

# Introduction to key influencers

TREND ANALYSIS IN POWER BI



**Maarten Van den Broeck**

Content Developer at DataCamp

# What are "key influencers"?

## Definition

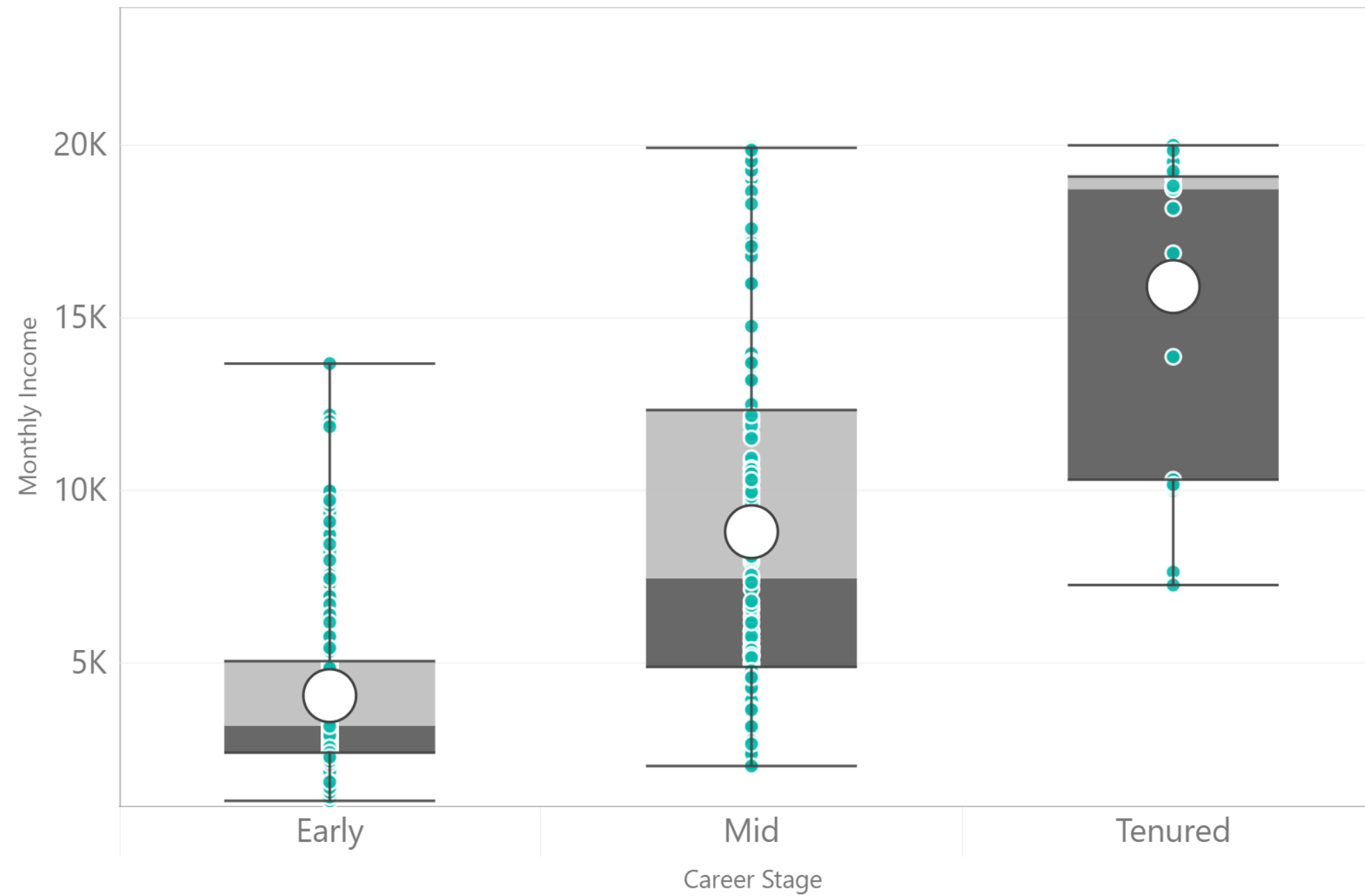
Explanatory variables which cause a significant change in the characteristic of a target variable.

## Use Cases

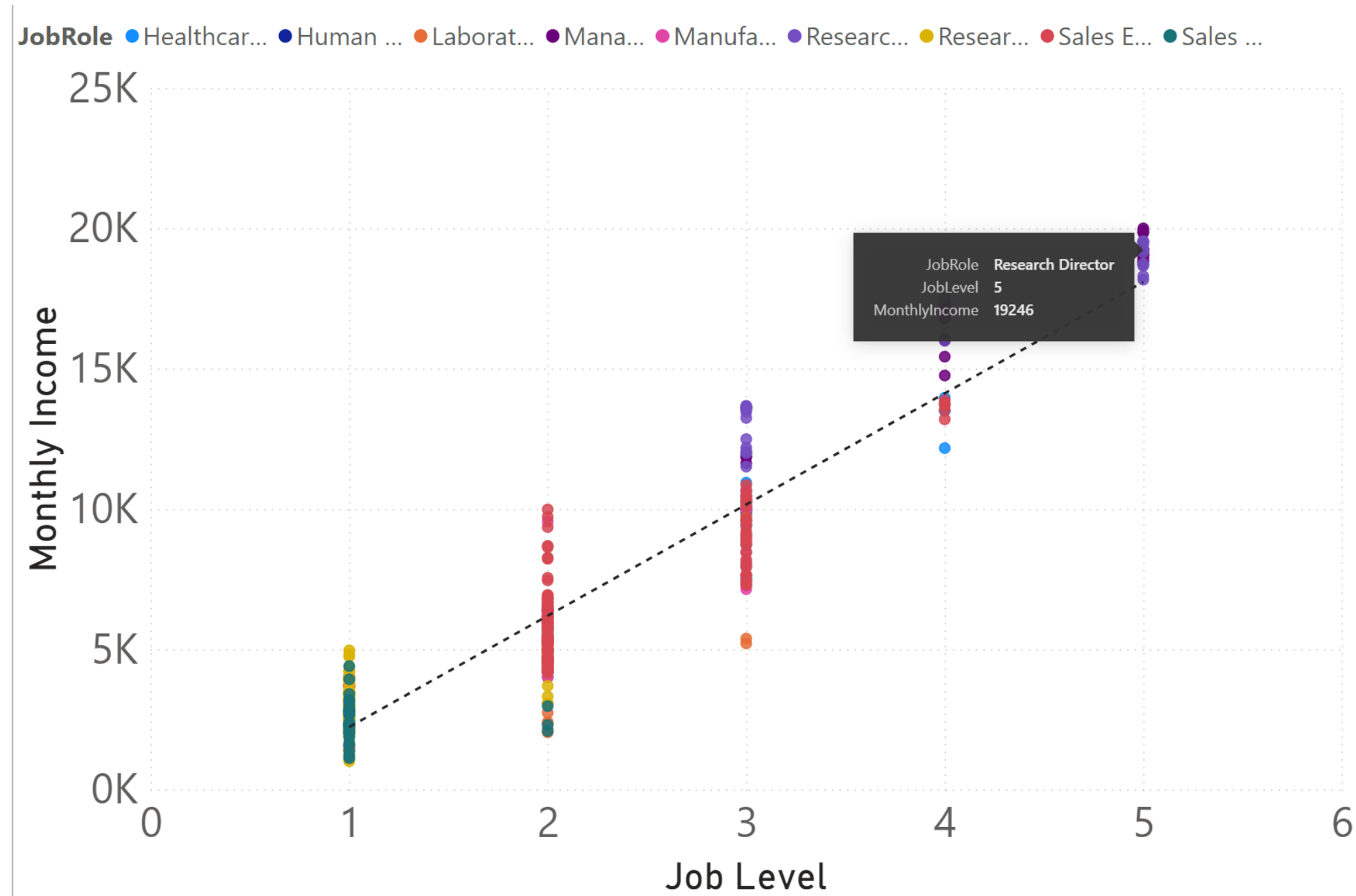
- Determine major drivers of a metric
- Compare the relative importance of variables
- Explore relationships between a target and another variable

<sup>1</sup> <https://docs.microsoft.com/en-us/power-bi/visuals/power-bi-visualization-influencers>

# What are "key influencers"?



# What are "key influencers"?



# Key influencer visualization

Key influencers Top segments

What influences MonthlyIncome to  ?

When...

...the average of  
MonthlyIncome increases  
by

**JobRole is Manager**

\$11.76K

JobRole is Research Director

\$10.30K

YearsSinceLastPromotion is  
more than 10

\$7.80K

YearsInCurrentRole is more  
than 5

\$3.61K

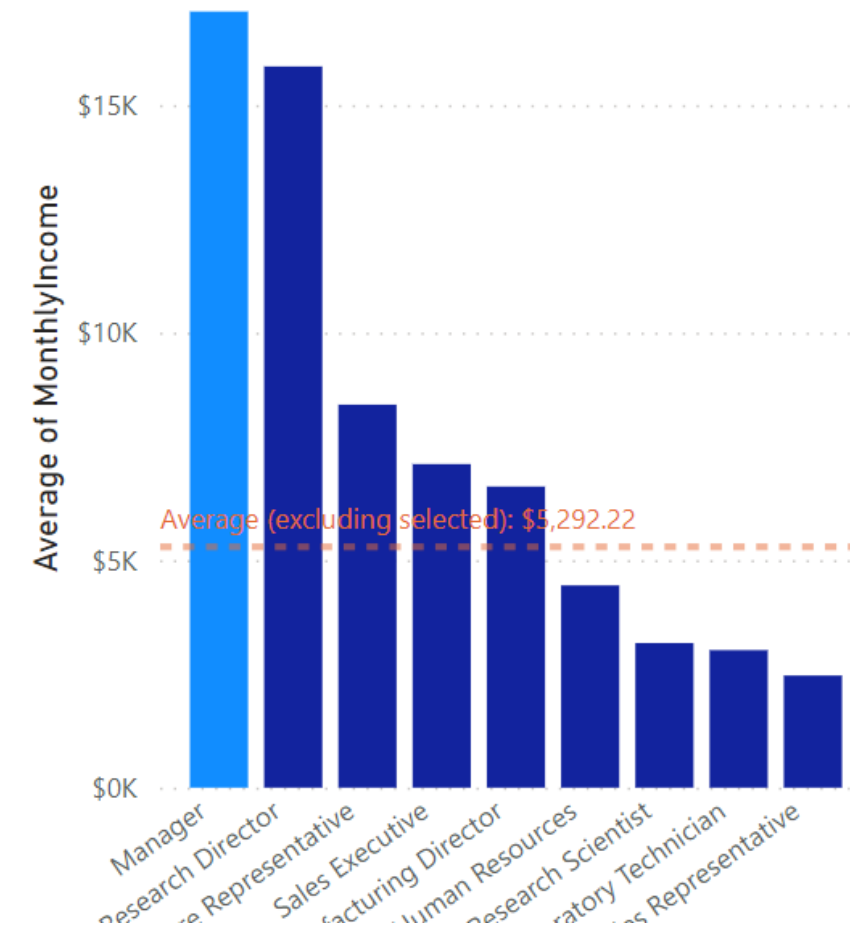
TotalWorkingYears goes up  
7.66

\$1.58K

YearsAtCompany goes up  
6.51

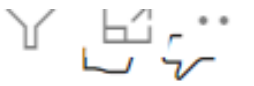
\$255.2

← MonthlyIncome is more likely to increase when JobRole is Manager than otherwise (on average).



# Key influencer visualization

Key influencers Top segments



What influences MonthlyIncome to  ?

When...  
....the average of MonthlyIncome increases by

**JobRole is Manager**

\$11.76K

JobRole is Research Director

\$10.30K

YearsSinceLastPromotion is more than 10

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← MonthlyIncome is more likely to increase when JobRole is Manager than otherwise (on average).

Age of MonthlyIncome

\$15K

\$10K

# Reasons why key influencers are not found

- **Problem: explanatory fields have too many categories**

Action: transform variable into categories

- **Problem: there aren't enough observations to derive patterns**

Action: increase the sample size or find new data

- **There are simply no key influencers**

Action: explore other explanatory variables

**Let's practice!**  
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# Using key influencers in Power BI

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**Let's practice!**  
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# Congratulations!

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# Trend Analysis in Power BI

## Time series

- Extracting variables
- Line charts
- Period-over-period changes
- Rolling average

## Influence of variables

- Decomposition trees
- Key influencers

# See you again!

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