

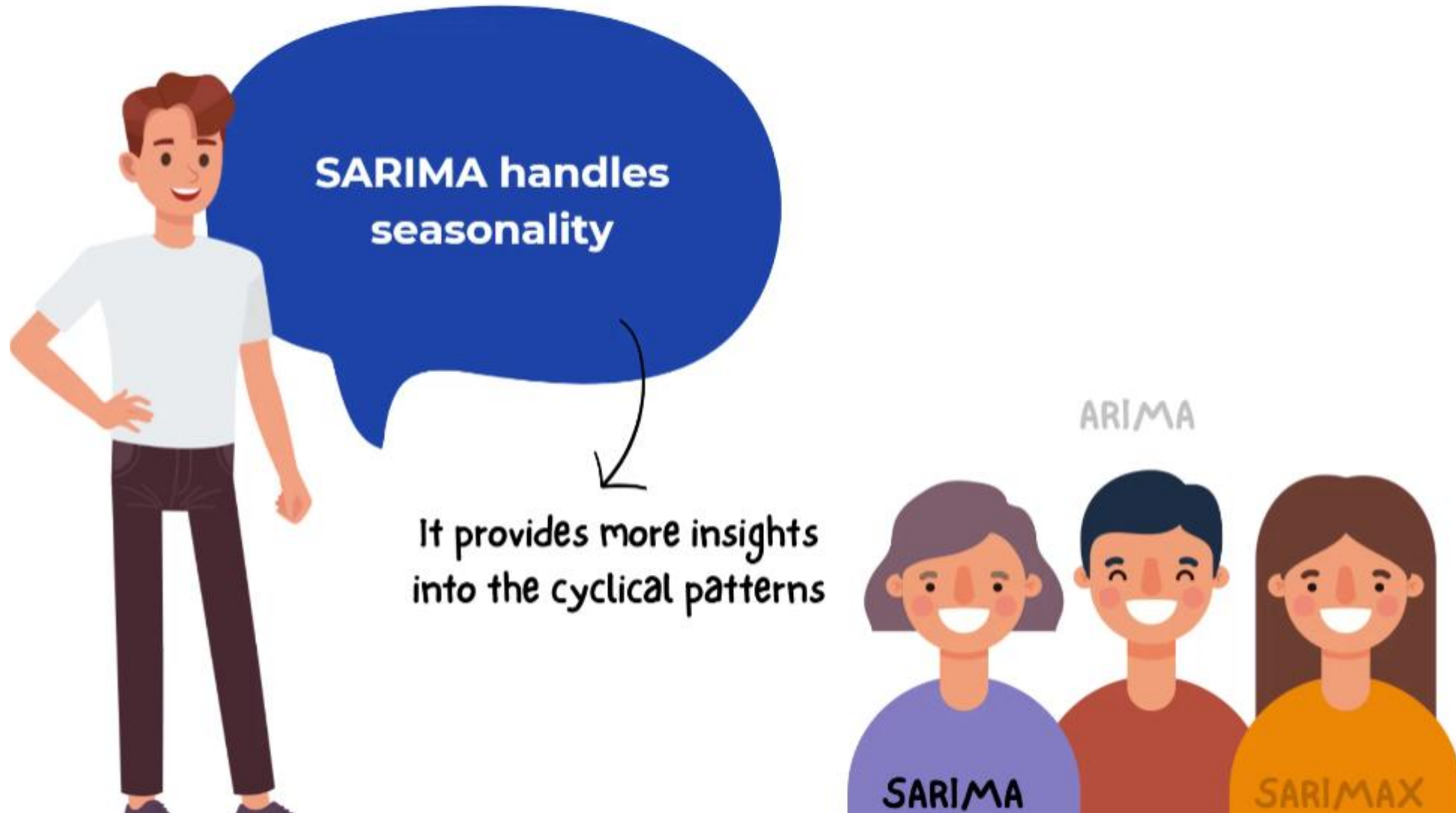
## Cognate/Professional Electives

# SARIMA



SEASONAL AUTOREGRESIVE INTEGRATED MOVING AVERAGE (SARIMA)

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SEASONAL AUTOREGRESIVE INTEGRATED MOVING AVERAGE (SARIMA)

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$SARIMA(p, d, q)(P, D, Q)m$

- $p, d, q$  = non-seasonal components
- $P, D, Q$  = seasonal components

- $P$  = seasonal autoregressive order

- $D$  = seasonal differencing order

- $Q$  = seasonal moving average order

→ 

- $m$  = number of periods in each season

SARIMA's  
Components



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**How SARIMA Works?**

- Seasonal Differencing (D): stabilize seasonal patterns in the data.
- Seasonal Auto-regression (P): looking at past seasonal data to forecast future sales.
- Seasonal Moving Average (Q): looks into the past errors.

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- SARIMA is best with data showing predictable fluctuations



Let's wrap it up..



**Thank you very much for listening.**