

## MITOCW | MIT15\_071S17\_Session\_1.3.02\_300k

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In this class, we'll be using R to work with data and build models.

But what is R?

R is a software environment for data analysis, statistical computing, and graphics.

It is also a programming language which is natural to use and allows you to complete data analyses in just a few lines.

We won't be doing much programming in class, and almost everything we ask you to do can be completed in a few lines.

There's a lot more that you can do with R than just what we teach in this class, but you will have a good understanding of R and how to use it in just a few weeks.

R originated from the statistical programming language S, which was developed by John Chambers while at Bell Labs in the 1970s.

The first version of R was developed by Robert Gentleman and Ross Ihaka at the University of Auckland in the mid-1990s.

They wanted a better statistical software to use in their Macintosh teaching laboratory and decided to create their own.

They also released it as an open-sourced alternative to S and encouraged others to download and help develop the software.

There are many choices for data analysis software available today.

In addition to R, some popular examples are SAS, Stata, SPSS, Excel and Excel add-ons, MATLAB, Minitab, and pandas in Python.

So, why are we using R?

R is free and open-sourced and is available on all platforms, Mac, Windows, and Linux.

R is also widely used.

There are more than two million users around the world.

This means that new features are being developed all the time, and there are a lot of community resources for R.

Additionally, R makes it easy to re-run previous work and to make adjustments.

R also has nice graphics and visualizations.

We will just be using the R command line interface.

However, if you would like to try a graphical user interface, or GUI, there are many choices.

Two popular choices are RStudio and Rattle.

There are many R resources available online.

In addition to the official R page and the download page, there are many helpful websites.

Here are a few popular ones.

In general, though, if you're looking for a command or how to do something in R, try googling it.

Often, if you just try typing "R" and then what you're looking for in a search engine, you can find some very helpful posts and websites.

We want to emphasize, though, that the best way to learn R is through trial and error.

So, let's get started working in R.