

# AI used in advertising and

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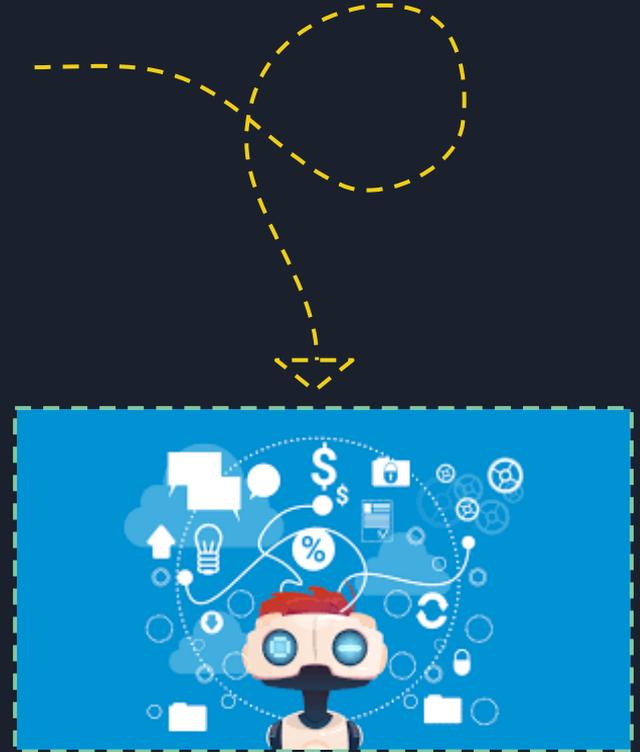
Ander Lorenzo  
Gorka Martinez  
Ander  
Insausti

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# Introduction

- Medicine, cars....
- More results for each dollar spent on advertising
- Amazon
- Competitors



# How AI is used in advertising



- Right ads to right customers
- Analyze behaviour and use real-time optimization
- Replace human negotiations and increase transparency

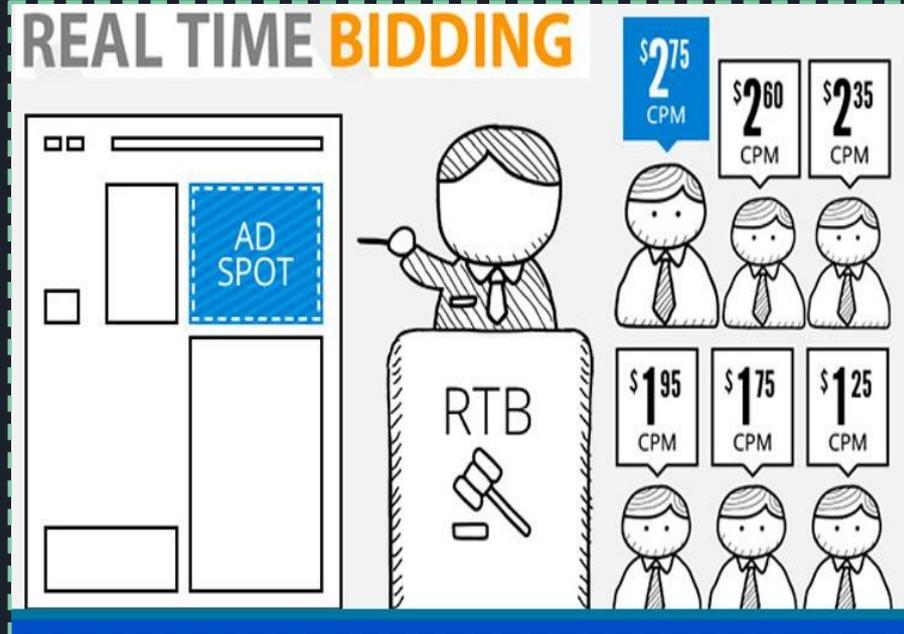
# Programmatic advertising

- In lots of digital channels: mobile, video, social...
- Out of home advertising: digital screens on bus stations or shopping malls.
- Programmatic adv. = AI + Machine learning = adv. in real-time.



# Real-Time Bidding (RTB)

- Buy/sell ads through real-time actions
- Visitor enters website and information is matched with advertisers
- Entering a website will probably make you see adverts of it in the next websites you visit



# Benefits of AI in advertisement



- More personalized experiences
- Select the right thought leaders and influencers
- Make better decisions faster
- Improve ROI

# More personalized experiences

- Experiences tailored to them
- Personalized experiences
- Football and skateboard



# Select the right thought leaders and influencers

Large numbers of fans

Best audience

Basketball shirts





Make better  
decisions faster

Right data and insights



Improve ROI

Struggled with the effectiveness

Right audiences



# Potential obstacles to avoid with AI in advertising

Weak IT infrastructure

Strong IT infrastructure



Too little high-quality data

Difficult to manage the quality

Useful as the data

# Recommendation System

Purpose: to suggest relevant items to users

To achieve this task, two major categories of methods



Collaborative filtering methods

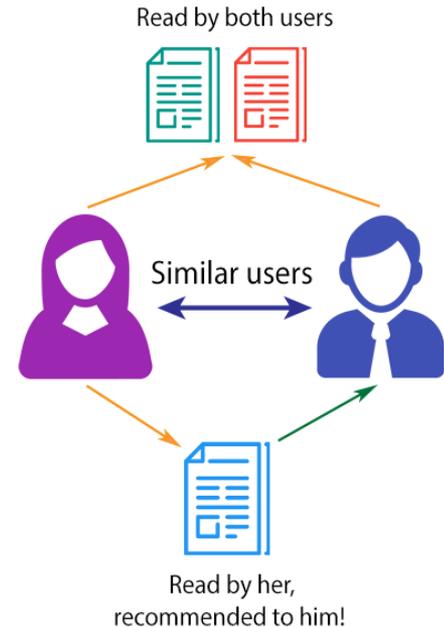
Content-based methods

# Collaborative filtering methods

- Are based on the past interactions recorded between users and items.
- Main advantage: they require no information about users or items.
- Disadvantage: it is impossible to recommend anything to new users, or users/items with few interactions.



## COLLABORATIVE FILTERING

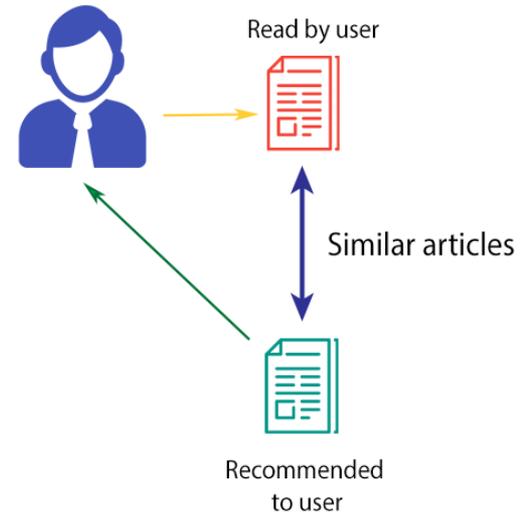


# Content-based methods

- Less start problem than collaborative approaches.
- New users or items can be described by their characteristics.
- Only new users / items with unseen features will suffer from this drawback.



## CONTENT-BASED FILTERING



# Recommendation engine processes data in four phases

1

Collecting the data

2

Storing the data

3

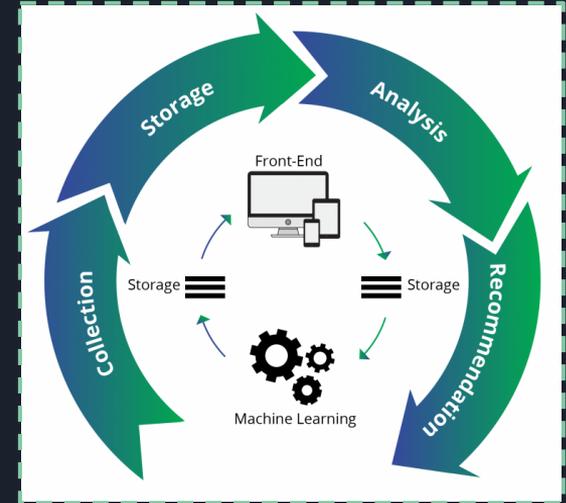
Analyzing the data

4

Filtering the data

Content-based

Collaborative



Real-time system

Near-real-time analysis

Batch analysis

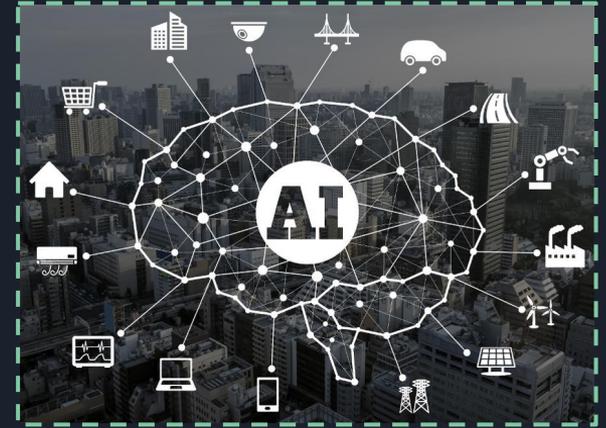
# Privacy

- Consumers vs organizations using their data
- Make sure of using data in ethical way
- Tools need to be explicitly programmed, not going beyond the acceptable.



# Conclusion

- Advance of artificial intelligence has been huge in recent years.
- The functioning of a machine is more efficient and fast than the human mind.
- This can be generalised to more aspects of life in the future.





THE END

QUESTIONS?