



Mastering AI Models with Practical Productivity

Prepared by : Mohamed Helfaya



Table of Contents



Module 1: Introduction to AI & Machine Learning (ML)

Module 2: Understanding Large Language Models (LLMs)

Module 3: The Fundamentals of Successful Prompt Engineering

Module 4: Leveraging AI in Daily Transactions & Productivity

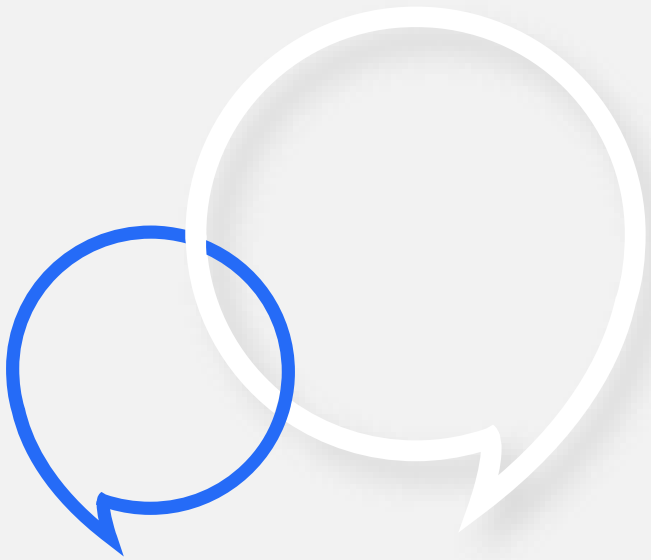
Module 5: Ethical Considerations, Limitations, and the Future

What Next

Module 1: Introduction to AI & Machine Learning (ML)

What is Artificial Intelligence (AI)?

- AI is a field of computer science focused on creating machines that can perform tasks typically requiring human intelligence, such as learning, problem-solving, perception, and decision-making. It aims to build intelligent agents that can reason and act to achieve goals.



What is Machine Learning (ML) and how does it relate to AI?

- ML is a subset of AI that enables systems to learn and improve from experience without being explicitly programmed. It uses algorithms to identify patterns in data and make predictions or decisions.
- *Example:* Spam filters learning which emails are junk, recommendation engines suggesting products or movies based on past behavior.



Types of AI:

Narrow AI (Weak AI)

Designed to perform a specific task or set of tasks, Most AI systems today fall into this category

General AI (Strong AI)

Possesses the ability to understand, learn, and apply knowledge across a wide range of tasks, like human cognitive abilities



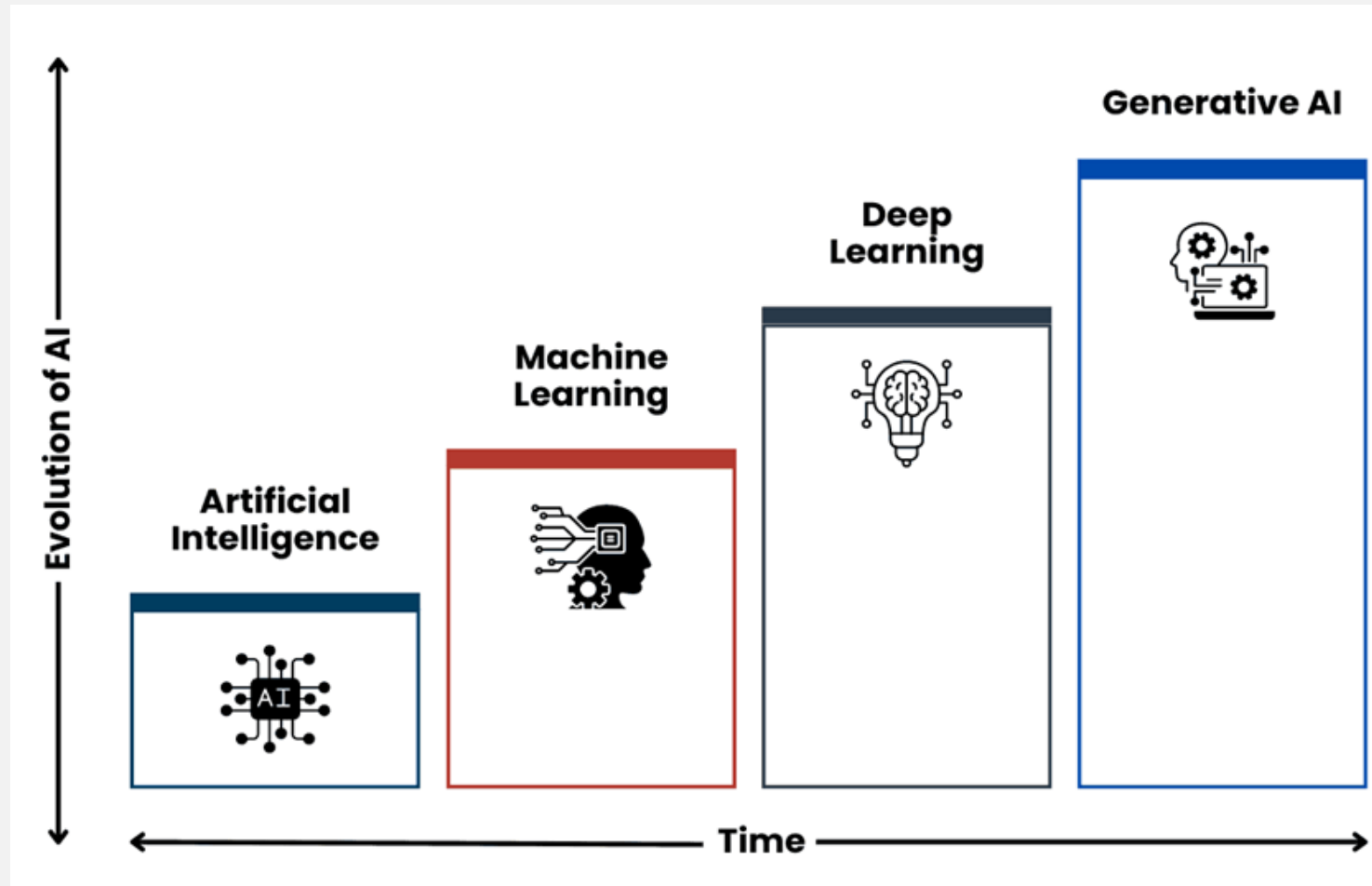
Traditional AI

Was effective for specific tasks but lacked adaptability.

Generative AI

Is a newer form of AI that can generate new content from text to images based on patterns they've learned from massive amounts of data

Generative AI: takes AI a step further by creating new content, unlocking endless possibilities in industries like design, entertainment, and customer service



A decorative graphic on the left side of the slide. It features a black background with several blue squares of varying sizes. A white rectangular box is positioned in the center-left, containing the text 'LLMs' in a bold, black, sans-serif font.

LLMs

Module 2:

Understanding Large
Language Models (LLMs)

What are Large Language Models (LLMs) and how do they work (simplified)?

LLMs are a type of AI model trained on vast amounts of text data to understand, generate, and process human language. They work by learning patterns, grammar, facts, and reasoning abilities from this data, allowing them to predict and produce coherent text.

Why it Matters: LLMs are the specific AI technology underpinning tools like ChatGPT, Gemini, and Copilot, which are the focus of this practical course.

“AI Chatbots

ChatGPT

A popular conversational AI model developed by OpenAI, known for its broad knowledge base and ability to engage in diverse conversations and generate various text formats



Gemini

Google's family of multimodal AI models, designed to understand and operate across different types of information including text, images, audio, video, and code.



Copilot

Developed by Microsoft and GitHub, often integrated into applications to provide real-time assistance, such as code completion (GitHub Copilot) or drafting content within productivity suites (Microsoft 365 Copilot).

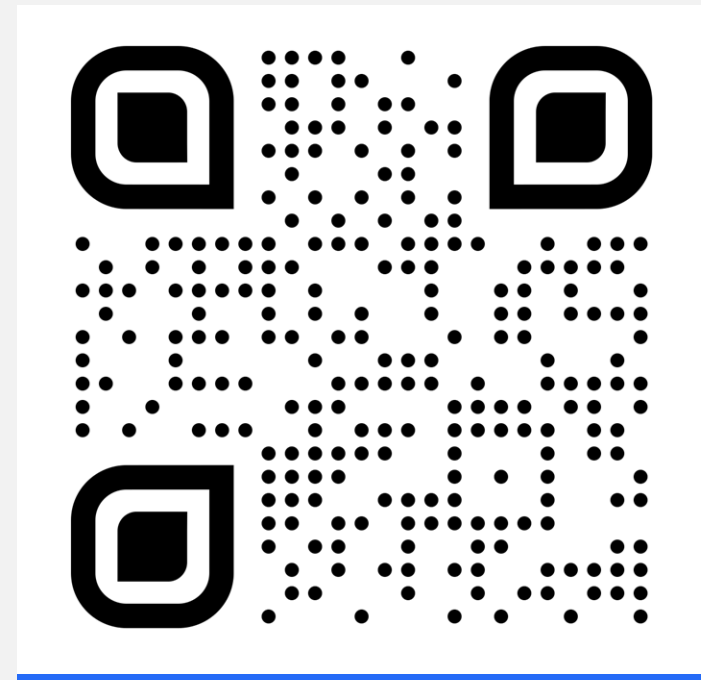


Let's **Register**



Gemini

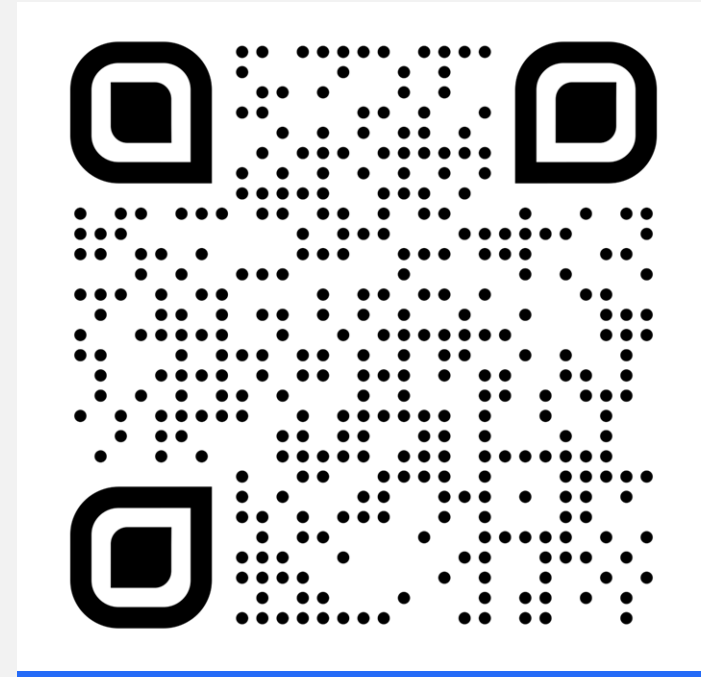
Let's Visit





Copilot

Let's Visit





Module 3:

The Fundamentals of Successful Prompt Engineering

What are Prompts?

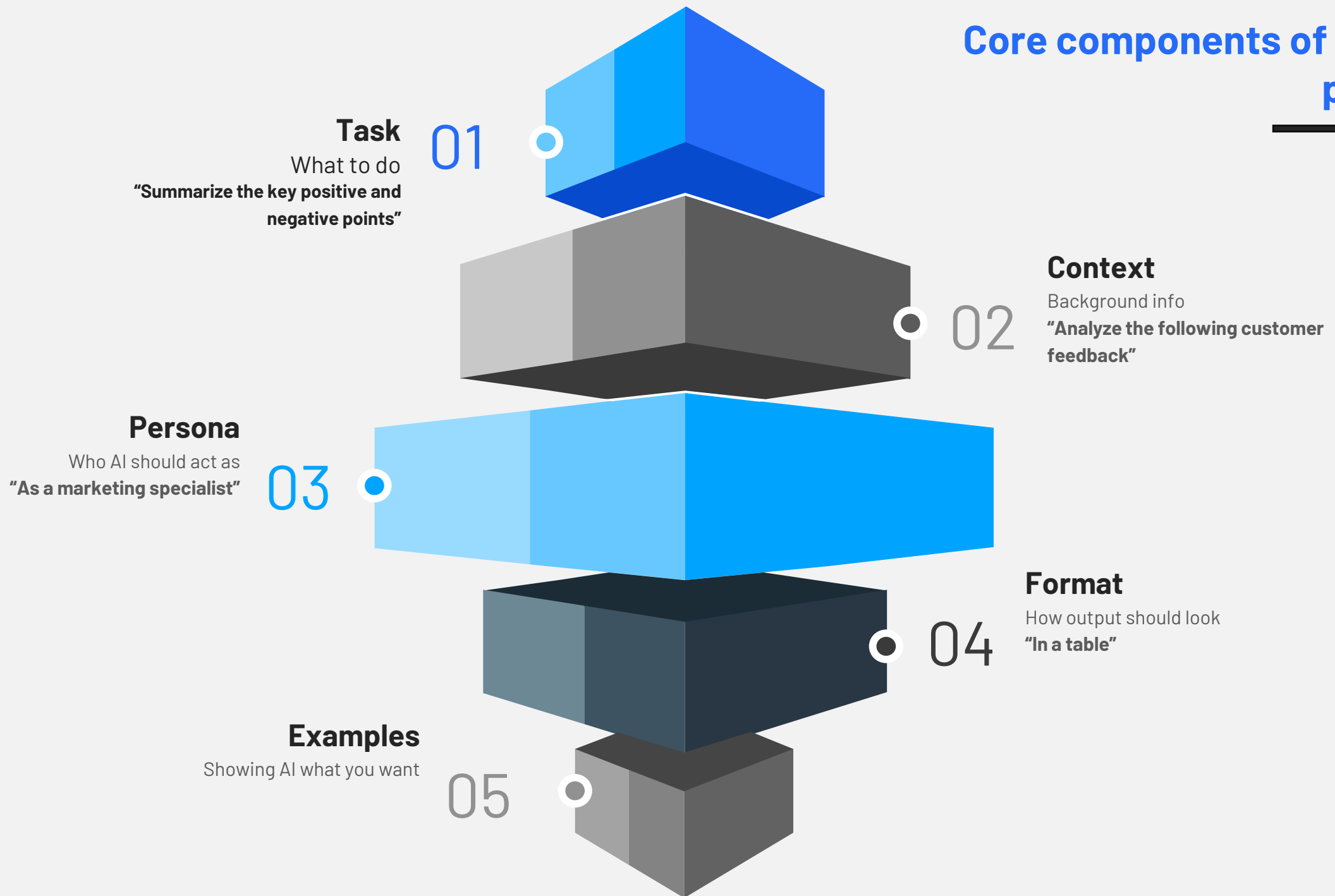
A prompt is simply the text input you provide to a language model to initiate a response. It's your way of communicating what you want the AI to do, ask, or generate.

Why prompts matter: Garbage in, garbage out.

Large Language Models are powerful tools, but they rely entirely on the input you give them to understand your request. A vague or poorly constructed prompt will lead to an incorrect response, much like giving unclear instructions to a human.

Example: Asking "Tell me about AI" is vague vs. "Explain the concept of 'reinforcement learning' in AI using a simple analogy for someone new to the topic."

Core components of a good prompt



“Example for prompt



Report ZSO_V2

Planning, Sales, Production and Warehouse Orders status – This report have a very valuable data about sales orders and its status.



- ✓ I have extract it from SAP
- ✓ Upload it to ChatGPT
- ✓ Start prompting
- ✓ Go a dashboard and I can ask GPT for any details for the attached sheet.

🧩 Task:

Clearly describe the main action you want e.g., “Generate an HTML dashboard from the uploaded Excel sheet showing sales performance by customer, order status, and delays.”

📘 Context:

[Provide background info such as where the data is from (e.g., SAP), what each field means, and how the data is structured. Mention if rows represent line items, and if sales documents have multiple lines, etc.]

👤 Persona:

Describe who the AI should act as to tailor tone and insights. E.g., “Act as a senior business analyst or sales director preparing a report for upper management.

📦 Format:

Specify the output format and components required. For dashboards, include layout and chart types, such as:

- Donut chart: Delayed vs. Not Delayed Orders
- Bar chart: Order Status by Creation Date
- Filterable Table: ShowRoom or Customer
- Responsive HTML format with UTF-8 encoding
- DataTables.js for interactivity]

📌 Examples:

Give data-specific instructions or samples, such as:

- Use 'SLA Operation Status' to determine delays (value = 'Delayed')
- Use 'ShowRoom' for showroom name, 'Customer DES' for name, and 'Customer' number if Arabic causes rendering issues in charts
- Group total values from 'Total SO' column
- One sales order might have multiple line items (Sales Document + Item)

Report ZS0_V2

Sales Orders SLA Dashboard

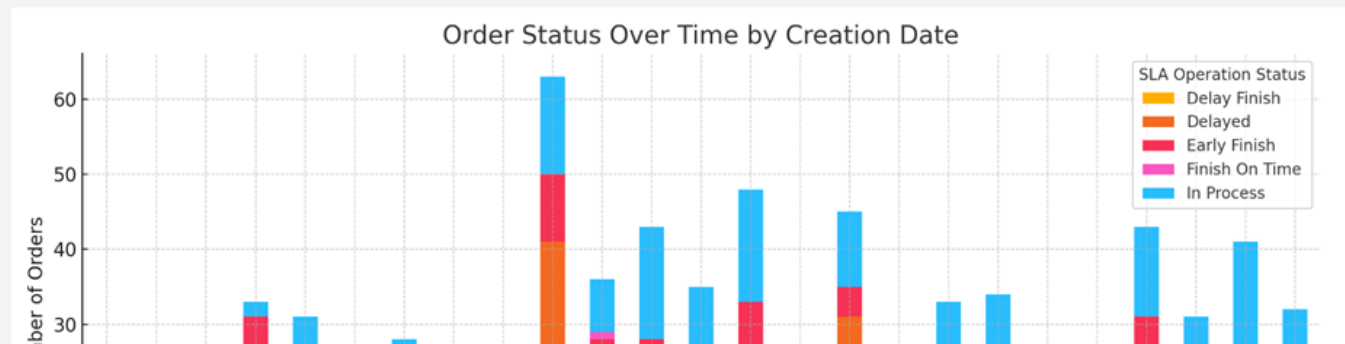
Total Sales Orders
601

Total Sales Amount
58,762,731.64

Delayed Orders
328

Delayed Amount
5,707,271.56

Orders Status by Creation Date



Delayed Orders Detail

Filter by Showroom: العمارة المشرقية

Show 10 entries

Search:

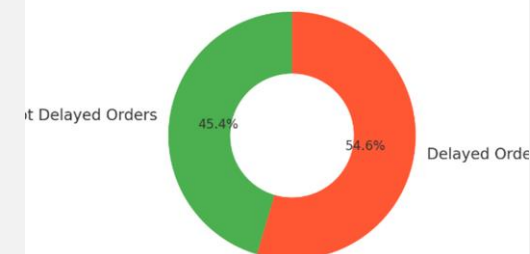
Sales Document	Item	Customer	Customer Name	Total SO	SLA Finish Date	SLA Status	Sales Reason	Creation Date	ShowRoom
21932	10	500003968 0	محمد حسين	504.39	2025-04-11 00:00:00	Delayed	Standard Order	2025-04-03 00:00:00	المصنف بالدارسين
21934	10	500000130 0	شركة عراست	20,973.60	2025-04-11 00:00:00	Delayed	Standard Order	2025-04-03 00:00:00	المصنف بالدارسين
21938	10	500004140 0	محمد عبد الغفار	151.32	2025-04-10 00:00:00	Delayed	Standard Order	2025-04-03 00:00:00	المصنف بالدارسين
21939	10	5000003034 0	كامل بوهيت حسين	21,363.98	2025-04-11 00:00:00	Delayed	Standard Order	2025-04-03 00:00:00	المصنف بالدارسين
21939	20	5000003034 0	كامل بوهيت حسين	0.00	2025-04-11 00:00:00	Delayed	Standard Order	2025-04-03 00:00:00	المصنف بالدارسين
21940	10	5000003034 0	كامل بوهيت حسين	21,579.25	2025-04-11 00:00:00	Delayed	Standard Order	2025-04-03 00:00:00	المصنف بالدارسين
21941	10	5000003034 0	كامل بوهيت حسين	13,917.50	2025-04-11 00:00:00	Delayed	Standard Order	2025-04-03 00:00:00	المصنف بالدارسين
21941	20	5000003034 0	كامل بوهيت حسين	0.00	2025-04-11 00:00:00	Delayed	Standard Order	2025-04-03 00:00:00	المصنف بالدارسين
21949	10	500000672 0	ذافر للخدمات العامة و التجاري	5,388.60	2025-04-14 00:00:00	Delayed	Standard Order	2025-04-06 00:00:00	المصنف بالدارسين
21949	20	500000672 0	ذافر للخدمات العامة و التجاري	0.00	2025-04-14 00:00:00	Delayed	Standard Order	2025-04-06 00:00:00	المصنف بالدارسين

Showing 1 to 10 of 228 entries (filtered from 581 total entries)


Previous **1** 2 3 4 5 ... 23 Next



Delayed vs Not Delayed Orders



“Ask AI

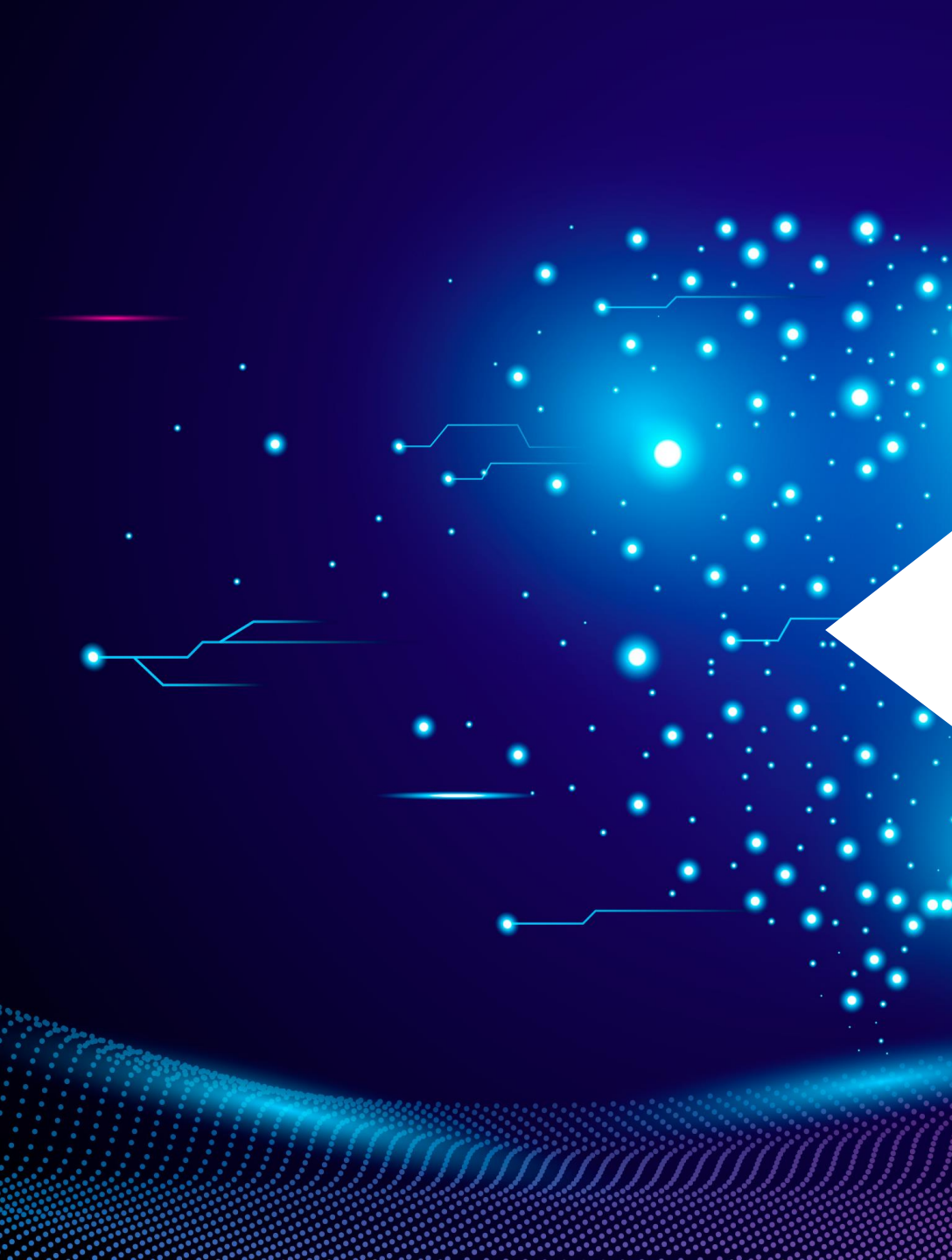
 The most expensive sales order is:

- Sales Order Number: 7001004
- Customer Name: سكاس للتشييد والبناء والتشطيبا
- Total Value: 5,089,400.80
- Current SLA Status: In Process

ما هو اكثر امر متاخر حتي الان طبقاً لتاريخ الانشاء

✦ أكثر أمر مبيعات متأخر حتى الآن بناءً على أقدم تاريخ إنشاء هو:

- رقم الأمر: 21931
- اسم العميل: معرض اوريا
- تاريخ الإنشاء: 02-04-2025
- تاريخ انتهاء الـ SLA: 2025-05-04
- قيمة الأمر: 0.00



Module 4:

Leveraging AI in Daily Transactions & Productivity

Using LLMs for communication: (drafting emails, summarizing conversations, translating)

Explanation: Utilizing AI to assist with writing professional correspondence, quickly understanding the gist of long messages, or overcoming language barriers.

Why it Matters: Saves significant time and effort in daily communication, improving clarity and efficiency.

Prompt: "Draft a professional email to a client following up on our meeting yesterday, summarizing the 3 action items we agreed upon."

Using LLMs for planning and organization (scheduling help, brainstorming itineraries, creating to-do lists).

Explanation: Using AI as a personal assistant for structuring tasks, planning events, or breaking down projects into manageable steps.

Why it Matters: Helps manage time effectively, reduces mental load, and improves productivity in planning personal and professional activities.

Prompt: "Create a packing checklist for a 3-day business trip to a cold climate."

Using LLMs for learning and information retrieval (explaining complex topics, getting quick facts, drafting study notes)

Explanation: Using AI to simplify difficult concepts, quickly access information (with verification), or generate learning materials.

Why it Matters: Provides a powerful tool for continuous learning and quick access to understanding a wide range of subjects.

Prompt: "Explain blockchain technology in simple terms."

Using LLMs for creative tasks (writing outlines, drafting social media posts, brainstorming ideas)

Explanation: Using AI to overcome creative blocks, generate initial drafts, or explore different angles for content creation.

Why it Matters: Boosts creativity and speeds up the initial stages of content generation for various purposes.

Prompt: : "Brainstorm 15 catchy headlines for a blog post series about remote work productivity."

Module 5: Ethical Considerations, Limitations, and the Future

Importance of fact-checking AI output

Explanation: Explaining that LLMs can sometimes generate completely false or nonsensical information

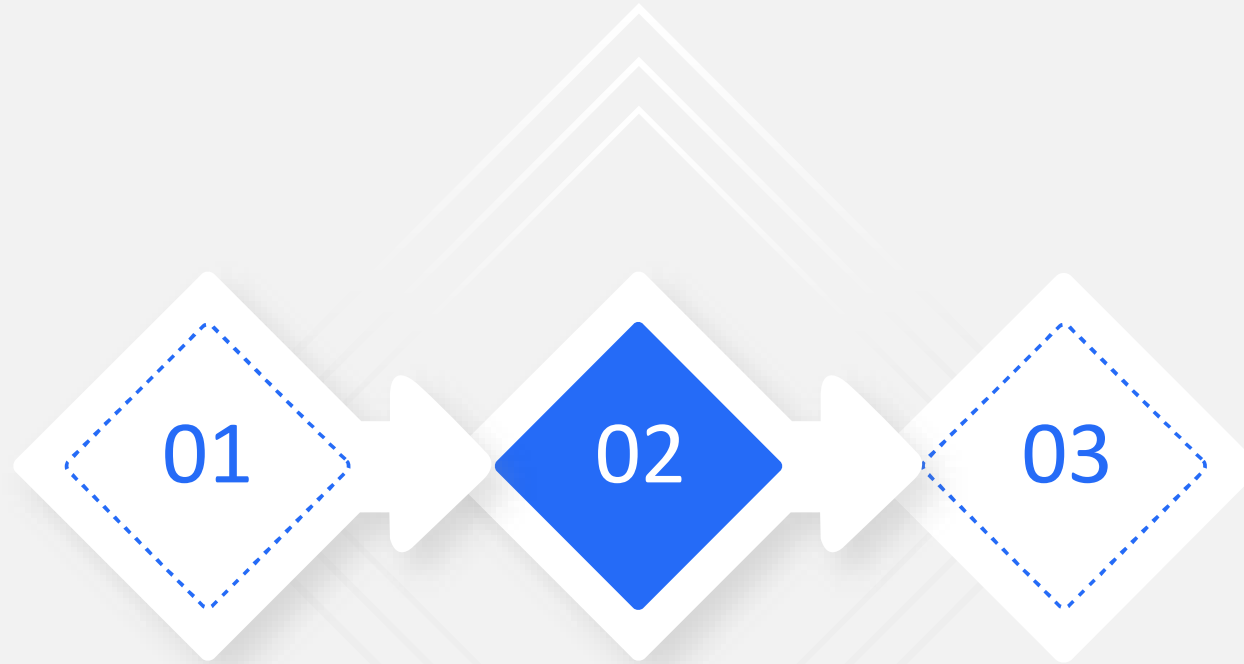
Example: AI making up fake statistics, inventing non-existent historical events, or citing sources that don't exist.

Data privacy, security, and responsible data handling with LLMs

Explanation: Reinforcing the risks of sharing sensitive information with public AI models and discussing general principles of secure and responsible data interaction.

- 🛑 Don't uploading sensitive, confidential, or personally identifiable data from your spreadsheets directly into public LLM chat

“What Next



Productivity using AI tools and models

Using AI for Data Analysis Assistance

AI for MS Office Professionals

The image features a central white circle containing the text 'HAVE ANY QUESTIONS?'. This circle is surrounded by three concentric dashed circles in blue, grey, and light grey. Six text labels are arranged around these circles: 'Why Us?' (top-left), 'Refund' (top-right), 'Start The Project' (right), 'Deposit' (bottom-right), 'What is The Timeline?' (bottom-left), and 'How To Order?' (left).

**HAVE ANY
QUESTIONS?**

Why Us?

Refund

Start The Project

Deposit

What is The Timeline?

How To Order?

Resources & Material



Thank You