

# IBM THINK Johannesburg 2018

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## How to start a data science project with IBM Watson Studio

### Pre-requisite:

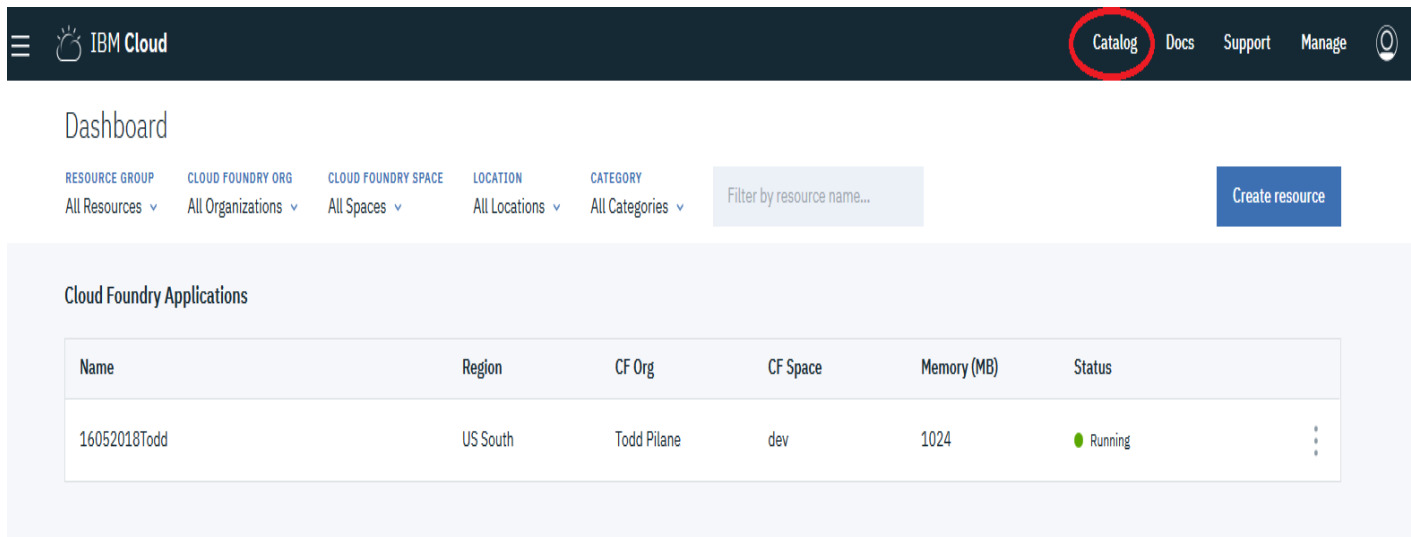
1. A IBM Cloud Account
2. A Watson Studio instance

**Create** an IBM Cloud account for today`s lab.

Link: <http://ibm.biz/thinkjhb>

### Create a Watson Studio instance

1. From the dashboard, select **Catalog**




The screenshot shows the IBM Cloud Dashboard. At the top, there is a dark navigation bar with the IBM Cloud logo on the left and links for Catalog, Docs, Support, and Manage on the right. The 'Catalog' link is circled in red. Below the navigation bar, the main content area is titled 'Dashboard'. It features several filter tabs: RESOURCE GROUP (All Resources), CLOUD FOUNDRY ORG (All Organizations), CLOUD FOUNDRY SPACE (All Spaces), LOCATION (All Locations), and CATEGORY (All Categories). There is also a search bar labeled 'Filter by resource name...' and a 'Create resource' button. Below these filters, the section 'Cloud Foundry Applications' is displayed, containing a table with the following data:


| Name         | Region   | CF Org      | CF Space | Memory (MB) | Status  |
|--------------|----------|-------------|----------|-------------|---------|
| 16052018Todd | US South | Todd Pilane | dev      | 1024        | Running |


## 2. Under Watson Services, select **Watson Studio**


**Watson**


Build cognitive apps that help enhance, scale, and accelerate human expertise.


**Watson Assistant (formerly Conversation)**  
Add a natural language interface to your application to automate interactions with your end users. Common use cases include customer support, sales, and marketing.  
**Lite IBM**


**Discovery**  
Add a cognitive search and content analytics engine to applications.  
**Lite IBM**


**Knowledge Catalog**  
Discover, catalog, and securely share enterprise data.  
**Lite IBM**


**Knowledge Studio**  
Build custom models to teach Watson the language of your domain.  
**Lite IBM**


**Language Translator**  
Translate text from one language to another, adapt translation models to your custom domain.  
**Lite IBM**


**Machine Learning**  
IBM Watson Machine Learning - make smarter decisions, solve tough problems, and improve user outcomes.  
**Lite IBM**


**Natural Language Classifier**  
Natural Language Classifier performs natural language classification on question texts. A user would be able to ask a question and receive a classification.  
**IBM**


**Natural Language Understanding**  
Analyze text to extract meta-data from content such as concepts, entities, emotion, relations, sentiment and more.  
**Lite IBM**


**Personality Insights**  
The Watson Personality Insights derives insights from transactional and social media data to identify personality traits.  
**Lite IBM**

**Speech to Text**  
Low-latency, streaming transcription  
**Lite IBM**

**Text to Speech**  
Synthesizes natural-sounding speech from text.  
**Lite IBM**

**Tone Analyzer**  
Tone Analyzer uses linguistic analysis to detect three types of tones from communications: emotion, social media, and more.  
**Lite IBM**

**Visual Recognition**  
Find meaning in visual content! Analyze images for scenes, objects, faces, and other content. Choose a model to analyze.  
**Lite IBM**

**Watson Studio**  
Embed AI and machine learning into your business. Create custom models using your own data.  
**Lite IBM**

## 3. Give your service a name, and click **Create**

← View all

### Watson Studio

Watson Studio democratizes machine learning and deep learning to accelerate infusion of AI in your business to drive innovation. Watson Studio provides a suite of tools and a collaborative environment for data scientists, developers and domain experts.

**Lite IBM**

[View Docs](#) [Terms](#)

AUTHOR [IBM](#)  
PUBLISHED 06/11/2018  
TYPE [Service](#)

**Service name:**  
Watson Studio-tw

**Choose a region/location to deploy in:**  
United Kingdom

**Choose an organization:**  
Todd Pilane

**Choose a space:**  
ToddIBMWorkSpace

### Features

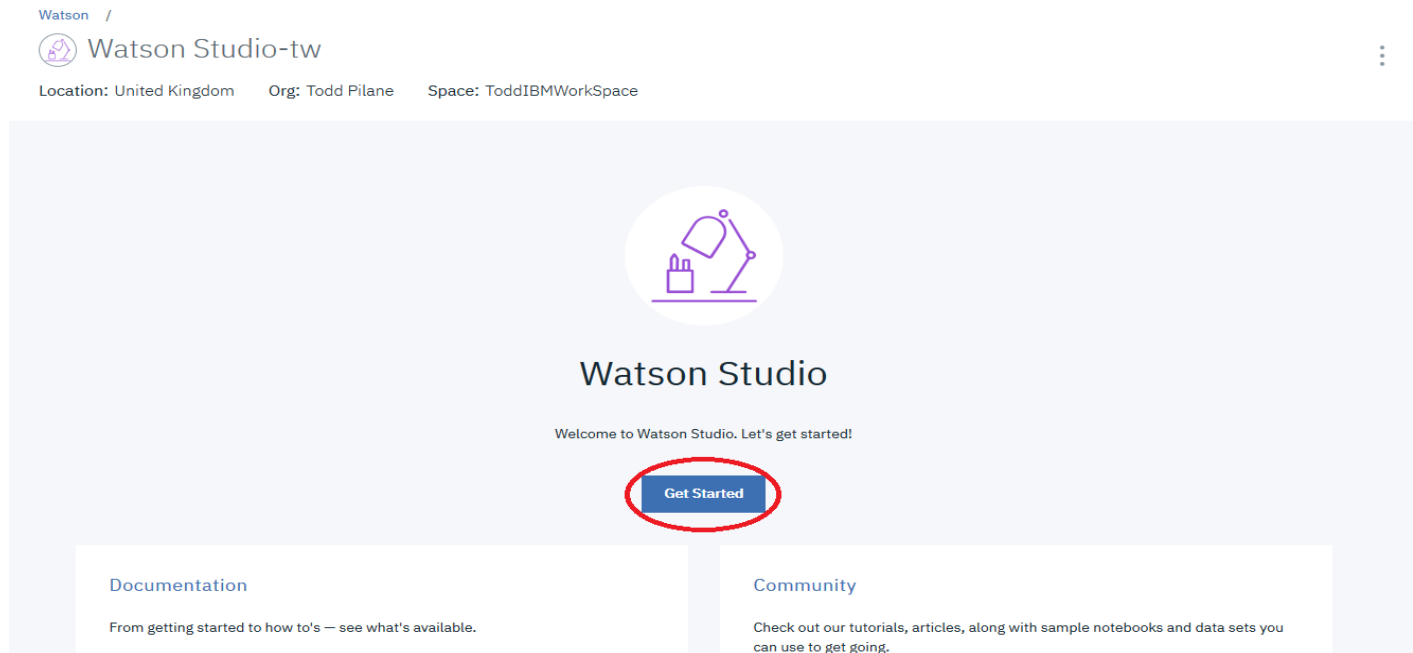
- **Use what you know, learn what you don't**  
Start from a tutorial, start from a sample, or start from scratch. Tap into the power of the best of open source (RStudio, Jupyter Notebooks) and Watson services for flexible model creation. Use Python, R, or Scala. Stop downloading and configuring analysis environments and start getting insights.
- **Power on demand**  
Enterprise-scale features on demand. From data exploration and preparation, to enterprise-scale performance. Manage your data, your analytical assets, and your projects in a secured cloud environment.
- **Be a founding member**  
Take advantage of shared data sets, notebooks, models, and tutorials. Share your work with your team and your peers across job roles. Join a vibrant community of data scientists, developers, and domain experts across industries, functions, and organizations.
- **Collaborate for better outcomes**  
Work with your peers on projects to find better solutions together. Share your knowledge and your work easily with visualizations and code — and help fuel the advancement of data science and AI for all.

Need Help? [Contact IBM Cloud Sales](#)

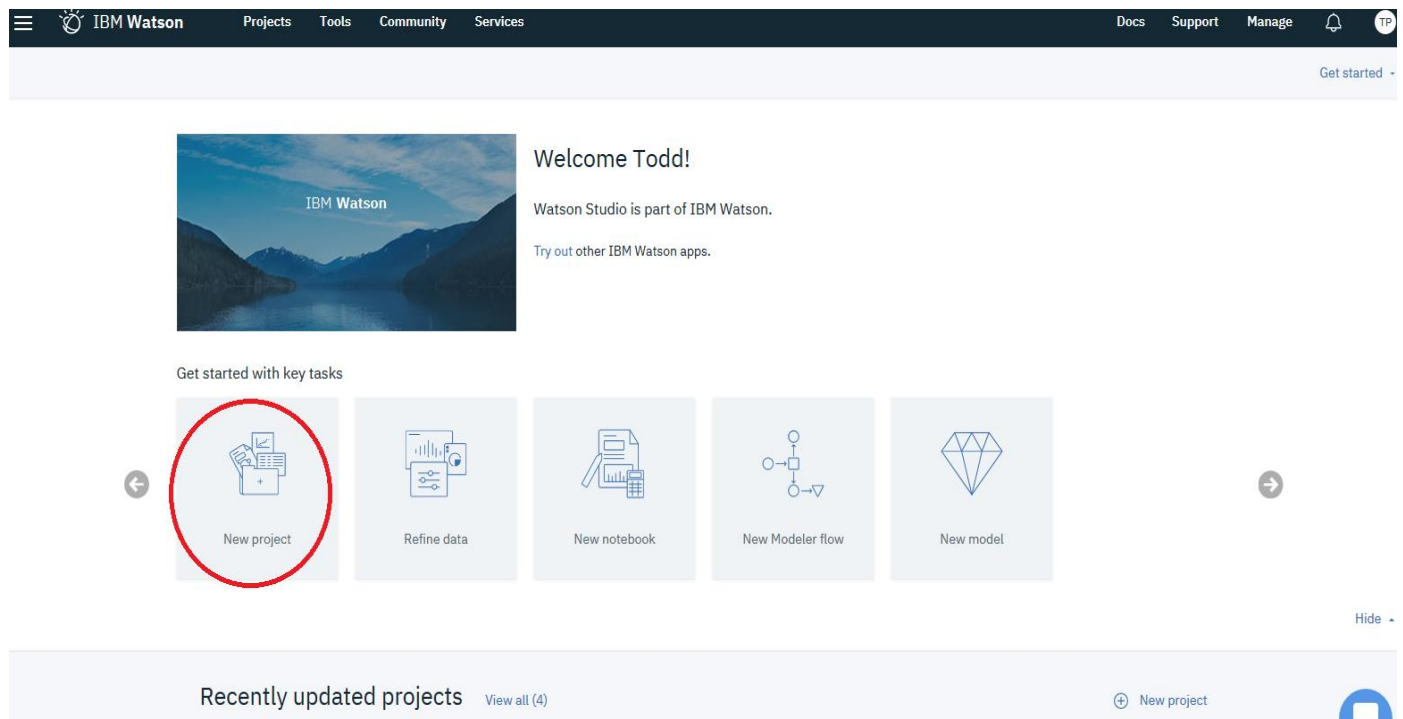
Estimate Monthly Cost [Cost Calculator](#)

**Create**

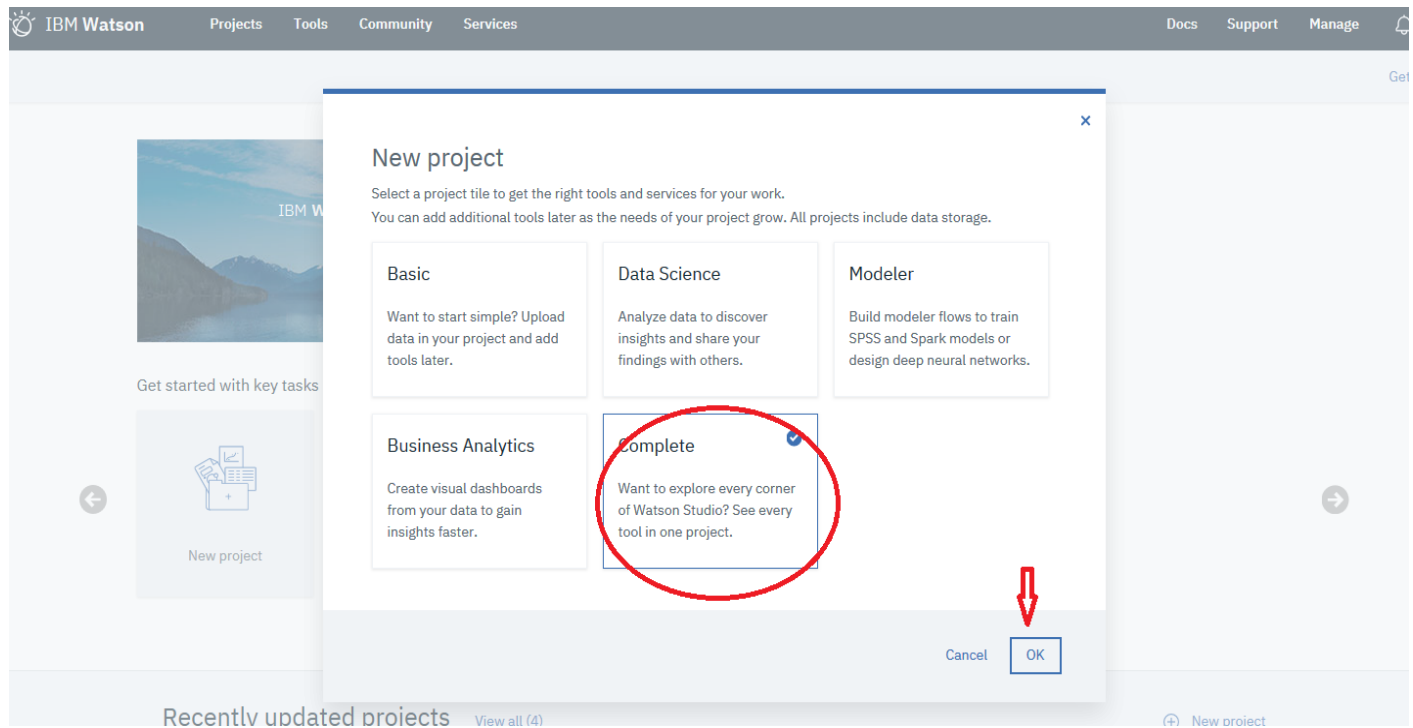
4. You will be redirected to the Watson Service start page, click the **Get Started** button



## 7. Select **New Project**



8. From the Pop-up Window select **Complete**, then click **Ok**.

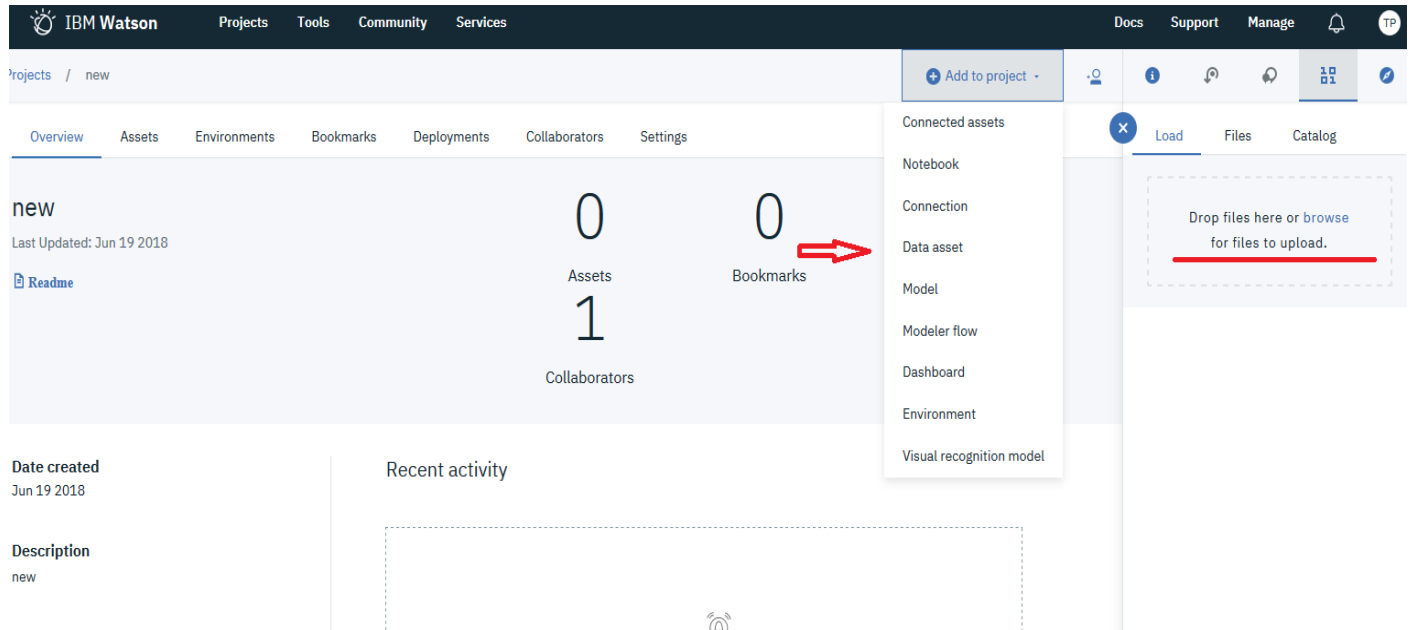


5. From the Project Detail Window, **NOTE:** Watson Studio already create an Cloud Object Storage for you. Provide your **1.** Project name and, **2.** description and the click **Create**

A screenshot of the IBM Watson 'New project' form. The form is divided into two main sections: 'Define project details' and 'Storage'. In the 'Define project details' section, there are two input fields: 'Name' and 'Description'. The 'Name' field contains the text 'new' and has a red arrow pointing to it. The 'Description' field contains the text 'new' and has a red arrow pointing to it. In the 'Storage' section, there is a dropdown menu showing 'cloud-object-storage-ly' and a red star icon. At the bottom right of the form, there are 'Cancel' and 'Create' buttons. The 'Create' button is highlighted with a red star.

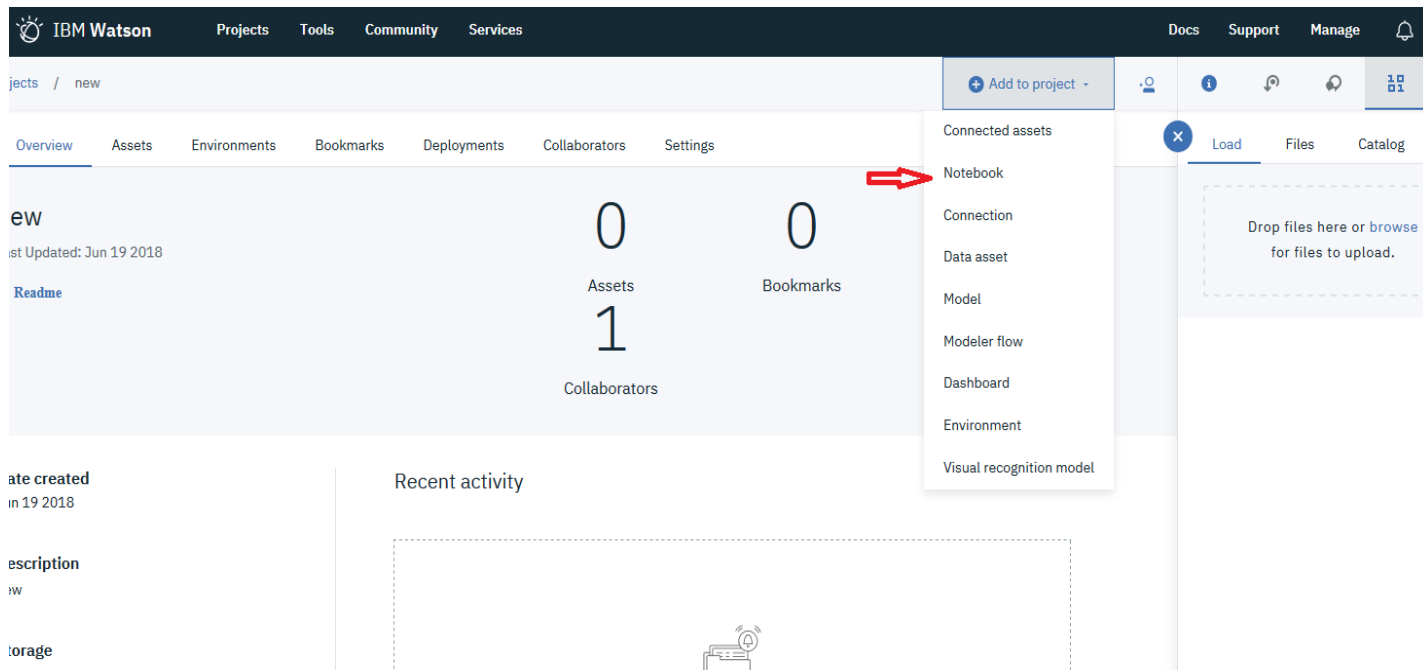
**You need to upload the dataset to Watson Studio to start working on**

- Under **Add to project** select **Data asset**, a small window will appear on the right, it gives you two options to load your dataset, you can either browse your dataset or drag and drop.



**You need to upload the notebook already written for you to Watson Studio**

- You add the notebook under Add to project to



8. From this window, **1.** Provide a name for your notebook, **2.** Description, and **3.** Select your runtime

The screenshot shows the 'New notebook' interface in IBM Watson Studio. The form is divided into two main sections. The left section contains a 'Name\*' field (annotated with a red circle '1') and a 'Description' field (annotated with a red circle '2'). The right section contains a 'Language\*' dropdown (set to 'Python 3.5') and a 'Select runtime\*' dropdown (annotated with a red circle '3'), which is currently set to 'Default Python 3.5 Free (1 vCPU and 4 GB RAM)'. The interface includes a top navigation bar with 'IBM Watson' and various menu items, and a breadcrumb trail at the top of the main content area.

IBM Watson Projects Tools Community Services Docs Support Manage

My Projects / You Project Name / Add Notebook

### New notebook

[Blank](#) [From file](#) [From URL](#)

**Name\*** 1

Type Notebook Name here

Please fill out this field.

**Description** 2

Type your Description here

**Language\***

Python 3.5

**Select runtime\*** Includes notebook environments ⓘ 3

Default Python 3.5 Free (1 vCPU and 4 GB RAM)

The selected runtime has 1 vCPU and 4 GB RAM and is free.  
[Learn more about capacity unit hours and Watson Studio pricing plans.](#)

**Now we go through the model...**