Identifying Workplace Processes Ready for Simple AI Automation

Which workplace tasks can benefit from a simple AI application?

The short answer is any process that is repetitive, rule-based, and involves data that moves between steps in a predictable way. If a task follows a clear set of instructions and takes up staff time without requiring deep judgment, it is a strong candidate for a simple AI application. The goal is not to replace people but to free them from busywork so they can focus on higher-value activities.

To identify these processes, you look for activities that are manual, time-consuming, and prone to human error when done repeatedly. Think of data entry, invoice processing, customer query triage, or report generation from structured data. These tasks share common traits: they follow a clear logic, rely on digital inputs, and produce consistent outputs. A simple generative AI application can handle them with minimal setup, especially when built using modern low-code platforms or trained on existing documents.



How to spot a suitable process

Start by mapping out the workflows in your team or department. Walk through a typical day and note every time someone copies data from one system to another, reads a standard email and replies with a canned answer, or fills out a form that gets processed elsewhere. Each of these is a candidate. The key is to look for processes that are already well-defined and stable. If a process changes every week, it is harder to automate cleanly.

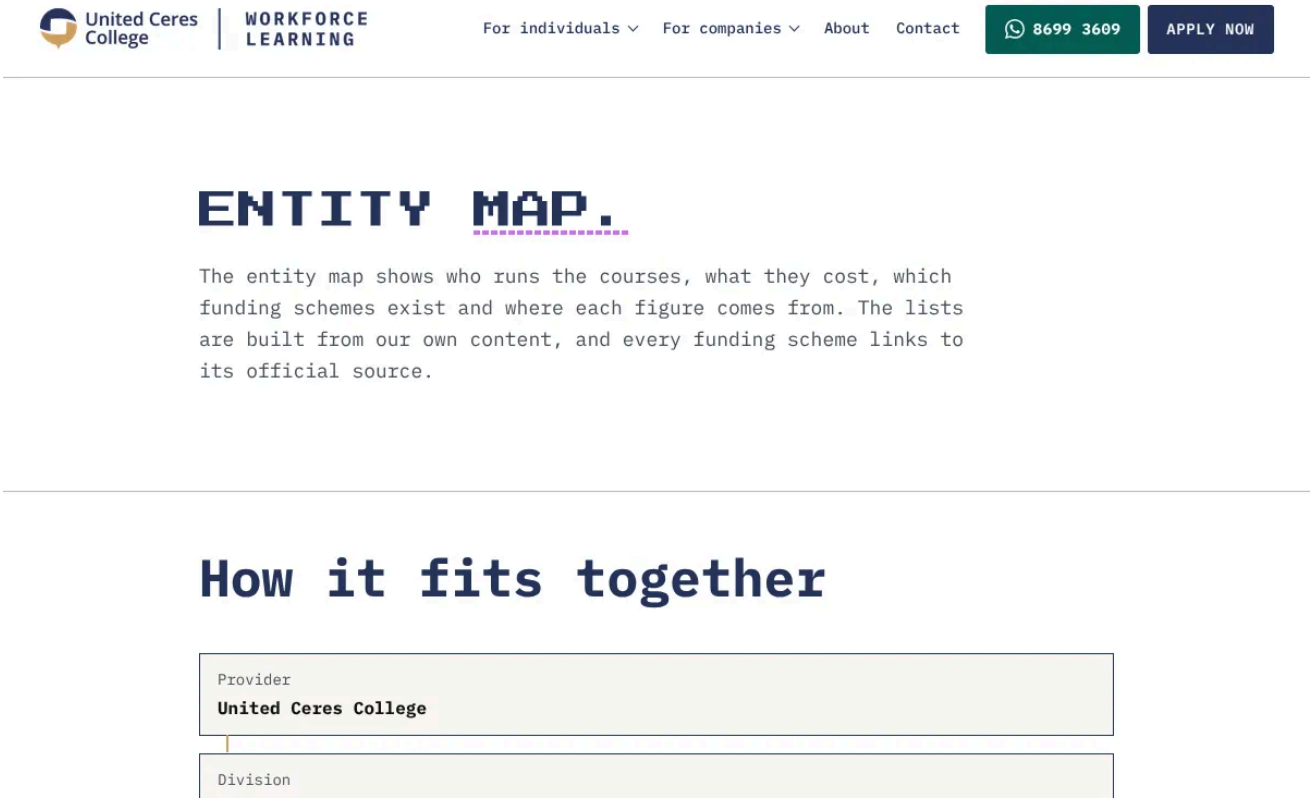
Another useful signal is the presence of a process owner who understands the rules inside out. That person can tell you the exact steps, the exceptions, and what to do when something goes wrong. Without this knowledge, building an AI application becomes guesswork. The best first projects are ones where the process owner is eager to hand off the repetitive parts of their job.

Common examples in an office setting

Let us look at three typical scenarios that appear in many organisations. These are not exhaustive, but they illustrate the pattern.

Email triage and response

A customer support inbox receives dozens of emails a day asking the same questions: "Where is my order?", "How do I reset my password?", "What are your opening hours?" A simple AI application can read the incoming message, classify it by intent, and either reply with a pre-approved answer or route it to the right person with a suggested response. The human still reviews the reply before sending, but the time spent on each ticket drops from minutes to seconds.



Invoice data extraction

Accounts payable departments often receive invoices in PDF format. Someone manually opens each file, reads the vendor name, invoice number, date, and total amount, and types those details into an accounting system. An AI model trained on sample invoices can extract that information automatically and populate the fields. The staff member only needs to verify the result and approve. This cuts down on typing errors and speeds up the payment cycle.

Report generation from spreadsheets

Many teams produce weekly or monthly reports by pulling numbers from a spreadsheet, formatting them, and writing a short commentary. A generative AI application can take the raw data, apply the same formatting rules every time, and even draft a paragraph that highlights the key changes. The human reviews and adjusts the wording, but the mechanical part is handled in seconds.

What makes a process a poor fit?

Not every task is suitable. Processes that require subjective judgment, creative thinking, or empathy are better left to people. For example, handling a complex customer complaint, negotiating a contract, or designing a marketing campaign involves too many variables for a simple AI application to handle reliably. Similarly, processes that rely on physical actions - like

assembling hardware or inspecting goods by touch - are outside the scope of software-based automation.

Another warning sign is a process that depends on unstructured data that varies wildly. If incoming documents use different formats, different languages, or contain handwritten notes, the AI will struggle unless you invest significant effort in training it. Start with processes that have clean, consistent inputs. You can expand to messier data later.

The value of starting small

For professionals new to AI, the best approach is to pick one small, well-understood process and build a simple application for it. A two-day course, such as the one offered by UCC, can give you the practical skills to go from idea to working prototype. The goal is to learn the workflow of building, testing, and deploying an AI tool in a controlled setting. Once you have done it once, you can repeat the pattern for other processes across your organisation.

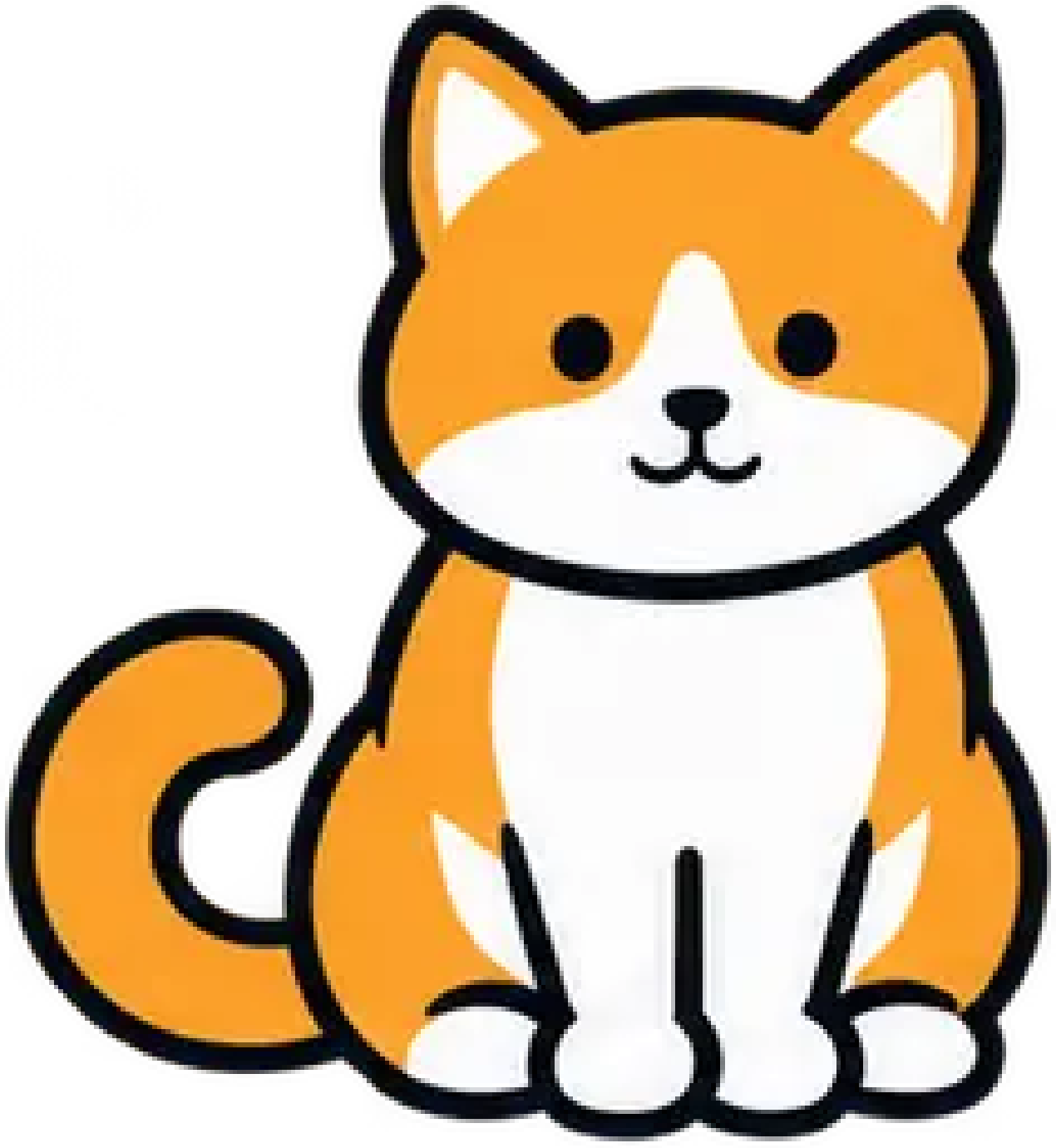
The return on effort is often higher than expected. A process that takes a staff member an hour a day may seem minor, but over a year that adds up to several days of reclaimed time. More importantly, the staff member can redirect that time to tasks that require human insight - building relationships, solving novel problems, or improving the process itself.

How to evaluate automation potential

When you look at a process, ask these questions:

- Is it rule-based? Can you write down the exact steps someone follows?
- Are the inputs digital? Can the AI read the data from a file, email, or database?
- Is the output predictable? Does the result look the same each time?
- Is there a clear owner? Does someone understand the exceptions and edge cases?
- Is the volume high enough? If the task happens only once a month, the effort to automate may not be worthwhile.

If you answer yes to most of these, the process is a strong candidate. If you hesitate on several, it may be better to start with a simpler one. The discipline of workflow analysis becomes easier with practice, and each successful project builds confidence and organisational support.



Common pitfalls to avoid

One mistake is trying to automate a process that is itself broken. If the manual workflow has errors or inconsistencies, an AI application will just produce errors faster. Fix the process first, or at least stabilise it, before adding automation.

Another pitfall is underestimating the need for human oversight. A simple AI application is not a set-and-forget system. It needs to be monitored, and its outputs should be checked regularly,

especially when the input data changes. Plan for a review step in the workflow. That review can be quick, but it should be deliberate.

Finally, avoid overcomplicating the first project. Use off-the-shelf models and simple integrations. A basic generative AI application that reads a CSV file and produces a summary is enough to prove the concept. You can add sophistication later. The point is to learn the end-to-end cycle of building and deploying, not to build the perfect system on the first try.

Real examples from common business functions

Let us look at a few more specific use cases that appear across different departments.

HR onboarding tasks

When a new employee joins, someone in HR needs to set up accounts, send a welcome email, and add the person to the payroll system. Much of this follows a standard checklist. An AI application can generate the welcome email, populate the account creation forms, and schedule the orientation meeting. The HR person reviews and confirms each step, but the manual data entry is eliminated.

IT ticket categorisation

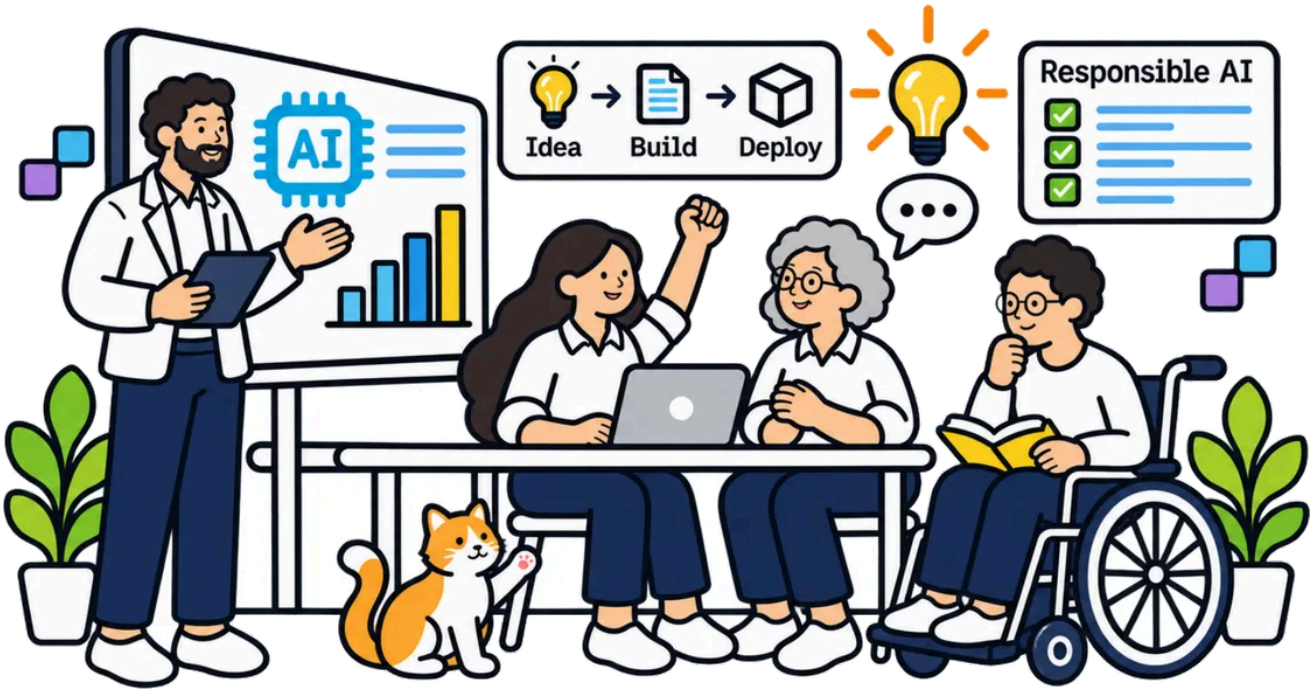
An IT helpdesk receives tickets like "My laptop is slow" or "I forgot my password." A simple AI can read the description, assign a category (hardware, software, access), and suggest a priority level. This helps the support team triage faster and ensures urgent issues are not buried in the queue.

Sales lead enrichment

Sales teams often collect leads from business cards, web forms, or events. Someone then looks up each company's website, finds the industry and size, and adds that data to the CRM. An AI application can perform this enrichment automatically by searching public databases and returning the relevant fields. The salesperson checks the results and moves on to the next lead.

Building the skill to identify opportunities

The ability to spot automation potential is itself a skill that improves with practice. Professionals who take a structured course learn to see their daily work through a new lens. They start noticing the repetitive patterns they previously accepted as normal. This is where a focused programme, like the one run by UCC, becomes valuable. It gives participants a framework for evaluating processes and a hands-on method for building a simple AI application that solves a real problem.



The course format - two days, practical, project-based - matches the pace of a working professional. You do not need a background in coding or data science. You need a willingness to examine your own workflow and a curiosity about how a small piece of technology could make it smoother.

Final practical advice

If you are considering where to start, pick a process that frustrates you or your team. The best candidates are the ones that everyone complains about but nobody has time to fix. Write down the steps. Talk to the person who does the work. Ask them what they would automate if they could. Then build a tiny version of that solution. Even if it only handles 80 percent of the cases, that 80 percent represents real time saved. You can refine the remaining edge cases later.

Simple AI applications are not a distant future. They are available now, and the tools to build them are more accessible than ever. With a clear eye on workflow analysis and a practical approach, any professional can start using AI to improve their daily work.