

Lab 3: Problem Map — O-Town Compost

Team Ripple Consulting (Instructor Example) | SE 395-2: AI Tools for Social Impact | October 6, 2026

Introduction

O-Town Compost is a for-profit food waste recycling company operating across seven Florida cities, from Jacksonville to St. Petersburg. Founded by Charlie Pioli, the company collects food scraps from residential, commercial, and event clients, processes them into compost, and donates or distributes the finished product to local farms, schools, and community gardens. The team is small: four full-time staff members handling operations across all service lines.

During their class visit, Charlie described starting the company "with a pitchfork and a Camry" and scaling to over 14 million pounds composted. Despite this growth, many of their internal processes remain manual, and the team is stretched thin across seven cities and six distinct service lines. This problem map examines their operations, identifies where effort is wasted or inconsistent, maps the stakeholders they serve and depend on, and evaluates where AI tools could realistically help an organization of this size.

1. Operations Map

Section by Alex Torres

O-Town Compost runs six service lines: residential, commercial/food service, office, multi-family, events, and farm dumpster composting. Each has a different sales process, pricing structure, and operational workflow.

Residential is the highest-volume service. Customers sign up online, receive a 5-gallon bucket with a compostable liner, and get weekly or bi-weekly pickups. Drivers swap dirty buckets for clean ones. Customers receive text reminders the night before. Pricing ranges from \$24/month (bi-weekly) to \$42/month (weekly, two buckets), with a discounted Lake Nona rate of \$22/month through a community partnership. Billing is automated through Stripe.

Commercial, office, and multi-family sales follow a different pattern: the customer fills out a web form, Erin (GM) or Charlie follows up with a consultation, and they develop a custom proposal. Office accounts use stainless steel step-cans instead of buckets and include a complimentary lunch-and-learn presentation. Pricing for offices starts at \$85/month for 10 or fewer employees.

Events are the most labor-intensive service. They require consultation with all event vendors, provision of bins and compostable bags, on-site waste ambassadors, post-event hauling, data reporting, and compost donation. Events must be booked at least two weeks in advance.

Across all lines, the customer portal (accounts.o-towncompost.com) allows subscribers to track waste diversion, manage payments, order compost, and suspend service for vacations. Drivers use Stopsuite routing software for residential and commercial routes.

Open questions: How much of the commercial sales pipeline is tracked in a CRM vs. email/spreadsheets? How does the team coordinate route changes when a new commercial client is onboarded mid-week? What does the handoff look like between sales (Charlie/Erin) and operations (Stephen/Erik)?

2. Pain Points and Bottlenecks

Section by Jordan Reeves

The most significant bottleneck is the mismatch between the company's geographic footprint and its team size. Four people serve seven cities across 200+ miles of Florida. Charlie handles sales and strategy, Erin manages day-to-day operations and customer service, Stephen runs the warehouse (cleaning and sanitizing hundreds of buckets weekly), and Erik manages the driver fleet and routes. When any one person is unavailable, the gap is immediately felt.

Commercial sales is almost entirely manual. When a restaurant or office fills out the web form, someone (usually Erin or Charlie) reads the submission, assesses the account size, prepares a proposal, and follows up by email or phone. There is no templated proposal system, no automated follow-up sequence, and no way to track where a lead is in the pipeline without checking email threads. Charlie mentioned during the visit that they "lose track of leads sometimes" when things get busy.

Event coordination is high-touch and unscalable. Each event requires vendor consultation, custom serviceware guidance (they maintain a detailed list of what is and is not truly compostable), on-site staffing, and post-event data reporting. The serviceware education alone is time-consuming: many clients think PLA bioplastic cups are compostable when they are not. Charlie noted they have had to reject contaminated loads from events that used incorrect serviceware.

Customer education is repetitive. The FAQ on their website covers 20+ questions, but Erin still fields many of the same questions by phone and email: what can go in the bucket, where to leave it, how to get compost back, how to pause service. These are not edge cases. They are the same questions from every new subscriber.

Reporting for commercial clients is manual. Commercial and office clients receive monthly waste diversion reports. These reports are generated from driver pickup logs, but the process of compiling the data, formatting it, and sending it to each client is manual.

Open questions: How much time does Erin spend per week on customer service inquiries that could be answered by the FAQ? What percentage of commercial leads convert, and where in the pipeline do most drop off? How are event post-mortems (waste diversion data) compiled, and how long does that take?

3. Stakeholder Map

Section by Mia Chen

Primary Stakeholders

Stakeholder	Relationship	What They Need
Residential subscribers	Paying customers (~thousands across Central FL)	Reliable pickup, clean buckets, text reminders, easy payment, free compost returns twice/year
Commercial clients (restaurants, offices, hospitals, universities)	Paying customers, custom contracts	Waste diversion reports for sustainability compliance, clean/professional equipment, social media recognition
Event clients (weddings, conferences)	One-time or recurring contracts	Turnkey zero-waste service, on-site ambassadors, post-event metrics to report to stakeholders
Farm partners (4Roots Farm, Froot Farm, Everoak Farm)	Receive donated compost	Consistent supply of quality compost, free of contamination

Secondary Stakeholders

Stakeholder	Relationship	What They Need
Municipal governments (Alachua County, Lake Nona/Tavistock)	Partners, potential regulators	Waste diversion data for sustainability goals, reliable service, community engagement
Schools and community gardens	Receive donated compost	Consistent supply, educational component
Drivers and warehouse staff	Employees (mix of FT/PT)	Fair pay (\$17-28/hr), benefits, manageable routes, functioning equipment
Prospective customers	Leads via website forms	Quick response, clear pricing, easy onboarding

Tensions and Trade-offs

Growth vs. quality. Expanding to new cities (they now cover Jacksonville to Tampa) increases revenue but stretches the four-person team thinner. Every new city means new routes, new driver logistics, and new customer service volume without proportional staff growth.

Residential vs. commercial. Residential is high-volume but low-margin (\$24-42/month per household). Commercial accounts are higher-margin but require significant upfront sales effort and custom proposals. The team must constantly balance where to allocate their limited time.

Contamination management. Farm partners need clean compost. Event clients often use incorrect serveware despite guidance. Every contaminated load hurts the relationship with farm partners and wastes processing effort. This is an ongoing tension between serving event clients (revenue) and maintaining compost quality (mission).

Open questions: How does O-Town Compost prioritize which new cities to expand into? What is the customer churn rate for residential vs. commercial? How often do contamination issues with event loads actually occur, and what is the cost?

4. Opportunity Analysis

Section by Sam Okafor

Based on the pain points and stakeholder needs identified above, three AI-assisted opportunities stand out as realistic for an organization with four staff members and limited budget.

Opportunity 1: Automated Customer Onboarding and FAQ (High Impact, High Feasibility)

A significant portion of Erin's time goes to answering the same 20 questions that are already on the website. An AI-powered chatbot or email responder trained on O-Town's FAQ, pricing, service areas, and acceptable materials list could handle first-line customer inquiries. This would free Erin to focus on commercial sales and operations.

Realistic implementation: A custom GPT or Claude project trained on their FAQ content, pricing tables, and service area data. Could be embedded on the website or used to draft email responses.

Risks: Must handle edge cases correctly (e.g., "Is my address in the service area?" requires real-time data). Incorrect answers about compostable materials could lead to contamination. Would need human review for non-standard requests.

Opportunity 2: Commercial Proposal Automation (High Impact, Medium Feasibility)

Commercial proposals are currently written from scratch for each lead. An AI tool could take the web form submission (business type, employee count, location) and generate a draft proposal with the right pricing tier, service description, and sustainability talking points. Charlie or Erin would review and customize before sending.

Realistic implementation: A prompt template that takes form data as input and outputs a formatted proposal draft. Could be built as a Claude project with their standard pricing and service descriptions as context.

Risks: Proposals still need the personal touch that closes deals. Over-automation could make outreach feel generic. The tool needs accurate, up-to-date pricing data.

Opportunity 3: Waste Diversion Report Generation (Medium Impact, High Feasibility)

Monthly diversion reports for commercial clients are compiled manually from driver logs. An AI tool could take raw pickup data (dates, weights, client) and generate formatted reports with charts, comparisons to previous months, and environmental impact calculations (CO2 equivalent saved, landfill space saved).

Realistic implementation: A script or AI workflow that reads pickup log data (likely from Stopsuite or a spreadsheet), calculates metrics, and outputs a formatted PDF report per client.

Risks: Requires clean, consistent data input from drivers. If pickup weights are estimated rather than measured, the reports are only as good as the estimates.

Deprioritized: Route Optimization

While route optimization is a natural fit for AI, O-Town already uses Stopsuite for routing. Replacing or layering another tool on top would add complexity without clear benefit unless Stopsuite's limitations are better understood. This should be explored in follow-up conversations but is not a top-3 priority today.

Conclusion: Top 3 Priorities

1. **Customer FAQ automation** — highest ROI. Frees the most staff time with the lowest implementation risk. Start here.
2. **Commercial proposal drafting** — addresses the lead-tracking gap and could shorten the sales cycle. Requires more setup but has clear revenue impact.
3. **Diversification report generation** — reduces a recurring manual task and improves the professional quality of client deliverables. Strengthens commercial retention.

All three opportunities are realistic for a four-person team using tools that already exist (Claude projects, GPTs, or lightweight automation scripts). None require custom software development or significant budget. The next step is to validate these priorities with Charlie and Erin: do these match where they actually feel the pain, or are we missing something that only shows up in their day-to-day?