

Unit 2: Consumer Behaviour and Decision-Making



Why do we buy what we buy? Exploring utility, elasticity, and rational consumer decisions.

What You'll Learn in Unit 2



What is Utility?

Satisfaction from goods & services



Price Elasticity

How demand responds to price changes



Marginal Utility

Law of Diminishing Marginal Utility



Types of Goods

Normal, inferior, substitutes & complements



Unit Review & Quiz

Test your knowledge — 8 questions



Consumer Choice

Maximising satisfaction on a budget

SECTION 1

What is Utility?

In economics, "utility" means satisfaction.
It explains why we buy what we buy.



Understanding Utility

Utility is the **satisfaction or enjoyment** a person gets from consuming a good or service. It is personal — the same product can give different people different amounts of satisfaction.



Utils

Imaginary units used to measure satisfaction levels. "First pizza slice gave me 80 utils."
The number itself is not as important as whether utility goes up or down.



Total Utility (TU)

The total satisfaction from consuming ALL units of a good. Usually rises as you consume more — but more and more slowly each time.



Marginal Utility (MU)

The EXTRA satisfaction from consuming ONE MORE unit.
 $MU = \Delta TU \div \Delta Q$
This is the number that drives every buying decision!



DID YOU KNOW?

In the 1700s, philosopher Jeremy Bentham believed happiness could be measured as a number — an early version of utility theory!



KEY IDEA

Utility is about the LAST unit. Your decision to buy "one more" depends on how much satisfaction that extra unit gives you — not how much you enjoyed the first one.

The Rational Consumer

Economists assume that consumers are RATIONAL — they compare the satisfaction they expect (utility) with the price they must pay, and try to get the most satisfaction from their budget.

😊 **Utility > Price → They BUY**

😐 **Utility = Price → They are indifferent**

😞 **Utility < Price → They DON'T BUY**

🍔 Real-World Example

You're very hungry and eat your first burger — HIGH utility! The second is still good. By the third, you're too full. Your utility from burgers peaked at the second and then fell.

BUDGET CONSTRAINT



The limit set by your income and prices.

You CANNOT spend more than you have!

🔑 WHY UTILITY MATTERS

Utility answers:

- WHY do people buy things?
- HOW MUCH are they willing to pay?
- WHEN do they stop buying?

SECTION 2

Marginal Utility & The Law of DMU

Each extra unit gives you a little LESS satisfaction than the one before.



Law of Diminishing Marginal Utility

$$MU = \Delta TU \div \Delta Q$$

Marginal Utility = change in Total Utility when one more unit is consumed
(Since $\Delta Q = 1$ in most examples: $MU = TU \text{ after} - TU \text{ before}$)

As you consume MORE of any good, each extra unit gives you LESS satisfaction than the one before.



↓ Marginal Utility falls with every additional burger you eat!

Total Utility vs Marginal Utility — Two Curves



Total Utility (TU)

- ▶ Starts at zero — no consumption, no satisfaction
- ▶ Rises as you consume more units
- ▶ Rises more and more SLOWLY each time (DMU at work)
- ▶ Reaches a maximum at the saturation point
- ▶ May FALL if you consume too much → disutility



Marginal Utility (MU)

- ▶ Starts HIGH — your most urgent need is met first
- ▶ ALWAYS FALLS with each extra unit consumed
- ▶ Reaches ZERO when TU is at its highest point
- ▶ Becomes NEGATIVE → each unit makes you feel WORSE
- ▶ This pattern is the Law of Diminishing Marginal Utility



DISUTILITY: When consuming MORE of a good actually makes you feel WORSE — Total Utility begins to FALL. Example: eating a 9th slice of pizza when you are already very full.

SECTION 3 • INTERACTIVE ACTIVITY



The Pizza Lab

Let's see exactly how Total Utility and Marginal Utility behave as you eat more and more slices of pizza!





Pizza Lab: Total Utility & Marginal Utility Data

Slices (Q)	Total Utility (TU)	Marginal Utility (MU)	Assessment
0	0	—	—
1	80	80	High ●
2	135	55	High ●
3	170	35	Moderate ●
4	195	25	Moderate ●
5	205	10	Low ●
6	200	-5	Disutility ●
7	185	-15	Disutility ●
8	160	-25	Disutility ●

Key Observations:



TU peaks at slice 5 → 205 utils



MU falls with EVERY additional slice



MU becomes NEGATIVE after slice 5 → Disutility!



When MU is negative, TU starts to FALL



All-you-can-eat buffets make money because customers' MU falls so fast they rarely eat much more than a normal meal!

SECTION 4

Consumer Choice

How do consumers decide where to spend their limited money?



Spending Your Budget Wisely

 A rational consumer always asks: "Which option gives me the MOST satisfaction per dollar RIGHT NOW?"

Example: You have \$5. Pizza costs \$2/slice; drinks cost \$1. You are very thirsty and a little hungry.

1

Compare MU per Dollar

Calculate which good gives the most satisfaction for each dollar spent.

2

Buy the Best Value First

Your first drink gives far more satisfaction per dollar than pizza. Buy it!

3

Reassess as MU Changes

After the drink, DMU kicks in. The next best choice may now be pizza.

4

Continue Until Budget Gone

Keep buying in order of best satisfaction-per-dollar until the \$5 is spent.

Consumer Surplus — The "Good Deal" Feeling

Consumer Surplus = Willingness to Pay – Actual Price Paid

The extra benefit you receive as a buyer — the gap between what you were WILLING to pay and what you ACTUALLY paid.



Book

Willing to pay: \$30
Actual price paid: \$20

Surplus: \$10 🎉



Concert Ticket

Willing to pay: \$50
Actual price paid: \$35

Surplus: \$15 🎉



Sneakers

Willing to pay: \$150
Actual price paid: \$90

Surplus: \$60 🎉

🛒 When you choose a larger pack because it costs less per unit, you are already thinking about value for money — exactly how economists model consumer decision-making!

SECTION 5

Price Elasticity of Demand

When prices go up, how much does consumer behaviour actually change?



Price Elasticity of Demand (PED)

$$\text{PED} = \% \text{ Change in Quantity Demanded} \div \% \text{ Change in Price}$$

● $|\text{PED}| > 1$

ELASTIC

Consumers are VERY sensitive to price changes.

Small price $\uparrow$ $\rightarrow$ Large quantity $\downarrow$

Examples:

Luxury goods • Designer brands
Non-essentials • Entertainment

● $|\text{PED}| < 1$

INELASTIC

Consumers are NOT very sensitive to price changes.

Price $\uparrow$ $\rightarrow$ Only small quantity $\downarrow$

Examples:

Necessities • Insulin • Fuel
Cigarettes • Basic food

● $|\text{PED}| = 1$

UNIT ELASTIC

1% price $\uparrow$ causes exactly 1% quantity $\downarrow$
Total revenue stays the same.

Examples:

Theoretical benchmark used
to compare elastic vs inelastic

What Makes Demand Elastic? + The Revenue Test

Four Determinants of Elasticity:



Substitutes

More alternatives = MORE elastic (easy to switch away)



Necessity vs Luxury

Necessities = MORE inelastic (you NEED them regardless)



Share of Income

Bigger share of income = MORE elastic (price hits harder)



Time

More time = MORE elastic (consumers find alternatives)



The Total Revenue Test

A simple way to identify elasticity.
If price rises and...

Revenue **RISES**

→ Demand is **INELASTIC**

Revenue **FALLS**

→ Demand is **ELASTIC**

Revenue **SAME** ↔

→ **UNIT ELASTIC**

BC Carbon Tax on fuel: demand is inelastic short-term → the tax raises significant revenue, even though people dislike it!

SECTION 7

Types of Goods

How does demand change when income goes up —
and when the price of a related good changes?



Normal Goods vs Inferior Goods



NORMAL GOOD

$YED > 0$ (positive)

Income $\uparrow$ $\rightarrow$ Demand $\uparrow$

When people earn more money, they buy MORE of these goods.

Examples:

-  Restaurant meals
-  Travel & holidays
-  New electronics
-  Gym memberships
-  Brand-name clothing



INFERIOR GOOD

$YED < 0$ (negative)

Income $\uparrow$ $\rightarrow$ Demand $\downarrow$

When people earn more money, they switch to BETTER alternatives.

Examples:

-  Instant noodles
-  Second-hand clothing
-  Bus travel
-  Store-brand products
-  Budget housing



Inferior good in action: During recessions, instant noodle sales RISE. When the economy improves, they FALL again. Classic inferior good behaviour!

Substitutes & Complements



SUBSTITUTES

Price of A ↑ → Demand for B ↑

Goods that can REPLACE each other.
When the price of one rises, consumers switch to the other.

$XED > 0$ (positive)

Example pairs:

☕ Coffee ← 🍵 Tea

🚌 Bus ← 🚕 Taxi

🎬 Netflix ← 🎬 Disney+

🥤 Pepsi ← 🥤 Coke



COMPLEMENTS

Price of A ↑ → Demand for B ↓

Goods used TOGETHER.
When the price of one rises, demand for the other also falls.

$XED < 0$ (negative)

Example pairs:

🖨️ Printer ← 🖨️ ? Ink Cartridge

🚗 Car ← ⛽ Fuel

📱 Phone ← 📱 Phone Case

🎮 Console ← 🎮 Games

Key Formulas & Quick-Reference

Marginal Utility

$$MU = \Delta TU \div \Delta Q$$

Extra satisfaction from one more unit

Price Elasticity of Demand

$$PED = \% \Delta Q_d \div \% \Delta P$$

> 1 Elastic | < 1 Inelastic | = 1 Unit elastic

Consumer Surplus

$$CS = \text{Willing to Pay} - \text{Price}$$

The "good deal" benefit to the buyer

Income Elasticity (YED)

$$YED = \% \Delta Q_d \div \% \Delta \text{Income}$$

> 0 Normal good | < 0 Inferior good | > 1 Luxury



Income $\uparrow \rightarrow$ Demand $\uparrow$ = Normal | Income $\uparrow \rightarrow$ Demand $\downarrow$ = Inferior | Price A $\uparrow \rightarrow$ Demand B $\uparrow$ = Substitutes | Price A $\uparrow \rightarrow$ Demand B $\downarrow$ = Complements

UNIT 2 REVIEW

Study Tips & Review Quiz



Master the formulas

$MU = \Delta TU \div \Delta Q$ and $PED = \% \Delta Q_d \div \% \Delta P$ — practice calculating with real numbers!



Use the Pizza Lab data

The pizza table shows everything: TU rising, MU falling, disutility after slice 5.



Use the Revenue Test

Price $\uparrow$ and revenue $\uparrow$ $\rightarrow$ inelastic. Price $\uparrow$ and revenue $\downarrow$ $\rightarrow$ elastic.



Know the 4 good types

Normal, Inferior, Substitute, Complement — and what income/price changes do.

Good luck on your Unit 2 assessment! 🎉