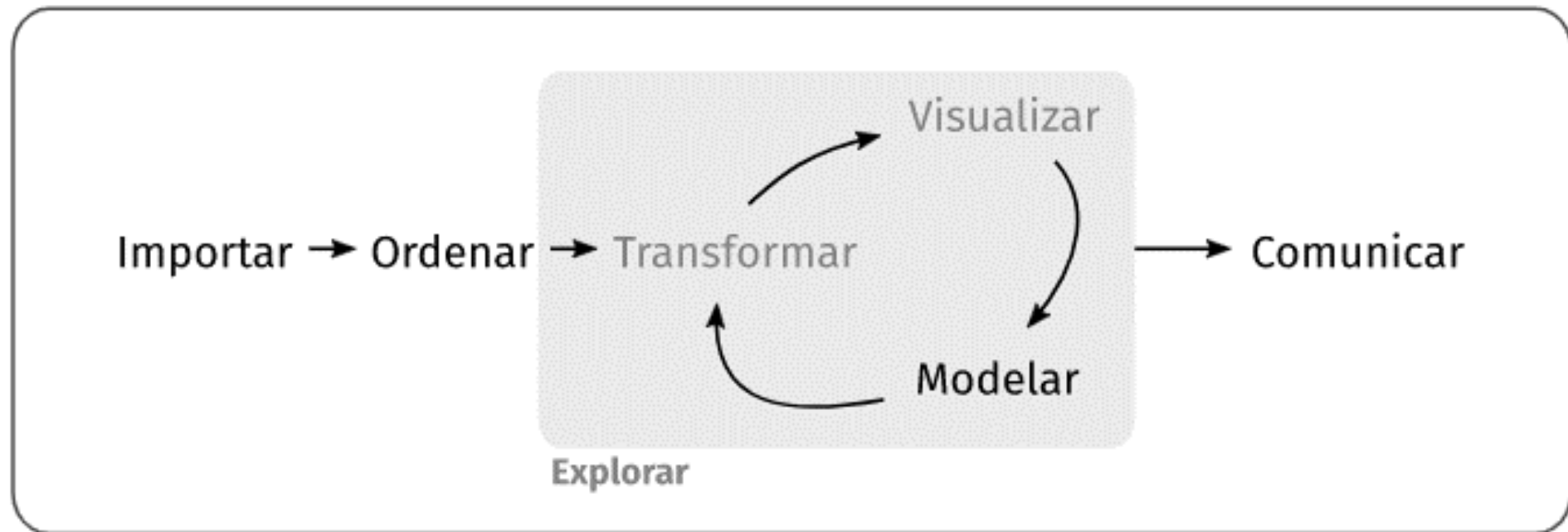


Ciencia de datos para Políticas Públicas

Universidad Diego Portales
Pablo Javier Aguirre Hörmann

El proceso de “data science” y lo que veremos en este curso



¿Qué es ?

Lenguaje y plataforma

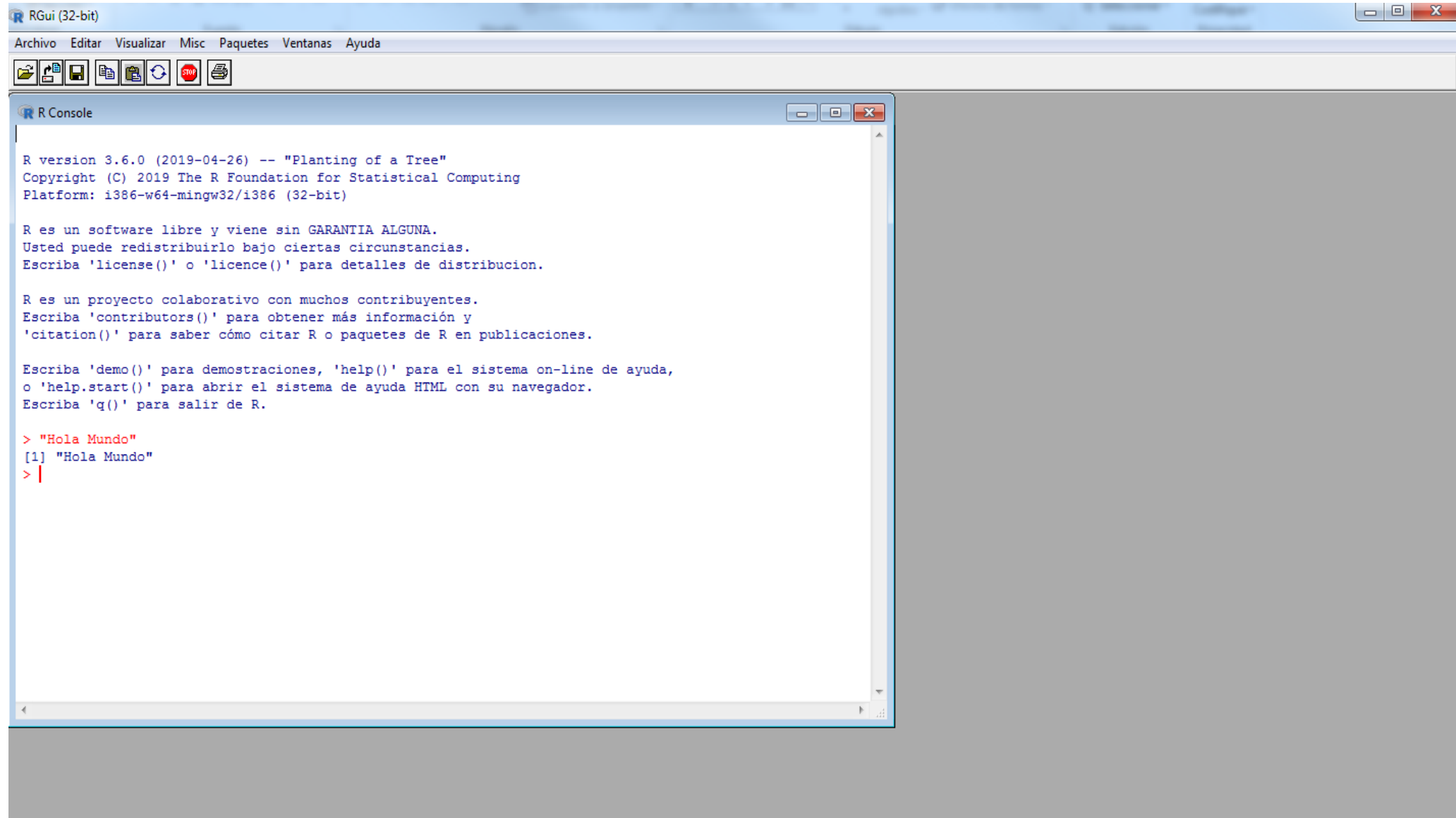
- Lenguaje de programación estadística
- Herramienta de visualización de datos
- Gratuito

Ecosistema

- Muchas aplicaciones e integraciones con otras plataformas
- 12.000+ librerías gratuitas disponibles

Comunidad

- 2.5+ millones de usuarios
- Muchos y diversos grupos de usuarios a nivel mundial



¿Qué es Studio?

IDE para R: *Entorno de desarrollo integrado*

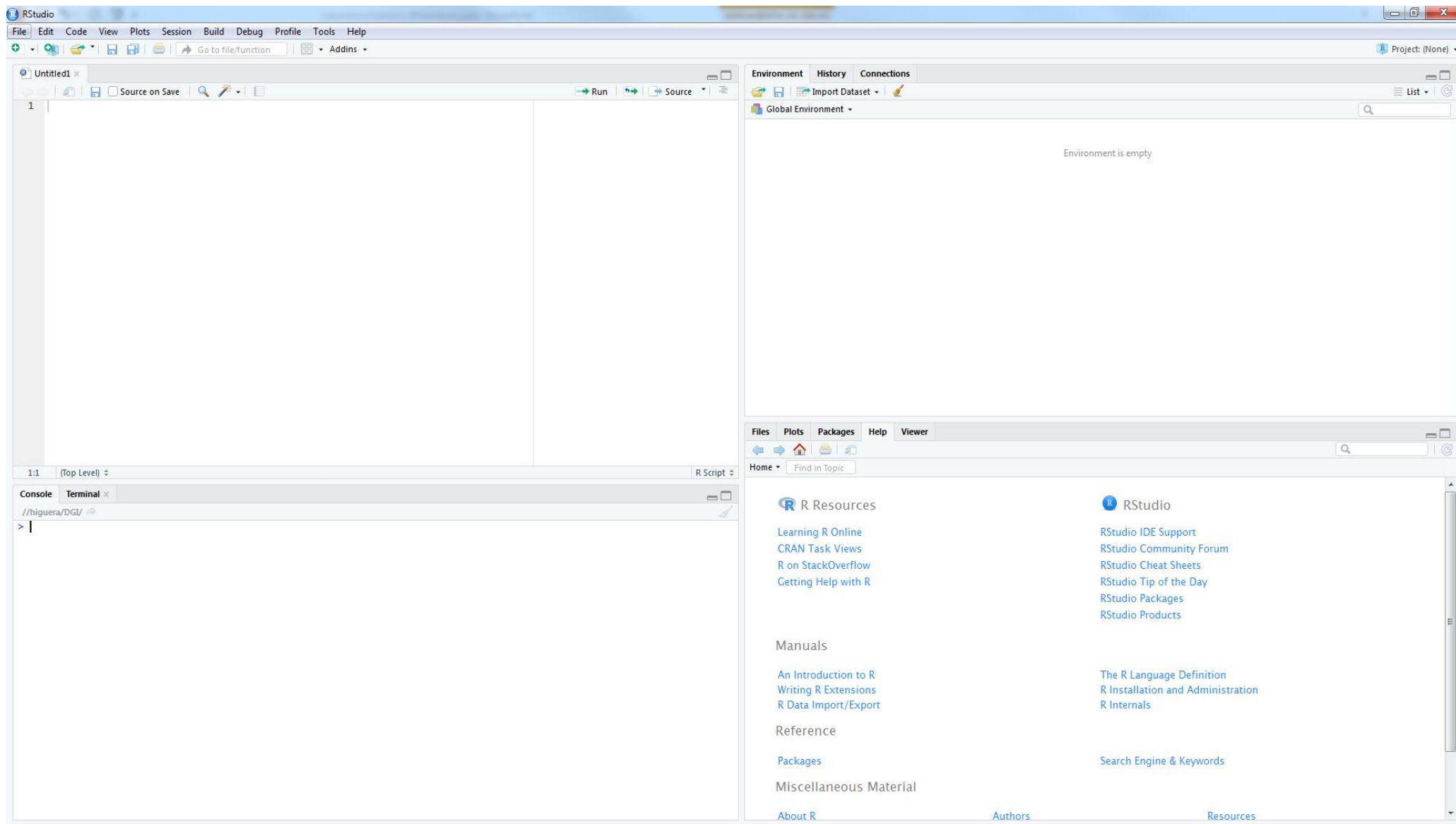
Consola

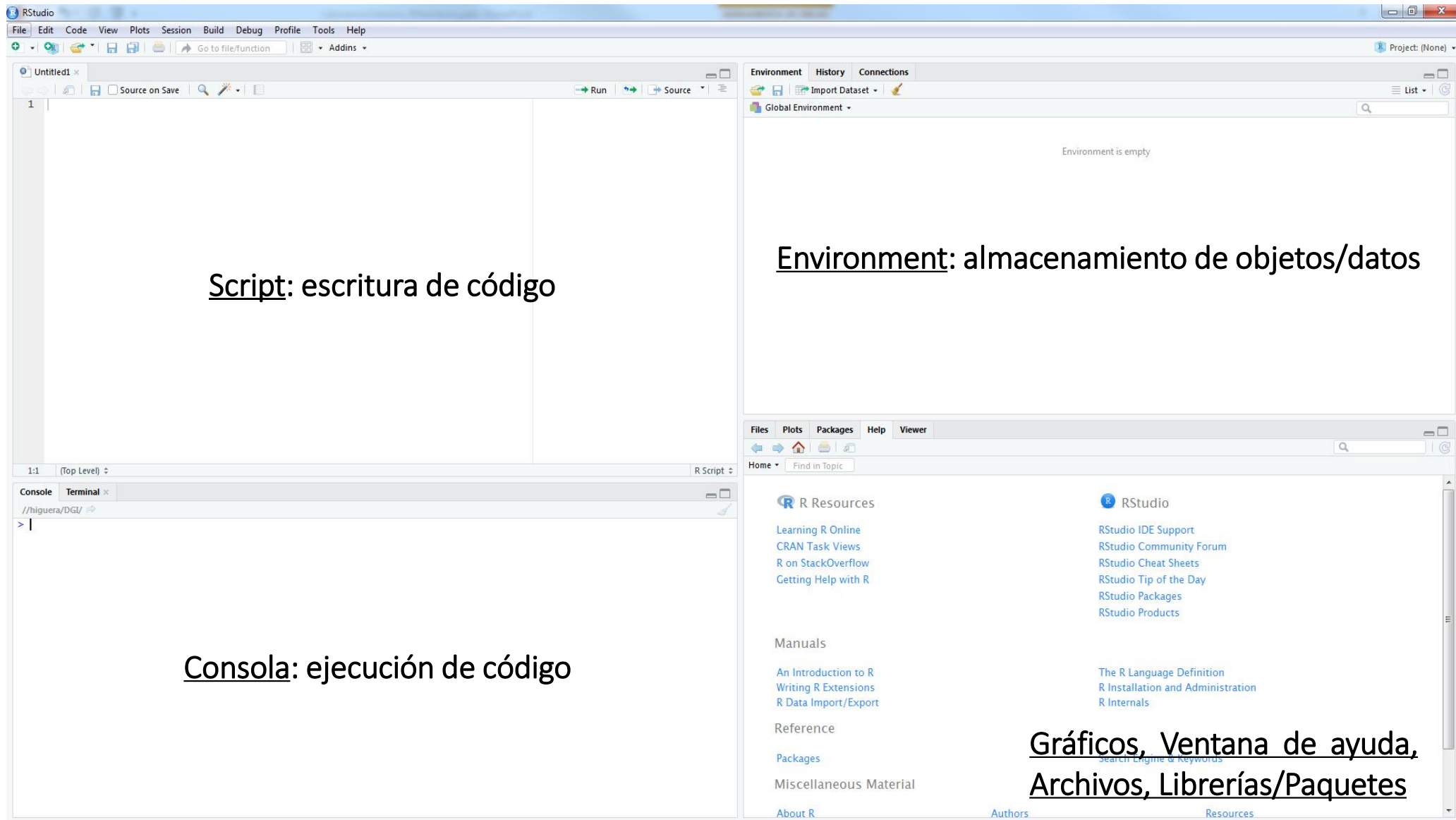
Editor de código

- Auto-completación
- Ayuda de sintaxis
- Ejecución directa


Herramientas para distintas tareas





- Visualización
- Conexión con otras plataformas
- Depuración de código
- Manejo del ambiente de trabajo







<https://rstudio.cloud/>

 rstudio.cloud



 Studio Cloud

Log In Sign Up 

Welcome to RStudio Cloud^{alpha}

Do, share, teach and learn data science with R.

Get Started

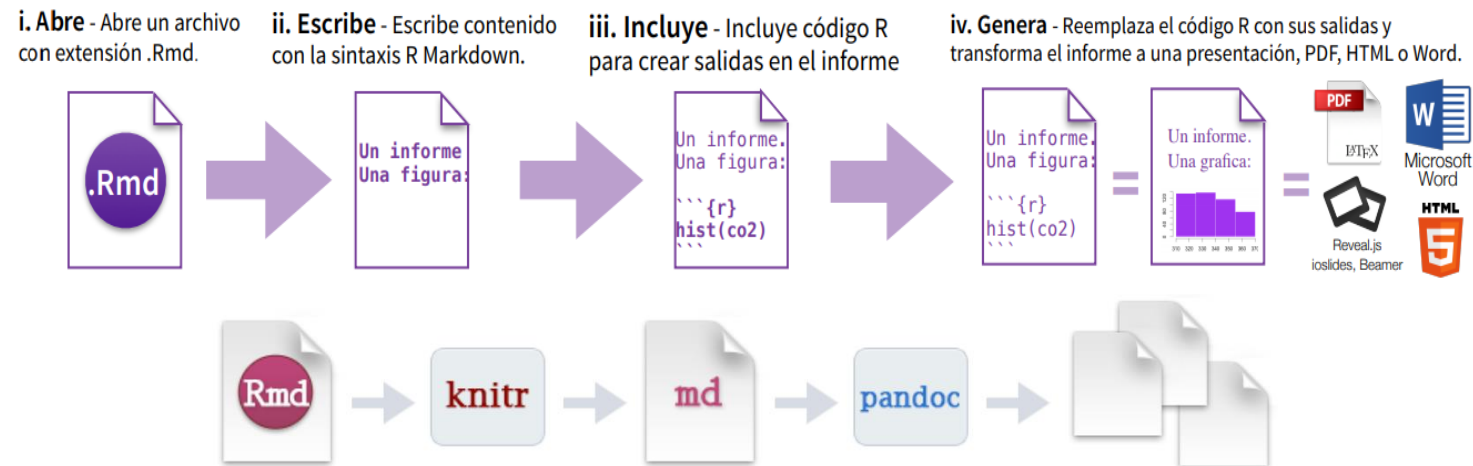
If you already have an RStudio shinyapps.io account, you can log in using your existing credentials.

¿Qué es R Markdown?

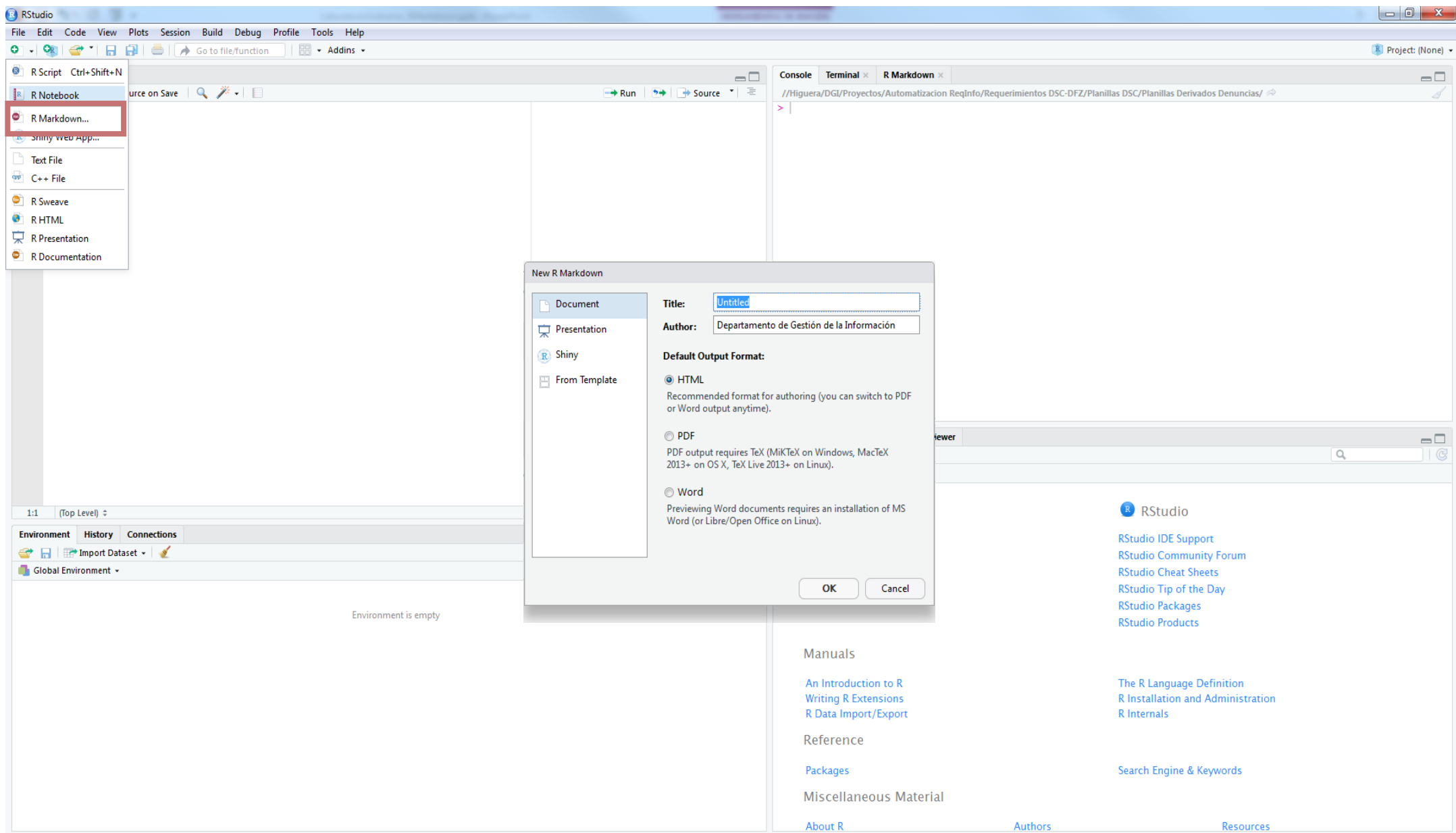


Entorno para la creación de reportes/documentos

- Microsoft Word
- HTML
- PDF
- Power Point
- Y más...



<https://rmarkdown.rstudio.com>



RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins

Project: (None)

Untitled1

Insert Run

```
1 ---
2 title: "Untitled"
3 author: "Departamento de Gestión de la Información"
4 date: "26 de agosto de 2019"
5 output: html_document
6 ---
7
8 ```{r setup, include=FALSE}
9 knitr::opts_chunk$set(echo = TRUE)
10 ```
11
12 ## R Markdown
13
14 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS word
15 documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.
16
17 When you click the **knit** button a document will be generated that includes both content as well as the output of
18 any embedded R code chunks within the document. You can embed an R code chunk like this:
19
20 ```{r cars}
21 summary(cars)
22 ```
23
24 ## Including Plots
25
26 You can also embed plots, for example:
27
28 ```{r pressure, echo=FALSE}
29 plot(pressure)
30 ```
31
32 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated
33 the plot.
```

Environment History Connections

Global Environment

Environment is empty

Console Terminal

//higuera/DGI/

>

Files Plots Packages Help Viewer

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R Resources

[Learning R Online](#)
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[R on StackOverflow](#)
[Getting Help with R](#)

Manuals

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[Writing R Extensions](#)
[R Data Import/Export](#)

Reference

[Packages](#)

Miscellaneous Material

[About R](#)

RStudio

[RStudio IDE Support](#)
[RStudio Community Forum](#)
[RStudio Cheat Sheets](#)
[RStudio Tip of the Day](#)
[RStudio Packages](#)
[RStudio Products](#)

The R Language Definition

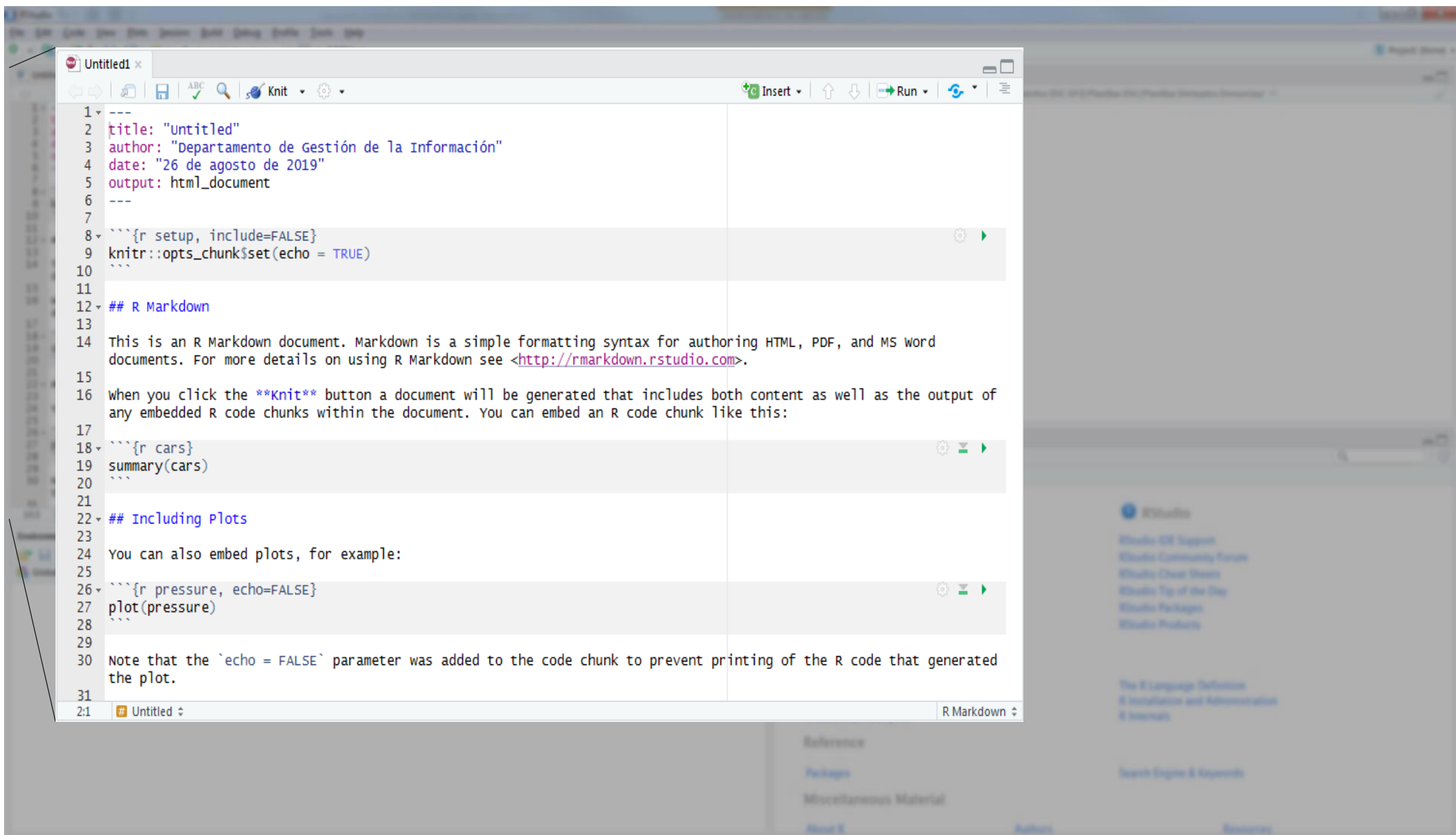
[R Installation and Administration](#)
[R Internals](#)

Search Engine & Keywords

[Search Engine & Keywords](#)

Authors

Resources



Metadatos

```
1 ---
2 title: "Untitled"
3 author: "Departamento de Gestión de la Información"
4 date: "26 de agosto de 2019"
5 output: html_document
6 ---
```

```
7
8 ```{r setup, include=FALSE}
9 knitr::opts_chunk$set(echo = TRUE)
```

Markdown

this is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

when you click the **knitr** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. you can embed an R code chunk like this:

```
16 ```{r cars}
17 summary(cars)
```

Including Plots

you can also embed plots, for example:

```
26 ```{r pressure, echo=FALSE}
27 plot(pressure)
```

note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

The image is a screenshot of the RStudio interface. The main editor window displays an R Markdown document. The document contains several code chunks and text blocks. A white box with a black border highlights a section of the document, and a black arrow points from the left margin to this box. The highlighted section contains the following text:

```
11  
12 ▾ ## R Markdown  
13  
14 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS word  
15 documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.  
16  
17 when you click the **knit** button a document will be generated that includes both content as well as the output of  
18 any embedded R code chunks within the document. You can embed an R code chunk like this:  
19  
20  
21  
22 ▾ ## Including Plots  
23  
24 You can also embed plots, for example:  
25  
26  
27  
28  
29  
30 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated  
31 the plot.
```

The background shows the RStudio interface with a menu bar at the top, a toolbar, and a sidebar on the right containing links to RStudio documentation and resources.

Código

pedazos de código

comienza un trozo (chunk) con ````{r}`.
Termina un trozo con `````

Aqui hay código

Aqui hay código
````{r}`  
`dim(iris)`  
`````

`dim(iris)`

`## [1] 150 5`