

# How to Utilize Index Tipping Point Data in Plan Explorer

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- SQL Server DBA & DB Developer
- Chicago Suburban User Group Chapter Leader
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- Working with SQL Server since 2001
- Speaking since Early 2014
- Microsoft MVP (2017-2018)



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# Why Didn't That Query Use My Index?!?

- Non-Clustered Indexes that DO NOT cover a query
- Will the Query Optimizer choose:

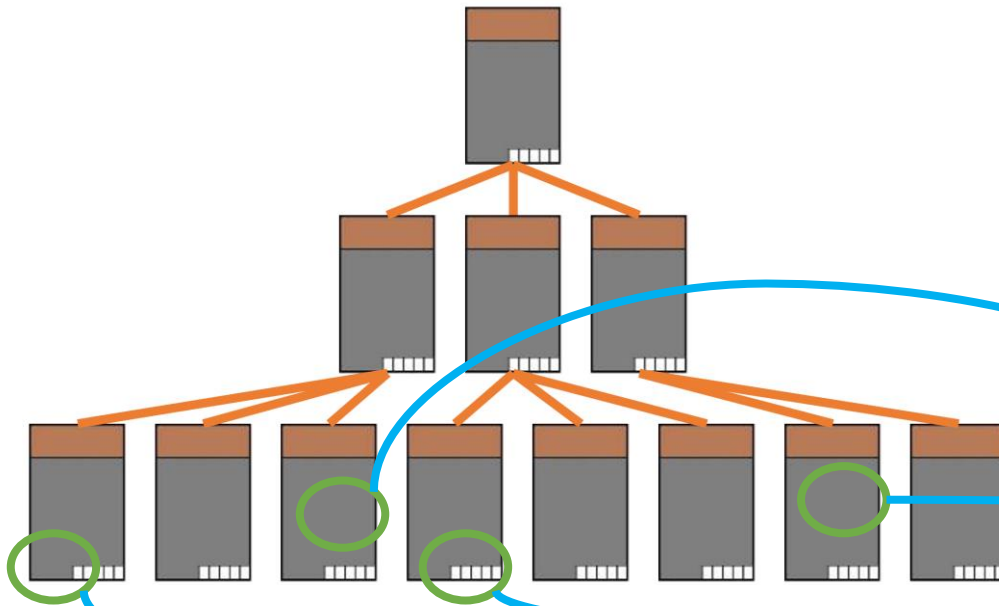
Seek + Lookup Op.

Or

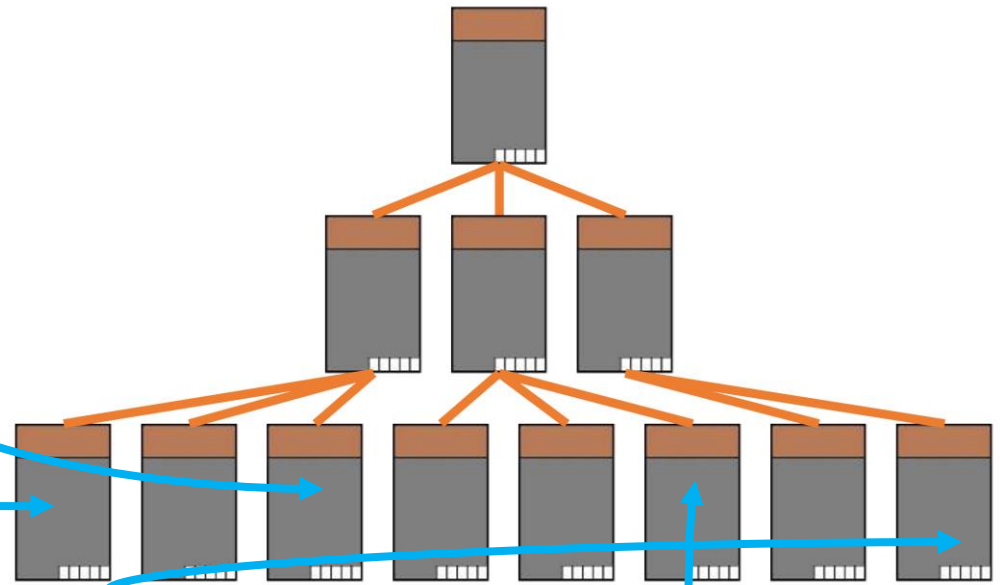
Full Table Scan?

- Decision threshold is called the Tipping Point

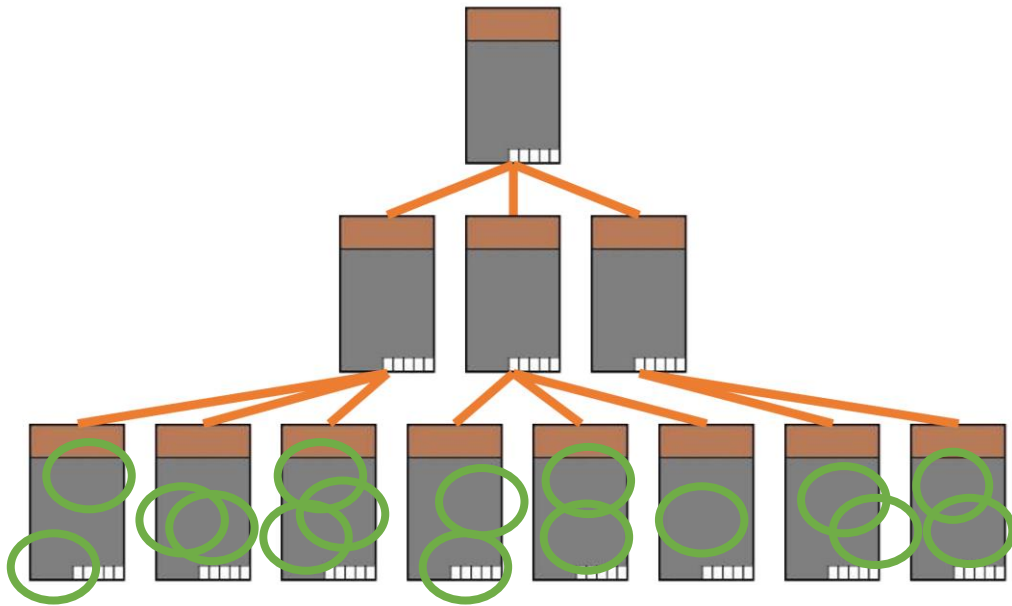
## Non-Clustered Index



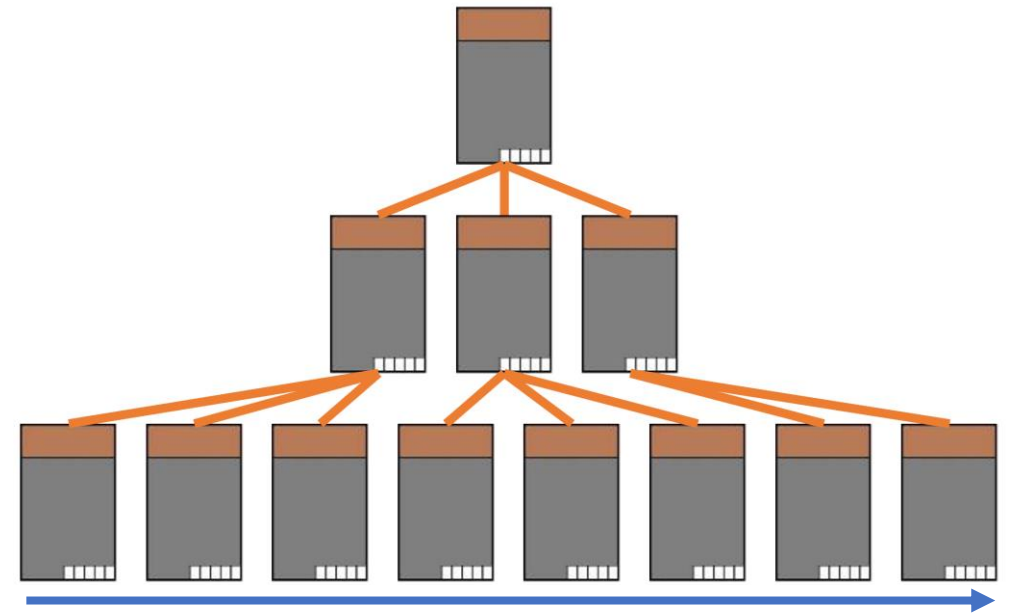
## Clustered Index



## Non-Clustered Index



## Clustered Index



DEMO

# Resources

## Tipping Point Blogs

– Kimberly Tripp

<https://www.sqlskills.com/blogs/kimberly/category/the-tipping-point/>

## Visualizing the Tipping Point with Plan Explorer

– Greg Gonzalez

<https://sqlperformance.com/2020/05/t-sql-queries/visualizing-the-tipping-point-with-plan-explorer>

# Thank you!

## Questions?

<https://github.com/SQLBek>

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