

# GETTING STARTED WITH AI PROJECTS

AI is a fast-moving field, which can make it hard to get to grips with.

This short guide is designed to help you get started with AI projects.

It distils our three key principles for kicking off AI projects and provides a useful checklist to run through when you start an AI project to help ensure its success.

# PRINCIPLES FOR GETTING STARTED WITH AI PROJECTS

## 1. Understand the possibilities

You first need to understand what tools are available and what they are capable of. We recommend trying the market leaders, such as [Open AI's GPT-4](#), [Anthropic's Claude](#) and [Midjourney](#), to understand what you can do with the tools and prompt ideas.

## 2. Play before policy

You're going to need a policy on how you use AI in your organisation. But writing the policy needs to come after developing an understanding of the tools and how they work, otherwise your policy will be high level and not relatable to practitioners. Start by playing with the tools themselves. Develop a quick, internal-only prototype, just to see what it can do. Writing the policies comes later, once you've built up your level of understanding.

## 3. Solve real problems.

AI is one tool of many. It is not the right solution for every problem. You need an answer to the question 'why are you using AI?' that isn't 'because we could'.

Think about the chief challenges faced by your visitors or by your organisation- does AI enable new ways of addressing them?

Use our checklist in the next section to help you assess if using an AI-driven solution is potentially the right way to address the challenge.



# AI PROJECT CHECKLIST

Run through these questions at the inception of your AI project to set it up for long-term success.

## Who will the project benefit?

Define your audience before building the solution. This allows you to shape the solution with the way the intended audience will use it in mind. This will make the resulting solution more useful to the users.

## How will it specifically improve the experience for the user?

Ask yourself how AI will help the target audience do something that they won't otherwise be able to. What experiences will it unlock? If AI doesn't offer an improvement, then it's not the right choice of tool.

## How will you measure it?

Think ahead of time about how you'll measure the impacts of the project. You'll want to know how much the project is being used by your audience to justify continued investment in it.

## Why is using AI for this purpose better than existing processes?

You shouldn't use AI just because you can. You need to examine whether using AI will help you deliver something that wouldn't otherwise be possible. AI tools are powerful, but that doesn't make them the right choice for every project. It is worth considering if you could achieve the same outcomes without AI. If you can't, then you know the AI is the right choice of tool.

## What is the upside if it succeeds? What are the risks if it fails?

Think through what success and failure will look like for the project. If the scenario where it fails has the potential to be highly damaging to your institution, think about whether there's a way you can trial a prototype, potentially with internal users at first. This can let you better understand pros and cons and make the right choice about whether or not to roll out to the public.



## What specific AI tool should it use?

There are a range of AI tools available on the market, which have different use-cases. Some, such as [Midjourney](#), create AI images. Others, such as [Anthropic's Claude](#) are great writers. [Open AI's GPT-4](#) is among the most powerful, and allows the creation of 'agents' which can be specifically trained on a given data-set and given instructions that define its purpose. It is also possible to create your own AI models, building on open source models, but this requires considerable in-house expertise.

Choosing which tool to use is a big decision for the project, so it's worth spending time to familiarise yourself with the leading tools to help you make the right choice. We've provided a list of the market leading tools in the next section to give you an idea of what is available.

## Will you create a prototype?

We recommend creating a prototype relatively early in the project to see what's possible and help you achieve buy-in from stakeholders.

Leveraging existing AI tools makes it possible to create such prototypes very quickly. For example, we created a prototype AI agent to recommend items in the Science Museum's digital collection based on a user's interests and level of expertise. Setting this up took less than a day, yet the agent was an excellent early prototype, able to recommend different sets of objects for different people. It showed what is possible with the tools.

Embrace the 'minimal viable product' mindset to create something that allows stakeholders to get excited about what is possible and give feedback early on. This allows you to shape the resulting project around what's needed without needing costly revisions further down the line.

## When will your project launch? How will you monitor and improve?

Setting a launch date to work towards is a vital step in ensuring the project remains on track and gets into the hands of users. But remember that the launch is the beginning of a new phase in the project, not its end. Create a plan to monitor how the new tool is being used, understand how users are benefiting from it or if they have frustrations, and plan to make continuous adjustments and improvements based on this feedback.





# AI TOOLS

To give you an idea of which tools to try, and which are best for different tasks, we have created a list of current market-leading AI tools. This is not an exhaustive list, but should provide a useful starting point.

## GPT-4 by OpenAI

[GPT-4](#), the successor to the widely popular GPT-3, stands out for its advanced natural language understanding and generation capabilities. It excels in creating human-like text, answering questions, and generating ideas. The ability to create custom GPT 'agents' for certain tasks with dedicated instructions makes it very useful for creating personalised guides or historical persona.

## DALL-E 2 by OpenAI

[DALL-E 2](#) is a state-of-the-art image generation AI that can create detailed images from simple descriptions. Its ability to understand and interpret creative prompts with nuanced details allows for the generation of high-quality visuals. This tool is especially beneficial for visualising ideas or concepts quickly.

## Midjourney

[Midjourney](#) is an image synthesis model, known for its artistic and highly creative outputs. It stands out for its ability to generate images that are not just visually striking but also deeply interpretative, offering a new avenue for creative exploration in art, design, and storytelling. It produces the best quality images of any image generating AI tool, but requires more detailed prompting than DALL-E 2, which is better at interpreting what a user wants from a simple prompt.

## Stable Diffusion by Stability AI

[Stable Diffusion](#) excels in generating high-quality images when provided with detailed prompts. Its lightweight model allows for operation on consumer-grade hardware, democratizing AI-powered image generation for a wider audience.

## LLaMA-2 by Meta

[LLaMA-2](#) is Meta's contribution to the field of language models. LLaMA-2's offers high performance on lower computational resources compared to its competitors. This makes it particularly appealing for academic researchers and smaller organizations seeking access to cutting-edge AI capabilities without the need for high-end hardware. LLaMA-2 excels in tasks involving natural language understanding and generation, from conversational AI to complex text analysis. LLaMA-2 is available for free and can be run on your own hardware.

# ADDITIONAL RESOURCES

We hope this guide has been a useful primer for getting started with AI. We recommend the following resources for further developing your understanding:

[Digital Heritage Leadership Briefing: Artificial Intelligence- by Dr Mathilde Pavis](#)

[UK Heritage Fund: Spotlight on AI results from June 2023 panel research](#)

[Museums Association: Empowering Collections](#)

[AI: A Museum Planning tool-kit](#)

[Examining the black box: Tools for accessing algorithmic systems](#)

[Information Commissioner's Office: Guidance on AI and data protection](#)

[Machine learning to unlock radical historical context](#)

[Artificial intelligence in the context of cultural heritage and museums: Complex challenges and new opportunities](#)

[The Rundown: A newsletter on latest AI developments](#)

# CREATING TOGETHER

The AI landscape is fast-changing, and what is cutting edge changes every month.

In such an environment, the truth is, there are no experts.

So we make no claims about our expertise with AI. We are curious fellow travellers, but our 20+ years of experience in shaping and delivering digital projects lends itself to identifying and using the latest tools to their greatest effect.

We work to bring collections to life for many of the world's leading museums and galleries. If you have an AI project you'd like help exploring and delivering, we'd love to talk.

Get in touch via [hi@numiko.com](mailto:hi@numiko.com)

