Co-funded by the European Union

Re.ai Connecting Low-Skilled Adults to Remote Opportunities

MODULE 4

Advanced AI Applications for Digital Work & Entrepreneurship

Re-AI Training Programme · EQF Level 4–5 · 13 hours

Hemisfério Didático
"Empower Your Mind, Transform Your Future"

RRINOVA

AdiM Agenzia d'Informazione Mediterranea

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How This Module Works

Apply AI at an advanced level: build a working chatbot, analyse real data, design an AI-powered business and run an AI ethics audit, then finish with a capstone project.

13 hrs	2–3 wks	4	4	EQF 4–5
Learning time	Recommended pace	Lessons	Hands-on exercises	Qualification level

4.1 1.5 hours

AI in customer service: build and deploy your own chatbot

Practice: EX 4.1

4.2 1.5 hours

AI for data analysis: finding insights without being a data scientist

Practice: EX 4.2

4.3 1.5 hours

Building an AI-powered business or freelance service

Practice: EX 4.3

4.4 1.5 hours

AI ethics, bias, and your legal responsibilities under EU law

Practice: EX 4.4

Learning Objectives

By the end of this module you will be able to:

Build a working chatbot

Configure and deploy an AI assistant for customer service, then test how well it performs.

Turn data into insight

Use AI tools to analyse a real dataset and explain the findings in plain language.

Design an AI-powered service

Sketch a simple AI business or freelance offer, with a 6-month income plan and a pitch deck.

Work ethically and legally

Check AI for bias and privacy risks, and meet your duties under the EU AI Act and the GDPR.

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LESSON 4.1 · 1.5 HOURS

AI in customer service: build and deploy your own chatbot

IN THIS LESSON

- What a customer-service chatbot does
- How a modern AI chatbot works
- Building and testing one yourself
- Your legal duty to disclose AI

L4.1 Learning Objectives

By the end of this lesson you will be able to:

- Explain the difference between a rule-based and an AI (LLM-based) chatbot
- Write a system prompt that sets a bot's role, tone, scope and fallback
- Build a knowledge base and test a chatbot for wrong answers and hand-off
- Apply the EU AI Act duty to tell users they are talking to AI

THIS LESSON

L4.1

Duration: 1.5 hours

Practice: EX 4.1

Quiz: 5 questions, 70% to pass

Key Terms

The words you will meet in L4.1, in plain language.

Chatbot

An AI assistant that answers questions in natural language, often for customer service.

LLM

A 'large language model': the AI behind modern chatbots that predicts natural-sounding text.

System prompt

The instructions that set a chatbot's role, tone, scope and limits.

Knowledge base

The documents (FAQs, policies, product info) a chatbot answers from.

Escalation

Handing a conversation over to a human when the bot can't or shouldn't answer.

Transparency duty

The EU AI Act rule to tell people clearly when they are dealing with AI.

Customer service never sleeps

WHY CHATBOTS MATTER

A chatbot answers routine customer questions in plain language, day or night, so people can focus on the hard cases.

Eurostat (2025): 55% of EU businesses used AI, cloud or analytics in 2023.

What a customer-service chatbot does

A chatbot is an AI assistant that answers customer questions in plain language, day or night.

Answers common questions

Opening hours, order status, returns, 'how do I…': the questions a business hears hundreds of times, answered in seconds.

Works around the clock

Customers get help at midnight or on a holiday, without a person waiting by the keyboard.

Frees people for hard cases

Staff stop repeating the same answers and focus on complex, sensitive or high-value conversations.

Tip: let the bot handle the routine questions so people can focus on the tricky ones.

Two kinds of chatbot

Not all chatbots are equal. Knowing the difference helps you build a better one.

A Rule-based (older)

- Follows fixed buttons and scripts
- Predictable, but limited
- Gets stuck if a question isn't in its menu

B AI / LLM-based (modern)

- Understands questions in natural language
- Answers from the knowledge you give it
- Far more flexible, but can 'hallucinate'

Best practice: a knowledge-grounded bot answers only from your documents.

How a modern AI chatbot works

Behind the scenes, a knowledge-grounded chatbot follows four simple stages.

1

Feed it knowledge

Upload FAQs, policies and product info. This is its source of truth.

2

Set its behaviour

Give it a name and a system prompt that defines its tone, scope and limits.

3

It answers customers

It matches each question to your content and replies in seconds, 24/7.

4

You review and improve

Check where it fails, refine the prompt and fill gaps in its knowledge.

Quality comes mostly from the knowledge and the prompt you give it. Builds toward EX 4.1.

Writing a good system prompt

The system prompt is the bot's job description. Write it as if briefing a new employee on day one.

Part	What it does	Example (a small bakery)
Role and tone	Says who the bot is and how it should sound	'You are the friendly support assistant for a small bakery. Be warm, concise and polite.'
Scope and limits	Says what to cover and what to refuse	'Only answer questions about our products, hours and orders. For anything else, offer a human.'
Fallback	Says what to do when it doesn't know	'If you are unsure, say so and suggest contacting the team. Never guess.'
AI disclosure	Makes sure users know it is an AI	'Start each chat with: You're chatting with our AI assistant.'

A clear system prompt is the difference between a good bot and a bad one.

What to put in the knowledge base

Your chatbot is only as good as the information you give it. Cover these four areas.

Frequent questions

The real questions customers ask most often, with clear, correct answers.

Policies

Returns, refunds, delivery, privacy: the rules customers need to understand.

Products and services

What you offer, key details, prices and what makes each option different.

Contact and escalation

How and when to reach a human, so the bot can hand over smoothly.

Tip: write your FAQ the way customers actually ask, not in formal company language.

Build a chatbot, step by step

You can build a working chatbot in under an hour, with no coding.

1

Create the bot

Sign up to a no-code tool like Chatbase and start a new chatbot project.

2

Upload your knowledge

Add a FAQ document, policies or a website link so the bot answers from real content.

3

Name it and prompt it

Give it a friendly name and a system prompt: its role, tone, what it should and shouldn't do.

4

Test, then deploy

Ask real customer questions, fix weak spots, then embed it on a website with the code snippet it gives you.

Tool: Chatbase.co (free tier). This is exactly what you will do in EX 4.1.

Test your chatbot before customers do

A chatbot must be tested like any product. Probe it before it goes live.

Everyday and edge cases

Run the ten most common questions, then awkward, vague or out-of-scope ones to see how it copes.

Hunt for wrong answers

Confident but incorrect replies do the most damage. Fix these first.

Check the hand-off

Make sure it offers a human when it should, and never invents information.

Tip: keep a simple log of questions it failed. That list is your improvement plan.

Good chatbot vs bad chatbot

The same technology can delight or annoy customers. Behaviour is what separates them.

A good chatbot

- Answers accurately from real company info
- Clearly says it is an AI assistant
- Admits when it doesn't know
- Offers a human for complex issues

A bad chatbot

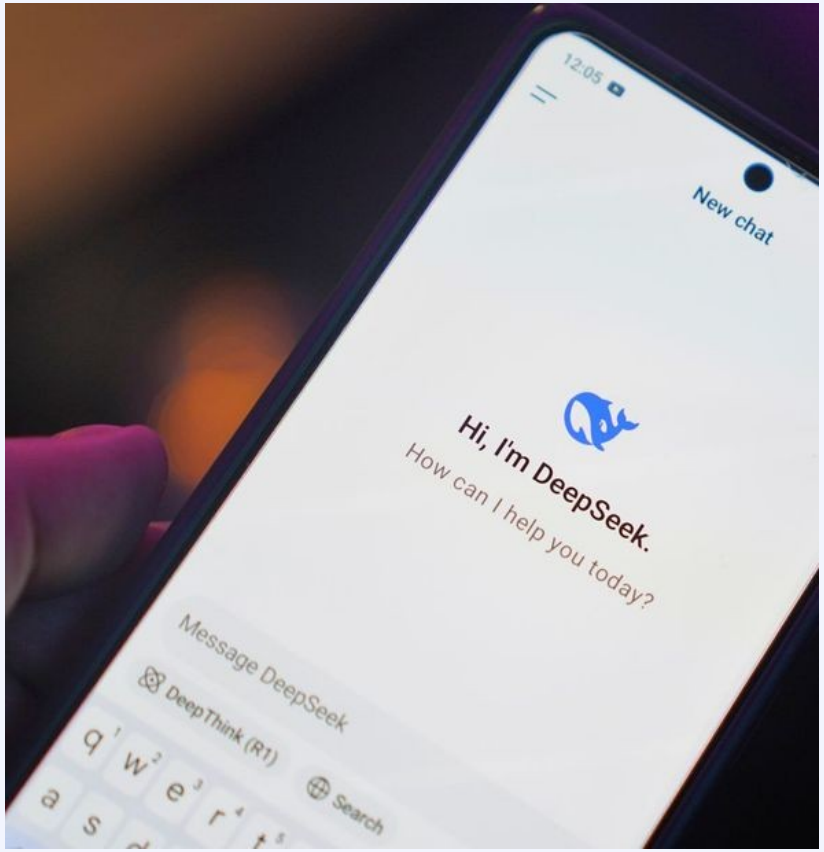
- Invents confident but wrong answers
- Pretends to be a human
- Traps customers in dead-end loops
- Never lets you reach a real person

Aim for the left column: it builds trust instead of frustration.

Your legal duty: disclose the AI

Under Article 50 of the EU AI Act, people must be clearly told when they are interacting with an AI system, unless it is obvious. This applies from 2 August 2026.

- Add a visible line such as 'You're chatting with our AI assistant'
- Never let the bot pose as a human
- Build the habit of disclosing AI into everything you make now



Check Your Understanding

Try answering these in your own words before moving on.

What is the difference between a rule-based and an AI (LLM-based) chatbot?

Why does grounding a chatbot in your own documents reduce wrong answers?

What three things should a good system prompt always define?

Under the EU AI Act, what must you tell customers who chat with your bot?

Learning Resources

Want to go further? These are free and trusted.

Chatbase: no-code AI chatbot builder

https://www.chatbase.co/

EU AI Act, Article 50: transparency obligations

https://artificialintelligenceact.eu/article/50/

L4.1 Key Takeaways

Before the next lesson, hold on to these five points.

- Modern AI chatbots answer natural questions from the knowledge you give them
- Ground the bot in your own documents to keep answers accurate and on-brand
- A clear system prompt (role, scope, fallback) is what makes a bot reliable
- Always test for wrong answers and a clean hand-off to a human
- By law (EU AI Act, Art. 50) you must tell users they are talking to AI

Now Put It Into Practice

Head to the Re-AI learning platform to finish this lesson.

INTERACTIVE ACTIVITY

Build your chatbot's system prompt

On the platform · about 10 minutes

HANDS-ON EXERCISE EX 4.1

Build and test a live AI chatbot

1.5 hours · Tools: Chatbase.co (free tier), Google Docs or Word, ChatGPT (optional, for drafting)

LESSON QUIZ

5 multiple-choice questions

70% to pass · unlimited retakes

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LESSON 4.2 · 1.5 HOURS

AI for data analysis: finding insights without being a data scientist

IN THIS LESSON

- Why data analysis matters in any job
- Asking data questions in plain English
- Turning numbers into a clear story
- Doing it ethically and safely

L4.2 Learning Objectives

By the end of this lesson you will be able to:

- Use an AI data tool to explore and analyse a spreadsheet or CSV file
- Write specific questions about totals, trends, comparisons and outliers
- Choose a suitable chart and write a plain-language summary of findings
- Apply GDPR basics: anonymise personal data and check tool terms

THIS LESSON

L4.2

Duration: 1.5 hours

Practice: EX 4.2

Quiz: 5 questions, 70% to pass

Key Terms

The words you will meet in L4.2, in plain language.

Dataset

A collection of related data, usually arranged in rows and columns.

CSV

'Comma-separated values': a simple, universal file format for tables.

Insight

A clear, useful finding from data that helps someone make a decision.

Trend

A pattern of change over time, such as rising or falling sales.

Outlier

An unusual value that stands far apart from the rest. Often worth investigating.

Dashboard

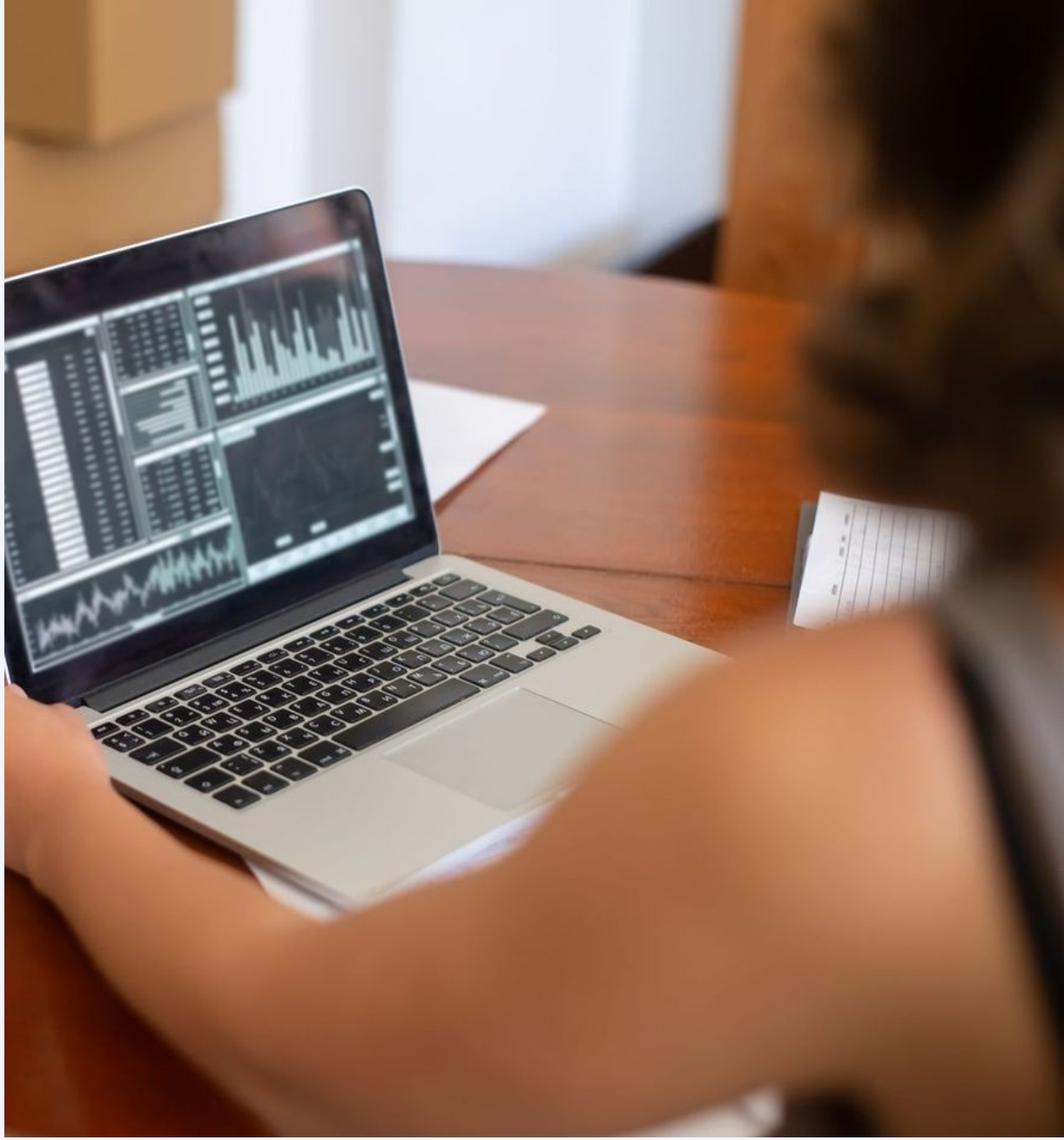
A visual summary of key numbers and charts, brought together in one view.

Every spreadsheet hides decisions

FROM NUMBERS TO DECISIONS

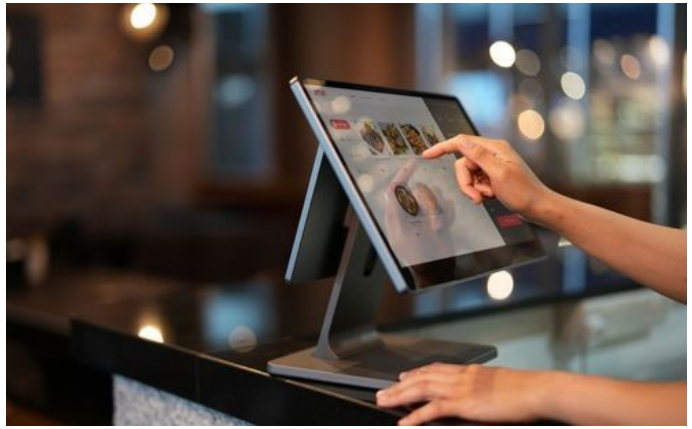
A sales spreadsheet is just numbers until someone asks 'which products should we stock more of?' Analysis answers that.

Reading data once needed coding or statistics training. AI tools have removed most of that barrier.



Where business data comes from

You don't need fancy data. Most organisations already sit on plenty, including operations data like stock and costs.



Sales and orders

What sold, when, to whom and for how much: the heart of most business analysis.

Website and social

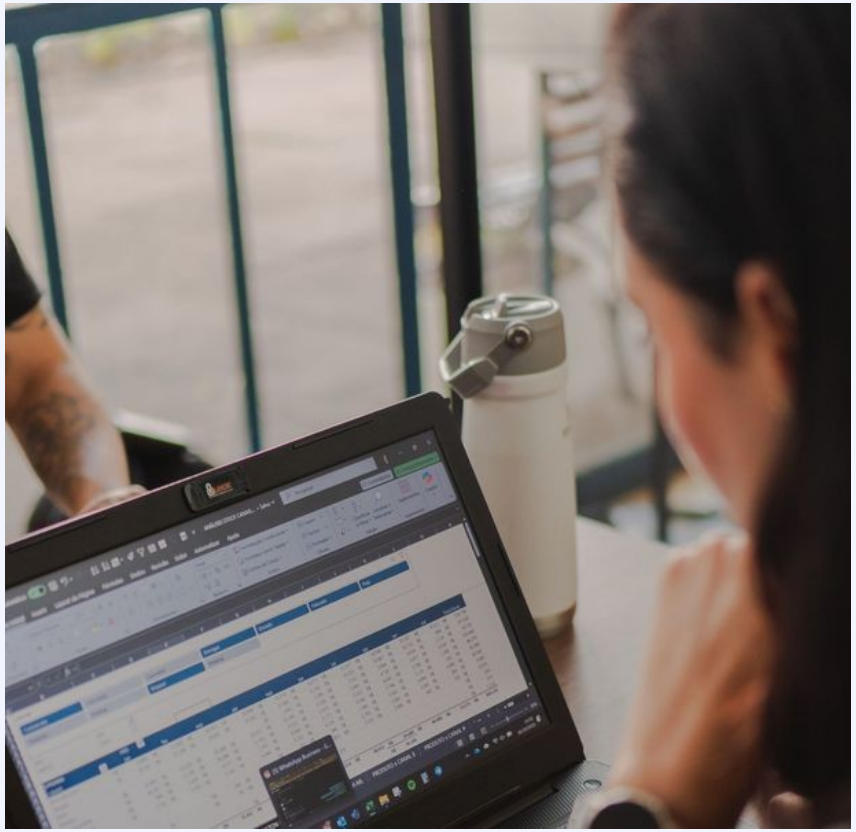
Visits, clicks and engagement that show what customers are interested in.

Surveys and feedback

Reviews, ratings and questionnaires: the 'why' behind the numbers.

How AI data tools work

Tools like Julius AI let you analyse data by chatting with it.



You upload a data file

A spreadsheet or CSV, for example a retail sales export, is loaded into the tool.

You ask in plain English

Type 'What were the top three products last quarter?' instead of writing any code.

It works and explains

The AI runs the analysis, draws charts and explains the result. You decide which questions to ask.

The AI does the calculation. Your job is the question and the judgement.

Analyse a dataset, step by step

From raw file to clear findings in five steps, with no spreadsheet formulas.

1

Upload the data

Drop in your CSV or spreadsheet. The tool reads the columns and rows.

2

Get to know it

Ask 'what's in this data?' to see the columns, time range and size.

3

Ask focused questions

One clear question at a time: totals, trends, comparisons or unusual values.

4

Create charts

Ask for a bar or line chart of the key result to make it easy to see.

5

Summarise the insights

Write a short plain-language summary of the top findings for a decision-maker.

Tool: Julius AI. This mirrors exactly what you'll do in EX 4.2.

The questions worth asking

Good questions

A

Totals and averages

'How much did we sell in total? What's the average order value?'

B

Trends over time

'How have sales changed month by month?'

C

Comparisons

'Which region or product performed best?'

D

Outliers

'Were there any unusual spikes or drops?' Surprises often hide the real story.

Prompts that get good answers

Like chatbots, data tools reward clear, specific questions.

Clear and specific

- 'Top 3 products by revenue in Q4'
- One question at a time, each easy to check
- 'Show me the numbers behind this chart'
- 'Give me a chart and a one-line takeaway'

Vague

- 'What sold well?'
- Five questions packed into one prompt
- Accepting a chart without checking it
- 'Analyse everything'

Name the exact column or period: vagueness gets vague results.

Choosing the right chart

The right chart makes a finding obvious. Match the chart to the question.

Chart	Best for	Example
Bar chart	Comparing categories	Sales by product, region or month
Line chart	Trends over time	How weekly sales rise or fall over a year
Pie chart	Parts of a whole, with only a few slices	Share of total sales by three shops
Table	When exact numbers matter more than the shape	Price list or top 10 orders

Tip: if a chart needs a long explanation, pick a simpler chart.

From numbers to a story

Insights only matter if people act on them. Wrap your numbers in a clear story.

1

Lead with the finding

Start with the point, for example 'Three products drove most of last quarter's sales'. Then show the chart.

2

Say why it matters

Connect it to a decision: 'so we should keep these in stock and feature them on the homepage'.

3

Keep it plain

Avoid jargon. A 150-word summary anyone understands beats a wall of statistics.

A decision-maker wants 'so what?' more than 'here's a chart'.

Insight vs vague observation

The same data can produce a useful insight or a useless one. Spot the difference.

A real insight

- 'Sales fell 20% in March, driven by one region'
- Names the number, the period and the cause
- Points to a clear next action

A vague observation

- 'Sales were a bit lower recently'
- No numbers, no timeframe, no cause
- Leaves the reader guessing

Aim for the left column: specific, useful and tied to a decision.

Analyse data ethically and safely

If data identifies real people, treat it as sensitive by default.

Anonymise personal data

Remove names, emails and IDs before analysis whenever you can. You rarely need them.

Respect the GDPR

Personal data must be handled lawfully, kept secure and used only for the purpose agreed.

No secrets in public tools

Never upload confidential or personal data to a tool whose terms you haven't checked.

Sanity-check the AI

AI can misread messy data. Always verify surprising results before you report them.

Reference: GDPR, Regulation (EU) 2016/679.

Check Your Understanding

Try answering these in your own words before moving on.

What does an AI data tool let you do without writing any code?

Give an example of a specific, well-phrased data question.

Which chart would you use to show a trend over twelve months, and why?

Name one thing you must do to handle personal data responsibly.

Learning Resources

Want to go further? These are free and trusted.

Julius AI: analyse data by chatting with it

https://julius.ai/

Looker Studio: free dashboards from Google

https://lookerstudio.google.com/

GDPR full text, Regulation (EU) 2016/679

https://eur-lex.europa.eu/eli/reg/2016/679/oj

L4.2 Key Takeaways

Before the next lesson, hold on to these five points.

- AI tools let you analyse data by asking questions in plain English, with no coding
- Good analysis comes from specific questions about totals, trends and comparisons
- Match the chart to the question, and always sanity-check surprising results
- Turn numbers into a story: lead with the finding and say why it matters
- Handle personal data lawfully: anonymise, respect the GDPR, protect secrets

Now Put It Into Practice

Head to the Re-AI learning platform to finish this lesson.

INTERACTIVE ACTIVITY

Insight or vague observation?

On the platform · about 10 minutes

HANDS-ON EXERCISE EX 4.2

Analyse a dataset and write up your findings

1.5 hours · Tools: Julius AI (free tier), Retail sales CSV (provided by your tutor), Google Docs or Word

LESSON QUIZ

5 multiple-choice questions

70% to pass · unlimited retakes

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LESSON 4.3 · 1.5 HOURS

Building an AI-powered business or freelance service

IN THIS LESSON

- The solo opportunity AI creates
- Choosing a service you can offer
- Pricing and a 6-month income plan
- Pitching your offer

L4.3 Learning Objectives

By the end of this lesson you will be able to:

- Identify an AI-powered service that fits your skills and real local demand
- Map a business idea on a one-page AI Business Model Canvas
- Choose a pricing model and build a simple 6-month income projection
- Plan a 5-slide pitch deck that ends with a clear next step

THIS LESSON

L4.3

Duration: 1.5 hours

Practice: EX 4.3

Quiz: 5 questions, 70% to pass

Key Terms

The words you will meet in L4.3, in plain language.

Business Model Canvas

A one-page template that maps value, customers, channels, revenue and costs.

Value proposition

The clear benefit you offer: the reason a customer chooses you.

Niche

A specific type of customer or need you focus on, making you easier to find and trust.

Revenue stream

A way your service earns money: hourly, per project or subscription.

Income projection

A month-by-month estimate of likely income and costs over a period.

Pitch deck

A short set of slides that persuades a client to buy your service.

One person, more output

THE OPPORTUNITY

AI is your invisible team. It drafts, designs, translates and analyses, so one skilled person can take on work that once needed several.

You don't need to quit your job: many people start with a side service.

Services you could offer

Freelance services you can start with skills you build quickly. Data clean-up and translation work too.

Content and copywriting

Blog posts, product descriptions and social captions, drafted with AI and polished by you.

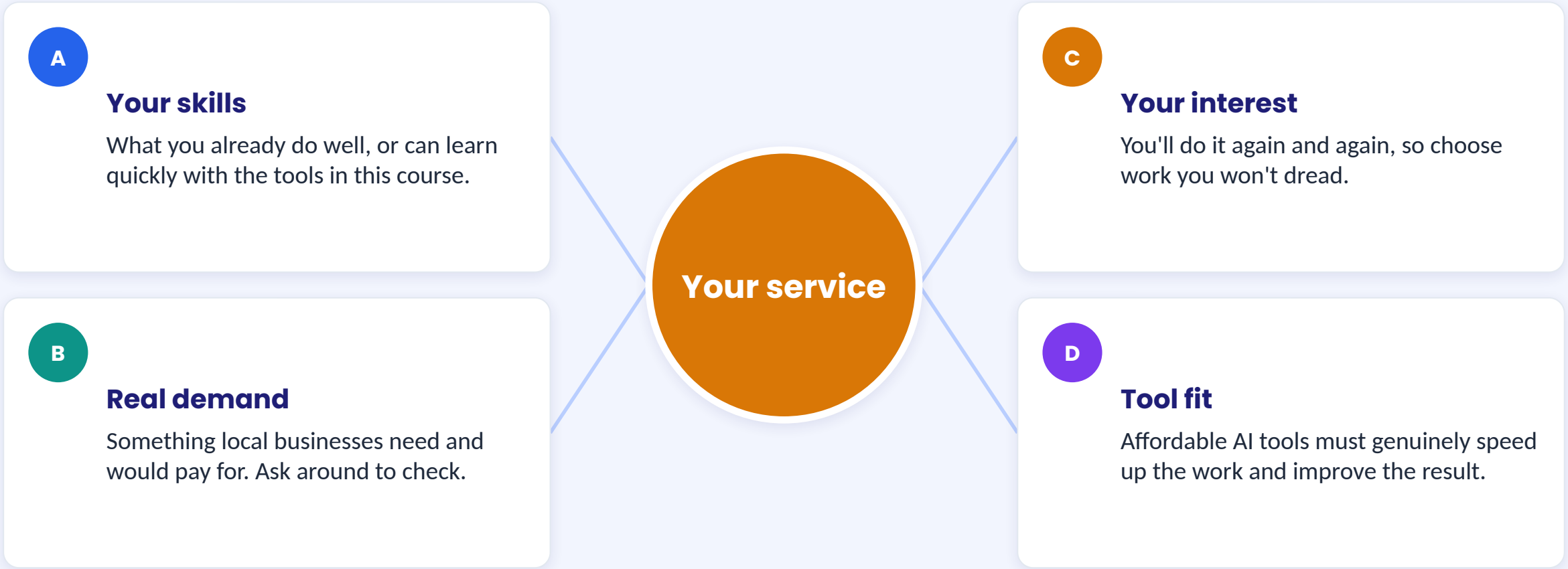
Social media management

Planning, drafting and scheduling posts for small businesses that lack the time.

Chatbots and automation

Setting up customer-service bots and simple automations for local businesses.

Pick the right service for you



Your AI Business Model Canvas

A one-page plan that answers 'who, what, how and how much'. Keep it a living draft, not a contract.

Block	Question to answer	Example: social posts for cafés
Value	What problem do you solve, and why is your AI-powered offer better, faster or cheaper?	Cafés get 12 good posts a month without spending their own evenings on it
Customers	Who exactly is this for? The clearer the niche, the easier to find them.	Independent cafés in my town with an Instagram page
Channels	How will people find and buy from you?	Visiting cafés in person, referrals, a simple Instagram profile
Revenue	What do you charge, and how?	Monthly subscription per café
Costs	What do you spend: tools and time?	AI and design tool subscriptions, about 6 hours per client a month

If you can answer these five clearly, you have a plan to test. You fill this in for EX 4.3.

From idea to offer

Turn your chosen service into something a client can say yes to.

1 2 3 4

Choose

Pick one clear service for one clear type of customer.

Define value

Write the benefit in one line the customer instantly understands.

Set a price

Decide what to charge and how: per hour, per project or monthly.

Package and pitch

Bundle it into a simple offer and a short pitch deck you can send.

'Social posts for cafés, €150/month' sells far better than 'I do marketing'.

Pricing your service

Pricing scares beginners, but three common models make it manageable. Many freelancers mix them.

Hourly

Simple to explain, but it caps your income, and AI makes you faster.

Per project

A fixed price for a result. Rewards your speed and is clear for the client.

Subscription

A monthly fee for an ongoing service. Gives the steadiest income.

Price the value you deliver, not just the hours you spend with AI's help.

Build a 6-month income projection

A simple month-by-month estimate shows whether your idea can actually pay.

1

State your assumptions

Write your price per client and how many hours each client takes.

2

Estimate clients

Start modest, perhaps one or two clients, and assume gentle growth as word spreads.

3

Multiply out income

Clients times price gives monthly income. Add up the six months for the total.

4

Subtract your costs

Take off tool subscriptions and other expenses to see your realistic take-home.

A projection is an educated guess: roughly right beats precisely blind.

Tools to run your micro-business

A handful of affordable tools cover almost everything a one-person service needs.

Notion AI

Plan projects, draft content and organise clients in one tidy workspace.

Gamma

Turn a few bullet points into a polished pitch deck or proposal in minutes.

Scheduling and invoicing

Free tools to book calls and send simple, professional invoices.

Your AI assistant

ChatGPT or similar for drafting, brainstorming and speeding up delivery.

Keep your toolkit small: a few tools used well beat many half-learned.

Finding your first clients

You don't need a marketing budget. Four simple moves bring in early work.

1

Build a small portfolio

Create two or three sample pieces so prospects can see your quality before your first paid job.

2

Pick a clear niche

'AI content for fitness coaches' is easier to market than 'writing for anyone'.

3

Use your network

Tell friends, family and local businesses what you offer. Referrals are the fastest start.

4

Show proof

Collect a short testimonial after each job. Social proof wins the next client.

Your first client is often someone you already know: just tell people what you do.

Pitching: the 5-slide deck

A short, sharp pitch deck wins work. Five slides are all you need, and you'll build one in EX 4.3.

Slide	What it shows
1. Problem	The customer's problem, in their words
2. Solution	How your AI-powered service solves it
3. Offer	Your concrete offer and price
4. Proof	A sample, a result or a testimonial
5. Next step	Exactly how to start working with you: one clear, easy action

Gamma turns your bullet points into a clean deck in minutes, so you focus on the message.

Check Your Understanding

Try answering these in your own words before moving on.

Name one AI-powered service you could realistically offer, and to whom.

What four things should line up when choosing your service?

Which pricing model gives the steadiest monthly income, and why?

What are the five slides in a simple pitch deck?

Learning Resources

Want to go further? These are free and trusted.

Gamma: AI pitch decks and presentations

https://gamma.app/

Notion AI

https://www.notion.com/product/ai

World Economic Forum: Future of Jobs Report 2025

https://www.weforum.org/publications/the-future-of-jobs-report-2025/

L4.3 Key Takeaways

Before the next lesson, hold on to these five points.

- AI lets one person deliver services that once needed a whole team, at low cost
- Choose a service where your skills, real demand, interest and tools line up
- Map your idea on a one-page canvas: value, customers, channels, revenue, costs
- Price for the value you deliver, and test it with a 6-month projection
- Win work with a clear niche, a small portfolio and a sharp 5-slide pitch

Now Put It Into Practice

Head to the Re-AI learning platform to finish this lesson.

INTERACTIVE ACTIVITY

Match the canvas block

On the platform · about 10 minutes

HANDS-ON EXERCISE EX 4.3

Design an AI business model

1.5 hours · Tools: Notion AI, Gamma.app, Google Sheets (optional)

LESSON QUIZ

5 multiple-choice questions

70% to pass · unlimited retakes

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LESSON 4.4 · 1.5 HOURS

AI ethics, bias, and your legal responsibilities under EU law

IN THIS LESSON

- Why ethics protects you and others
- How bias creeps into AI
- The EU AI Act risk tiers and your duties
- Running an ethics audit

L4.4 Learning Objectives

By the end of this lesson you will be able to:

- Explain where AI bias comes from and name four types of bias
- Place an AI tool in the correct EU AI Act risk tier
- Apply transparency, GDPR and human-oversight duties to your own AI work
- Run a five-step ethics audit using a 20-point checklist

THIS LESSON

L4.4

Duration: 1.5 hours

Practice: EX 4.4

Quiz: 5 questions, 70% to pass

Key Terms

The words you will meet in L4.4, in plain language.

Bias

When an AI treats some groups unfairly, usually because of skewed training data.

EU AI Act

The EU law (Regulation (EU) 2024/1689) that regulates AI by level of risk.

Risk tier

The AI Act's classification: unacceptable, high, limited or minimal risk.

Transparency

Being open that AI is involved, and labelling AI-generated content.

GDPR

The EU law protecting personal data: lawful use, data minimisation and people's rights.

Human oversight

Keeping a person responsible who can review and override AI decisions.

Why ethics matters to you

TRUST IS YOUR ASSET

Using AI responsibly protects your customers, your reputation and you: legally and commercially, not just morally.

Fair, transparent, privacy-respecting AI keeps customers. Source: OECD AI Principles (2024).

What is bias in AI?

Bias means an AI treats some groups unfairly. It usually comes from the data, not from bad intentions.

AI learns from the past, so it can repeat the past's unfairness.

It starts in the data

AI learns from human-made examples. If they reflect past unfairness, the AI can learn and repeat it.

A simple example

A hiring AI trained mostly on one group's CVs may quietly score similar candidates higher, disadvantaging others.

Why it's dangerous

AI is fast and confident, so biased decisions can be made at scale before anyone notices.

Types of bias to watch for

Bias wears several disguises. Recognising them is the first step to catching them.

Data bias

The training data over- or under-represents certain groups, skewing results against them.

Sampling bias

The data was collected in a way that misses part of the real population.

Historical bias

The data reflects past inequalities, which the AI then treats as 'normal'.

Automation bias

People trust the machine too much and stop questioning it. A human failing, not the AI's.

Ask 'who might this treat unfairly?' for every AI output you rely on.

The EU AI Act: four risk tiers

The EU AI Act sorts AI by risk: the higher the risk, the stricter the rules. Place your project before you build.

Risk tier	What it means	Examples
Unacceptable	Banned outright	Government social scoring of citizens; manipulative AI that exploits vulnerable people
High	Strict duties: risk checks, human oversight, records	AI used in hiring, credit scoring, education grading or essential public services
Limited (transparency)	You must tell users it's AI	Customer-service chatbots; AI-generated content
Minimal	No special rules	Spam filters, AI in games, smart suggestions: most everyday AI

Source: EU AI Act, Regulation (EU) 2024/1689.

Where do your projects sit?

Most tools you build in this course, such as a customer-service chatbot, are limited risk. Your main legal duty is transparency, plus the GDPR whenever personal data is involved.

- Clearly say an AI is responding
- Label AI-generated content where the law requires it
- Check outputs for bias and protect personal data under the GDPR
- If your AI helps decide on jobs, credit or grades, it is high risk

Transparency: AI Act Article 50

The duty you'll meet most often. In plain terms: be honest that AI is involved. It applies from 2 August 2026.

Say it's AI

Chatbots and AI assistants must make clear that users are talking to a machine, unless it is obvious.

Label AI-made content

Deepfakes, and AI text published to inform the public, must be disclosed as AI-made. AI tools must mark their output.

Why it matters

Transparency lets people judge AI output for themselves. It is the foundation of trustworthy AI.

Source: EU AI Act, Art. 50 (transparency); applies from 2 August 2026.

Your responsibilities in plain terms

A

Be transparent

Tell people clearly when they deal with AI or AI-generated content.

B

Check for bias

Test that your AI treats different groups fairly, not just on average.

C

Protect data

Collect only what you need and store personal data securely (GDPR).

D

Keep a human in the loop

A person reviews and can override important AI decisions before they take effect.

GDPR basics for AI builders

If your AI touches personal data, the GDPR applies. Collect the least you can: what you don't hold can't leak.

Have a lawful reason

You need a valid basis to use someone's data, usually clear consent or a genuine business need.

Collect only what you need

'Data minimisation' means gathering the minimum required, not everything you could.

Respect people's rights

People can ask what data you hold, correct it, or have it deleted. Be ready to honour that.

Decisions by machine

If AI alone decides something important, like a loan, people can ask for a human to review it (GDPR Art. 22).

Reference: GDPR, Regulation (EU) 2016/679.

Run an AI ethics audit

An ethics audit is a simple, repeatable check. Five steps make it manageable.

1

Set the scope

Pick one AI tool, such as your chatbot, and define what it does and who it affects.

2

Check the data

Ask what data it uses and whether any group is missing or misrepresented.

3

Test for bias

Try inputs from different groups and look for unfair differences in the output.

4

Check transparency

Confirm it discloses that it's AI and protects personal data properly.

5

Log gaps and fix

Write down what's wrong, plan changes, and re-check after fixing.

In EX 4.4 you apply a 20-point checklist to your EX 4.1 chatbot.

Responsible vs irresponsible AI use

The line between the two is mostly honesty, fairness and care.

Responsible use

- Tells people clearly when AI is involved
- Tests outputs for bias and fixes them
- Collects and protects data carefully
- Keeps a human accountable for decisions

Irresponsible use

- Hides that AI made the decision
- Ignores who might be treated unfairly
- Hoards personal data carelessly
- Lets the machine decide with no oversight

Aim for the left column in everything you build.

Check Your Understanding

Try answering these in your own words before moving on.

In your own words, where does bias in AI usually come from?

What are the four risk tiers of the EU AI Act, from highest to lowest?

What must you disclose under Article 50, and from when?

Name the five steps of a simple AI ethics audit.

Learning Resources

Want to go further? These are free and trusted.

European Commission: AI Act regulatory framework

https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai

EU AI Act explorer (full text by article)

https://artificialintelligenceact.eu/

OECD AI Principles

https://oecd.ai/en/ai-principles

L4.4 Key Takeaways

Before the next lesson, hold on to these five points.

- Ethics protects people and you: trust, fairness and the law all depend on it
- Bias usually comes from the training data, so test outputs across groups
- The EU AI Act ranks AI by risk; most tools you build are limited risk
- From 2 Aug 2026 you must disclose AI and label AI-made content (Art. 50)
- Four duties: be transparent, check bias, protect data, keep a human in the loop

Now Put It Into Practice

Head to the Re-AI learning platform to finish this lesson.

INTERACTIVE ACTIVITY

Which risk tier, which duty?

On the platform · about 10 minutes

HANDS-ON EXERCISE EX 4.4

Run an AI ethics audit

1 hour · Tools: 20-point AI Ethics Checklist (in this worksheet), Your EX 4.1 chatbot, Google Docs or Word

LESSON QUIZ

5 multiple-choice questions

70% to pass · unlimited retakes

CAPSTONE PROJECT · 3 HOURS

Show everything you can do with AI

The capstone is a 3-hour project at the end of the programme. Choose ONE pathway and produce a working AI-powered output you can show to an employer or client. Every pathway also needs a 400-word written reflection. The capstone counts for 35% of your programme result (pass mark 60%); the reflection counts for 10% and is pass / fail.

Choose Your Pathway

Pick one pathway. All three need a 400-word written reflection.

A AI Customer Service Chatbot

DELIVER

- A working chatbot for a real or fictional business, built with Chatbase.co
- 5 screenshots showing the set-up and test conversations
- Your final system prompt
- A 400-word reflection

Tools: Chatbase, Notion AI

B AI Data Analysis Report

DELIVER

- An analysis of the provided retail sales dataset using Julius AI
- A 500-word business report (PDF)
- A live 3-chart dashboard (link)
- A 400-word reflection

Tools: Julius AI, Power BI or Looker Studio

C AI-Powered Business Plan

DELIVER

- A complete AI-augmented freelance or micro-business design
- A Notion AI business model canvas
- A Gamma.app 5-slide pitch deck
- A 5-minute Loom presentation
- A 400-word reflection

Tools: Notion AI, Gamma.app, Loom

How the Capstone Is Assessed

Capstone 35% · Reflection 10% · Exercises 55% of the programme grade. Pass mark 60%.

1. Complete: every deliverable of the chosen pathway is submitted
2. Working and accurate: the output works and AI results were checked by the learner
3. Professional: clear, plain-language output you could show to an employer or client
4. Responsible: AI use is disclosed, personal data is protected and bias is considered
5. Reflection: 400 words showing awareness of what was learned and how AI was used (pass / fail)

YOUR REFLECTION

Write 400 words on what you built and what you learned. Explain how you used AI, where you checked or corrected it, how you met your ethical and legal duties (AI disclosure, bias, personal data), and what you would improve next time.

Module Summary

What you can now do after Module 4

- Ground a chatbot in your own documents and give it a clear system prompt
- Ask data tools clear questions, pick the right chart and tell the story
- Turn one AI-powered skill into a priced offer with a canvas and a pitch
- Test AI for bias, protect personal data and keep a human in the loop
- Tell people when they deal with AI: Art. 50 of the EU AI Act, from 2 Aug 2026

WHAT'S NEXT

This is the final module. Next: submit your capstone project, pass the final quiz and add your work to your portfolio to earn your Re-AI certificate.

Complete the final module quiz (70% to pass) to earn your Module 4 certificate and badge.

Re.ai Connecting Low-Skilled Adults to Remote Opportunities

End of Module 4

Thank you for learning with Re-AI

Continue on the Re-AI learning platform: re-ai.elnlab.eu

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