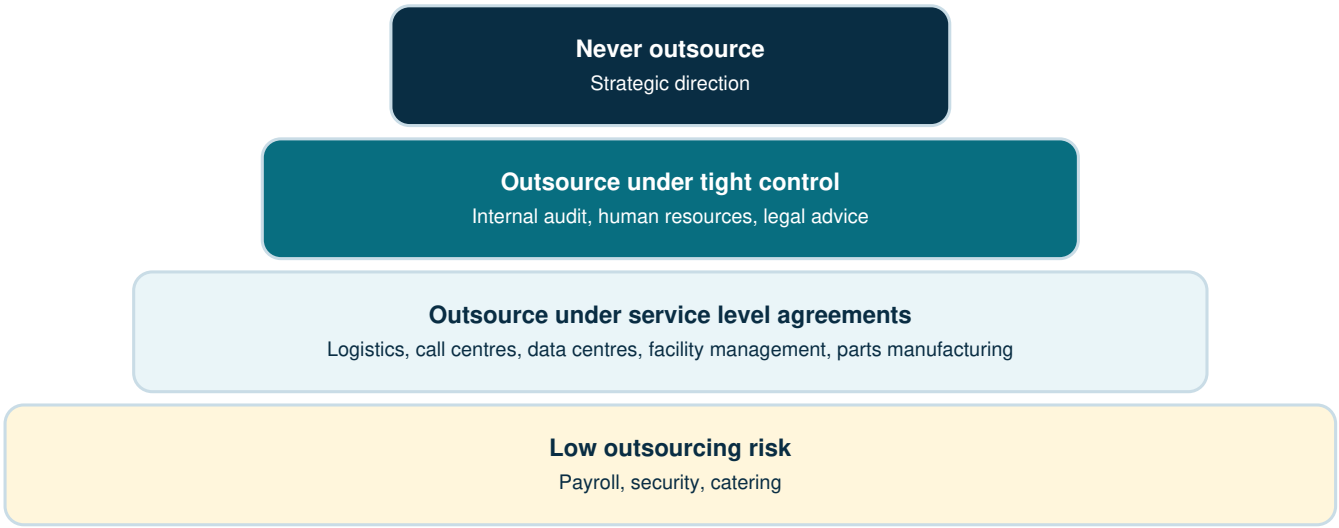
Rework adds no value - but here it is the better economic choice

Case note: in September 2016 Samsung recalled about 2.5 million Galaxy Note7 phones after batteries overheated and caught fire; some replacements failed too, and in October it stopped making the model. Reports based on Samsung's figures put the cost above US$5 billion. In January 2017 it traced the fires to battery faults and introduced an eight-point battery safety check - prevention and appraisal.

Outsourcing and offshoring

Item	Remember
Offshoring	Moving activities to overseas subsidiaries for lower labour or resource costs
Outsourcing	Switching supply from an internal unit to an outside vendor (IT, legal, market research, logistics, call centres, payables, payroll)
Hidden costs	Unavoidable fixed overheads remain; redundancy costs; rising dependence; contract management
Other factors	Quality, delivery, data quality and security, after-sales service, lost knowledge, labour and morale
Service level agreement	Selection, monitoring and audit criteria: cost plus % not to spec, late services, dispute response time

What to outsource - and how



Outsourcing: advantages and disadvantages

Advantages	Disadvantages
• Lower costs and fewer assets	• Long-run costs can rise
• Access to expertise and resources	• Lost skills and knowledge
• Flexibility	• Reliance on outside parties
• Focus on core activities	• Security breaches and quality problems

Many failures come from how the deal was evaluated and negotiated

Case note: in 2020 Qantas outsourced ground handling at ten airports and 1,683 workers lost their jobs. The Federal Court found the decision breached the Fair Work Act, and the High Court unanimously agreed on 13 September 2023. Qantas agreed to pay $120 million compensation (December 2024) and was ordered to pay a $90 million penalty (August 2025).

Sources: Samsung statements reported by AP and Al Jazeera (October 2016, 23 January 2017); High Court of Australia (2023); Federal Court of Australia and media reports (2024-2025).

Practice questions

MODULE 6 | PART E.2 | TRY THESE BEFORE THE WORKED ANSWERS

Question 1 - Classify the quality costs

Cost	Category
(a) Training staff in a new soldering technique	
(b) Testing every tenth unit off the line	
(c) Reworking units that fail testing	
(d) Replacing products under warranty	
(e) Auditing a supplier's factory	
(f) Redesigning a part that often breaks	
(g) Scrapping a batch of faulty components	
(h) Sales lost after poor online reviews	

Question 2 - Outsource payroll? (imagined council)

In-house payroll costs $420,000 a year: staff $300,000, software $60,000 and allocated office overhead $60,000 that will not go away. An outside provider quotes $330,000 a year, and redundancies would cost $45,000 once. (a) Ignoring the time value of money, what is the net saving over three years? (b) List four non-financial factors.

Worked answers

MODULE 6 | PART E.2 | WORKED ANSWERS - ATTEMPT THE QUESTIONS FIRST

Question 1 - Classify the quality costs

Cost	Answer
(a)	Prevention
(b)	Appraisal
(c)	Internal failure
(d)	External failure
(e)	Appraisal (supplier monitoring)
(f)	Prevention
(g)	Internal failure
(h)	External failure

Question 2 - Worked answer

Item	Answer
Avoidable in-house cost	$300,000 + $60,000 = $360,000 a year (the $60,000 overhead stays)
Annual saving	$360,000 - $330,000 = $30,000
Three years	$90,000 - $45,000 redundancy = $45,000 net saving
(b) Factors	Data security and privacy of employee records; service levels and accuracy; staff morale and industrial relations; dependence and long-run price rises; loss of in-house knowledge; capacity to manage the contract