Session 1 Handout: What AI Is and How It Learns

FAST-15 AI Foundations for Every Employee · 7formations · Instructor: Wadood Chaudhary · All examples fictional · Suggested reading: Svekis, AI Literacy for All Employees (2026), chapters 1 and 2

Why this session matters

AI is no longer a special project. In a Pew Research Center survey from February 2026, 38% of employed U.S. adults said they use AI chatbots for tasks at work, and about half of all adults use chatbots at all. Most people also meet AI without a chat window: in email, phones, and the software their employer already runs. You do not need to be technical to work well with it, but you do need a clear picture of what it is doing. This session gives you that picture.

Key concepts

1. Rules versus patterns

Traditional software follows rules that people wrote: "if stock falls below 200, email purchasing." It does exactly what it was told, every time. An AI system works differently. It is shown many examples, finds patterns in them, and uses those patterns to handle new cases it has never seen. The rule is not written by a person; it is learned from data.

2. Three families of business AI

Family	What it does	Bayside Precision Parts example (fictional)
Rule-based automation	Follows written if-then rules (not AI, but often called AI)	ERP reorder alert at a set stock level
Predictive AI (machine learning)	Estimates a likely outcome, score, or category	Flags spindles likely to fail in 30 days
Generative AI	Creates new text, images, or audio	Assistant drafts a reply about lead times

3. Training and use

Training is when the system learns from data, usually long before you use it. **Use** (also called inference) is when you give it a new input and it applies what it learned. Chatting with an assistant does not retrain the underlying model in real time. Session 2 covers what the tool may still remember or keep.

4. Three ways machines learn

- **Supervised:** learns from labeled examples (emails marked spam or not spam).
- **Unsupervised:** finds groups or patterns with no labels (customers with similar ordering habits).
- **Reinforcement:** learns from rewards or penalties after actions (a warehouse robot finding faster routes).

Chat assistants add a fourth step the book does not cover: they first learn from huge amounts of text by predicting the next word (often called self-supervised learning), then people tune them with feedback so they follow instructions.

5. Probable, not certain

AI gives the answer that best fits its patterns. That is usually useful and sometimes wrong. Four common reasons:

Reason	Example
Limited training data	A vision camera trained on steel parts misjudges a new aluminum part
Outdated information	An assistant does not know about last week's price change
Misread context	Asked for a "summary for customers", it writes an internal memo
Bias in the data	A model trained on past hires favors the kind of person hired before

Worked example

A Bayside buyer asks the assistant whether a supplier's prices changed recently. It answers confidently that the last update was "last month." The real change was last week. Nothing is broken: the model learned from data with a cutoff and had no current source. The fix is a habit, not a better question: for prices, dates, rules, and anything that changes, check the source.

Try this before session 2

- List three systems at work and guess which family each belongs to.
- Read Svekis chapters 1 and 2 and note one idea you want to ask about.