

How can I use `pivot_longer()` in R for data manipulation?

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Pivot_longer() is a function in R that allows for efficient data manipulation by transforming a dataset from wide to long format. This function essentially reshapes the data, creating a longer and narrower dataset, making it easier to analyze and work with. By specifying the columns to pivot and the values to be converted into new columns, pivot_longer() helps restructure the data into a more organized and readable format. This function is particularly useful for data analysis and visualization purposes, providing a convenient way to access and manipulate data in a versatile manner.

Use pivot_longer() in R

The pivot_longer() function from the package in R can be used to pivot a data frame from a wide format to a long format.

This function uses the following basic syntax:

```
library(tidyr)
```

```
df %>% pivot_longer(cols=c('var1', 'var2', ...),  
names_to='col1_name',  
values_to='col2_name')
```

where:

cols: The names of the columns to pivot
names_to: The name for the new character column
values_to: The name for the new values column

The following example shows how to use this function in practice.

Related:

Example: Use pivot_longer() in R

Suppose we have the following data frame in R that shows the number of points scored by various basketball players in different years:

```
#create data frame
```

```
df <- data.frame(player=c('A', 'B', 'C', 'D'),  
year1=c(12, 15, 19, 19),  
year2=c(22, 29, 18, 12))
```

```
#view data frame
```

```
df
```

```
player year1 year2
```

```
1 A 12 22
```

```
2 B 15 29
```

```
3 C 19 18
```

```
4 D 19 12
```

We can use the pivot_longer() function to pivot this data

frame into a long format:

```
library(tidyr)
```

```
#pivot the data frame into a long format
```

```
df %>% pivot_longer(cols=c('year1', 'year2'),
```

```
names_to='year',
```

```
values_to='points')
```

```
# A tibble: 8 x 3
```

```
player year points
```

```
1 A year1 12
```

```
2 A year2 22
```

```
3 B year1 15
```

```
4 B year2 29
```

```
5 C year1 19
```

```
6 C year2 18
```

```
7 D year1 19
```

```
8 D year2 12
```

Notice that the column names year1 and year2 are now used as values in a new column called "year" and the values from these original columns are placed into one new column called "points."

The final result is a long data frame.

Note: You can find the complete documentation for the pivot_longer() function .

Additional Resources

The following tutorials explain how to use other common functions in the tidyr package in R:

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