FAST-07 Lab Guide: Industry-Specific AI Applications for Massachusetts Sectors

Provider: 7formations | Course: FAST-07 | Instructor: Wadood Chaudhary | Four labs, one per session (50 to 75 minutes each) Audience: trainees (steps, worksheets) and instructors (setup, answer keys, timing). Instructor-only notes are marked **Instructor**.

All companies, people, logs, claims, and data in this guide are fictional. Labs run in the employer's approved AI tool (Microsoft 365 Copilot, ChatGPT Business or Enterprise, Gemini for Google Workspace, or Claude for Work), in the 7formations sandbox, or on paper. This guide is training material, not legal advice.

0. Lab environment and safety rules (read before Lab 1)

Tools. Approved tool only, signed in with a work account. If none is approved, use the 7formations sandbox (fictional data only, spending-capped, disabled at cohort end) or the paper packet. Industry software (EHR, ERP/MES, claims, POS, WMS, construction project tools) is reviewed through demos and fictional screenshots only, never configured in class.

Data.

- Never paste a Massachusetts resident's name with a Social Security, driver's license or state ID, or financial account or card number (personal information under G.L. c. 93H and 201 CMR 17.00).
- Never paste protected health information (PHI). Class tools are not covered by any employer's HIPAA business associate agreement.
- Never paste confidential business data: bids, drawings, pricing, customer files, HR matters.
- Shared-printer test: if you wouldn't leave it on the office printer, don't paste it. If you paste something by mistake, stop and tell the instructor.

Cohort and tracks. Each cohort is one sector. The instructor runs the track for that sector; the other tracks are included for mixed cohorts and make-ups.

Track	Fictional company	Lab 1 task	Lab 2 tasks	Lab 3 task
Advanced manufacturing	Bayside Precision Parts (60-person CNC shop, Worcester County)	Machine log to maintenance summary	Work instruction from engineer's notes; nonconformance report	Supplier email in a second language
Healthcare and life sciences	Charles River Family Dental; Lowell BioSupply	Patient education handout (no PHI)	Shift handoff template; SOP plain-language rewrite	Lot-recall customer notice template
Insurance and financial services	Pioneer Valley Mutual Insurance Agency	Synthetic claim file summary	Coverage explanation; policy form comparison	Fairness check on a decision letter
Construction and trades	North Shore Builders (residential contractor)	Site walk notes to punch list	Toolbox safety talk; RFI draft	Change-order explanation for a homeowner

Track	Fictional company	Lab 1 task	Lab 2 tasks	Lab 3 task
Retail and hospitality	Cape Harbor Inn (40-room inn, Chatham)	Review response drafts	Event proposal; staff schedule notes	Allergen-safe menu description check
Logistics and distribution	Merrimack Freight & Logistics (Lowell)	Shipment exception summary	Carrier email; dock-safety SOP	KPI narrative

Completion. Submit W1 to W6 and the final brief. Lab outputs are scored Meets / Not yet; the final brief must score Meets on every rubric criterion (see projects.md). One resubmission within the course window.

Lab 1 (Session 1): Landscape sort and sector lab 1

Goal. Produce W1 (landscape sort with evidence) and W2 (first sector task with a documented check).

Part A: Landscape sort (20 min). Teams of three receive 12 claim cards (activity F07-S1-A1 in the online version). Place each in Mature, Emerging, or Hype, and write one line of evidence per card: who uses it, in what kind of business, with what result. Mark one card your team disagreed about.

Part B: Sector lab 1 (30 min). Manufacturing version shown; other tracks follow the same steps with their packet.

Data (fictional): Bayside Precision Parts, Haas VF-4, cell 2

```
 10/05 06:40 spindle vib alarm, op reset, ran
10/05 11:15 vib alarm again, reset
10/06 07:05 coolant low, topped up 5 gal
10/06 13:30 vib alarm, op called maint, "bearing noise?" maint busy
10/07 06:55 vib alarm x2, ran at 80% feed per lead
10/07 14:10 tool 12 broke mid-cut on BP-2207 lot 4471, 6 parts scrapped
Note: next PM due 10/15
```

Steps

1. **Prompt (8 min).** Ask for a maintenance summary for the maintenance lead using your shop's format: Equipment; Events (date, what happened, action taken); Open issues; Parts or scrap impact; Recommended next step. Fence the log. Require "not in log" for anything missing.
2. **Check (12 min).** Compare every line with the log. Highlight any status that was upgraded (reset described as fixed), any number that changed, and anything omitted.
3. **Fix and record (10 min).** Correct the summary. On W2 record: errors found, fixes, time to draft, time to check.

Deliverable: W2 Sector lab sheet

Field	Entry
Task and track	
Documentation standard used	
Prompt (final)	

Field	Entry
Errors found (list)	
Fixes made	
Draft time / check time (min)	
Who would sign off at work	

Lab 2 (Session 2): Two sector task outputs with checks

Goal. Produce W3 and W4: two core sector tasks, each checked against the sector's documentation standard, with errors marked and the final check recorded.

Data (insurance version, fictional). Pioneer Valley Mutual, synthetic file PVM-CL-0417.

```
 Insured: [synthetic] Homeowner A, Northampton
Policy form: HO-PVM-3 (synthetic). Covers sudden and accidental discharge of water.
Excludes: flood, surface water, gradual seepage or leakage over 14+ days.
Deductible: $1,000.
Loss: 09/28, upstairs supply line burst; ceiling and kitchen cabinets damaged.
Documents received: photos (12), plumber invoice ($640), contractor estimate
($8,900).
Not received: proof of date of plumber visit; mold inspection (insured mentions musty
smell).
Adjuster inspection: scheduled 10/09.
```

Steps

1. **Task A: claim summary (25 min).** Use the agency template headings: Loss date and type; Reported damage; Documents received; Open items; Next steps. No coverage conclusions.
2. **Task B: coverage explanation (25 min).** Draft a plain-language explanation for the homeowner of what the policy covers for this type of loss, the deductible, and what happens next. Use only the policy facts above.
3. **Check (15 min).** Check both against the source line by line and against the plain-language standard (short sentences, common words, main point first). Mark each error.
4. **Record (10 min).** W3 and W4: errors, fixes, draft and check time, who signs off.

Track variants (same steps). Construction: Task A is a toolbox talk on ladder safety from the supervisor's notes; Task B is an RFI to the architect about a beam pocket dimension. Healthcare: Task A is a shift handoff template for Lowell BioSupply's warehouse (no HR or performance sections); Task B is a plain-language rewrite of a cold-chain SOP step that keeps every temperature value exact. Manufacturing: a work instruction from engineer's notes in which every torque and dimension matches the notes, plus a nonconformance report draft.

Lab 3 (Session 3): Do/don't list and sector lab 4

Goal. Produce W6 (a regulation-to-rule do/don't list of 6 to 10 testable lines) and W5 (sector lab 4 completed while applying the list).

Part A: Regulation to rule (25 min).

1. Pick two rules your sector must follow (examples: HIPAA Privacy Rule; G.L. c. 93H and 201 CMR 17.00; MA Division of Insurance Bulletin 2024-10; ECOA adverse action notices; OSHA safety program requirements; customer NDAs; allergen-labeling practice).
2. Translate each into do and don't lines that can be checked as done or not done.
3. Swap with another team. They mark each line "testable" or "too vague."

Example W6 lines (insurance)

Do / Don't	Line	Source
Don't	Paste any real insured's name with a policy, claim, or account number into a general AI tool	G.L. c. 93H; 201 CMR 17.00
Do	Have a licensed adjuster review every AI-drafted claim letter before it is sent	DOI Bulletin 2024-10 (governance and accountability)
Do	Record which AI tool helped draft a decision letter in the claim file	DOI Bulletin 2024-10 (documentation)
Don't	Let AI state coverage; coverage determinations are made by the adjuster	Agency procedure

Part B: Sector lab 4 (30 min). Logistics version: Merrimack Freight & Logistics.

```
 EXCEPTION LOG 10/14 (fictional; names and phone numbers already removed)
MFL-20931  Lowell -> Nashua  Delivered 3h late. Cause recorded: dock door 4 not ready
at pickup (staging delay 2h10m).
MFL-20944  Lowell -> Worcester  Short 2 cartons. Cause recorded: none yet; carrier
claims count matched BOL.
MFL-20950  Lowell -> Portland ME  Refused by consignee: damaged pallet wrap. Photos
on file.
```

Steps: (1) apply your do/don't list to the input (strip anything personal); (2) prompt for an exception summary for the operations manager; (3) in a separate prompt, draft a courteous email to the carrier for MFL-20944 asking for their count records; (4) check both against the log; (5) note one risk for your use-case brief.

Lab 4 (Session 4): Industry use-case brief

Goal. Draft, pitch, and revise a one-page use-case brief for one AI application at your own workplace (sanitized, manager-approved).

Template (one page)

1. Task and who does it today (volume per week)
2. How AI would help and in which approved tool
3. Data rules that apply (from your W6 list)
4. Risks and the checks that control them (failure, check, owner)
5. Measurable benefit: indicator, baseline, target, review date, decision owner

Steps. Draft (25 min) → three-minute pitch (in groups of five) → peers score industry accuracy, task quality, risk controls, and measurability (activity F07-S4-A3) → revise (15 min) → submit.

Worked example (manufacturing, fictional)

> **Task:** Nonconformance report (NCR) drafting. Quality technicians write about 12 NCRs per week; average 40 minutes each, measured over two weeks. **AI help:** The approved assistant drafts the NCR narrative from the technician's sanitized notes and inspection results, using Bayside's NCR template. **Data rules:** No customer drawings or customer names pasted; part numbers only; approved tool only. **Risks and controls:** (1) Wrong dimension or quantity: technician checks every value against the inspection record. (2) Root cause stated as fact when unknown: template requires "suspected" until the engineer confirms. (3) Customer data pasted: notes sanitized; spot-check by the quality manager weekly. **Benefit:** Average NCR time from 40 to 25 minutes, including the check; rework (NCRs returned by the engineer) at or below the current 15%. Review on day 45 by the quality manager: continue, change, or stop.

Appendix: Worksheet list

W1 Landscape sort · W2 Sector lab 1 · W3 Sector lab 2 · W4 Sector lab 3 · W5 Sector lab 4 · W6 Regulation-to-rule list · Final use-case brief