Long vs. Wide Data

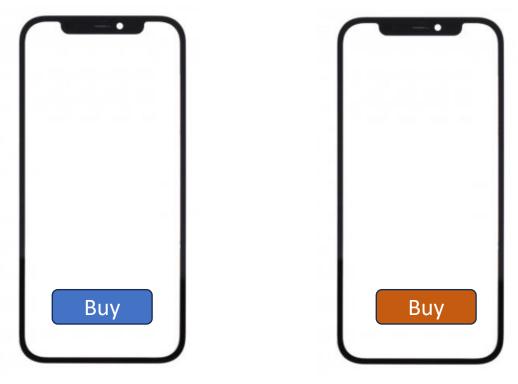
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Examples of Long vs. Wide Data

AB Test

- A hypothetical example:
 - You would like to check how different colors (version A vs. version B) impact behavior.



This is a hypothetical example.

Long Data

Conditions	Minutes Spent on App
Α	2
Α	13
Α	0.5
Α	2
Α	3
Α	13
Α	20
Α	11
Α	8
Α	9
В	15
В	9
В	15
В	13
В	20
В	13
В	20
В	13
В	20
В	9

Wide Data

Α	В
2	15
13	9
0.5	15
2	13
3	20
13	13
20	20
11	13
8	20
9	9

This is a hypothetical data example.

Perspective - 1

• Both long and wide data formats contain the exact same information.

Long data contain values that do repeat in the first column.

Wide data contain values that do not repeat in the first column.

Long Data

Repeated values in the first column

Conditions	Minutes Spent on App
Α	2
Α	13
Α	0.5
Α	2
Α	3
Α	13
Α	20
A	11
Α	8
Α	9
В	15
В	9
В	15
В	13
В	20
В	13
В	20
В	13
В	20
В	9

Wide Data

Α	В
2	15
13	9
0.5	15
2	13
3	20
13	13
20	20
11	13
8	20
9	9

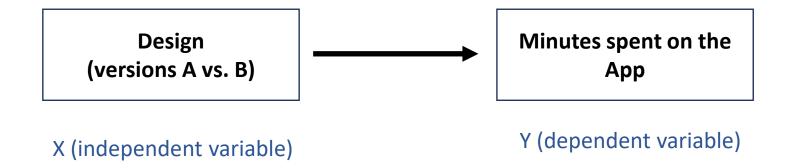
This is a hypothetical data example.

Perspective - 2

• Both long and wide data formats contain the exact same information.

• Long data: X (independent variable) appears as a column.

Wide data: X (independent variable) appears as column names.



Long Data

Conditions	Minutes Spent on App
Α	2
Α	13
A	0.5
Α	2
Α	3
Α	13
Α	20
Α	11
Α	8
Α	9
В	15
В	9
В	15
В	13
В	20
В	13
В	20
В	13
В	20
В	9

X (independent variable) as a single column

Wide Data

★ A	В
2	15
13	9
0.5	15
2	13
3	20
13	13
20	20
11	13
8	20
9	9

X (independent variable) as column names

This is a hypothetical data example.