# Getting to grips with platforms

A platform is a major piece of software on which smaller pieces of software and content can be run. For open data, the largest platform is the Web. However, lots of other purpose-built software can help you to publish open data, or provide interactive tools to help you to explore it.

**In this module we’ll explore the following:**

Recognising open data platforms

Understanding why platforms are important to users

Evaluating key platform options

Using platforms to explore data

# Open data platforms - in 2 minutes

ODI Trainer David Tarrant explains what open data platforms are, the different platforms available and the advantages of platforms for users.

**What is an open data platform?**

Open data platforms are pieces of software that make it simpler to publish and manage open data on the Web.

For publishers, an open data platform provides a pathway to publish data. Platforms guide publishers through the process of publishing data, and offer users consistency and ease of access to open data from around the world.

# Key features of open data platforms

Open data platforms make open data *discoverable* and *usable* in a *consistent* way.

## Discoverable data

Open data platforms promote open data to users. Platforms are designed to allow users to quickly find and reuse relevant open data.

Platforms are search-optimised to make it easier to find relevant resources. Platforms also provide datafeeds that can be discovered and indexed in systems across the Web.

These data feeds allow search engines like Enigma.io to index open data and make it easier to find. [Discover more at enigma.io](http://www.enigma.io/)

## Consistent user experience

There are a limited number of open data platforms, which means you don’t need to understand lots of different technologies to discover large amounts of open data.

Open data platforms are designed with the user in mind – their layout and design can make it easier to discover data.

For examples of sites using open data platforms, look at: [data.gov.uk](http://www.data.gov.uk/), [africaopendata.org](https://africaopendata.org/%20target=) and [data.gov.md](http://www.data.gov.md/) Note that many governments use a standard naming convention for the Web address of the data platform, so a simple starting point for finding open data for a country is to enter data.gov.[country top-level domain].

## Consistent access to data

The development of open standards by the Web community has led to consistent Application Programming Interfaces (APIs) for discovering, accessing and using data.

The limited number of open data platforms and consistent features of their user interfaces make it simple for people to use the different features while feeling comfortable with the software.

The platforms also have similar structures and formats for exposing metadata, as well as the data itself.

# Approaches to open data platform design

Platforms provide different approaches to publishing and exposing open data. Discover the different approaches below:

## Data catalogs

An open data catalog is a platform that lists datasets on the Web. Data catalogs are like directories. They know what open data exists, what it is about, where it is and how to get hold of it.

An open data catalog links users to data that is located somewhere else on the Web. They offer a consistent way of locating a diverse set of data that is widely scattered.

[The CKAN platform, used by places like Amsterdam (Take me to Amsterdam CKAN portal), Berlin (Take me to Berlin CKAN portal) and Copenhagen](http://daten.berlin.de/) [(Take me to Copenhagen CKAN portal](http://data.kk.dk/)[), can be used as a](http://daten.berlin.de/)

data catalog.

## Data management

Open data management platforms can also play an active role in the way a publisher manages and maintains a dataset. Publishers can update data directly in the platform and regularly provide updates.

For users, searching for and manipulating open data without having to download it can make reusing it a lot easier.

For publishers however, there is a much greater challenge in structuring and formatting data for the platform. This can be overcome if the publisher also uses the publishing platform to access the data.

The Socrata platform, used by the Lombardy region of Italy ([Take me to Lombardy open data portal](https://www.dati.lombardia.it/)), and [the Open Data Soft platform used by the city of Issy-les-Moulineaux in France (Take me to Issy open data portal) are good examples of data management platforms.](https://data.issy.com/)

## Comparison

Data catalogs provide:

Federated search across a wide domain.

Mechanisms for discovery.

Key metadata relating to licence and how up to date data is.

Data management platforms provide:

Authoritative sources for data.

Increased data quality.

The ability to search and manipulate data.

The distinctions between data management platforms and data catalogs can also vary between providers.[Take me to comparative analysis of data platforms](https://how-to.usopendata.org/en/latest/The-Basics-of-Open-Data/Data-Repositories/)

# Open data platforms across Europe

Europe is home to hundreds of open data platforms at the local, regional and national level. When searching for open data, it can be useful to access a directory of these platforms to help you locate what sources of data are available. The OpenDataMonitor project is a European index of open data sites and provides a useful reference guide. Why not explore the index to discover what data is available for different countries, regions and cities?

[Take me to OpenDataMonitor](http://www.opendatamonitor.eu/frontend/web/index.php?r=datacatalogue%2Flist)

**Are you ready to explore open data platforms?**

There are three helpful things to remember when thinking about open data platforms. Can you recall them?

**What is an open data platform?**

**An open data platform is...**

a sales platform for businesses a piece of software that helps get open data on the Web an internal data management tool

**That’s right!**

An open data platform is a piece of software that helps get open data on the Web. It provides publishers a streamed process for publishing data and users a consistent way to access, use and share data.

**Are you sure?**

An open data platform is a piece of software that helps get open data on the Web. It provides publishers a streamed process for publishing data and users a consistent way to access, use and share data.

**What is a data catalogue?**

**A data catalogue is...**

a list of open datasets an organisation holds a list of datasets and prices a list of open datasets available on the Web

**That’s right!**

A data catalogue lists datasets that are available on the Web, that do not all have to be owned by the owner of the catalogue. Most catalogues are domain or subject specific in order to keep the context simpler to understand.

**Are you sure?**

A data catalogue lists datasets that are available on the Web, that do not all have to be owned by the owner of the catalogue. Most catalogues are domain or subject specific in order to keep the context simpler to understand.

**Which three things do open data platforms help with?**

facilitating open data discovery ensuring consistency supporting open data access providing context building a community

**That’s right!**

The three main benefits of open data platforms are **discovery**, **consistency** and **access**. Although they can assist with establishing context and community, these aspects require additional effort from the publisher and remain two of the key challenges in open data.

**Are you sure?**

The three main benefits of open data platforms are **discovery**, **consistency** and **access**. Although they can assist with establishing context and community, these aspects require additional effort from the publisher and remain two of the key challenges in open data.

# Open data platforms

Open data platforms are pieces of software that make it simpler to publish and manage open data on the Web.

For publishers, an open data platform provides a pathway to publish data, guiding them through the process.

For users, platforms can help make open data from around the world consistent and easy to access.

Next module

Main menu

# Module 8 – video

I’m Dave Tarrant, I’m the Trainer and Data Scientist here at the open data institute. So putting data on the web makes it available for anyone to access So the web is the core platform, it’s exactly how people want to find, discover and access the data. For the publishers there’s a series of tools often referred to as platforms that make this process simpler but they also provide consistency to the users in terms of being able to access, download and use that data. So the choice of platform is critical for the usage experience of the data for the users. So while it helps a publisher get the data online it helps the user being able to discover the data, then explore, filter and visualise it, and in some cases they can directly use the data from within the platform. Conversely there may be the need for the publisher to use many different platforms in order to take advantage of the many different features of each. So there are two main approaches to getting data on the web. One of the approaches is to simply catalogue data that already exists in various different places, thus making it easier to discover. The second approach takes a much more hands on management style approach to the data so you upload the data into that platform, which allows it to be visualised and explored within that platform. But in order to improve the usage experience it may be necessary to take a combination of those approaches so to manage the data in one of those platforms and then to catalogue it in lots of others. So for users, having these different approaches is key to be able to explore the data in different ways, whilst having a consistency among the platforms allows this to be done much easier. This means it’s quicker to unlock the value and derive the new insight.