



Diving into an AI use case AI Shot #3 @ VISUM

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01

The Learning Spectrum
AI shot

02

Embedding Domain Knowledge
AI shot

03

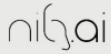
Diving into an AI use case

04

Semi-Supervised Learning
AI shot

The opportunity: Promoting upselling through the proposal of matching outfits





use case canvas

Company:

Owner:



Prediction

What questions do you want to be answered?

What missing information would support better decisions?



Decision Process

How the predictions will be used to create value to the business:

- What's the cost-benefit trade off associated to each decision?
- Are there any resource constraints?



Opportunity

What can be optimized to reach the company objectives?

Promoting upselling through the proposal of matching outfits



Business Integration

Where will the decision process be integrated in the value chain?

What will change in order to integrate the model in the company workflow?



Consequences

What are the potential by-products of the use case?

What will change in the value chain?



Data

What data/information is relevant to the problem?

- Granularity, relevant patterns, target values, etc.

What patterns have you observed that correlate with the objective?



Risks

What are the potential risks for wrong decisions?

Is there any regulatory restriction in the area?



Key Performance Indicators

Which KPIs will improve with the opportunity? (business and technical)

Boost Sales (ARPU)



Opportunity Size

What is your (gross) estimation for the use case potential?

Prediction

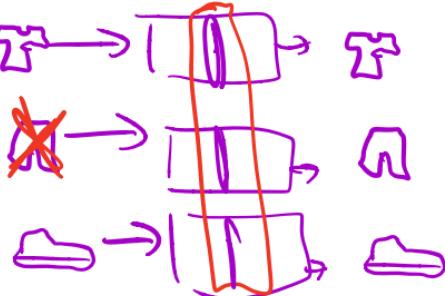
- What questions do you want to be answered?
- What missing information would support better decisions?

$$f = \text{Output} \times \underset{\substack{\text{Occasion?} \\ \text{Culture} \\ \text{Market}}}{\text{Context}} \times \text{Style} \times \text{Feedback} \rightarrow \text{Additional Output}$$

1 → N

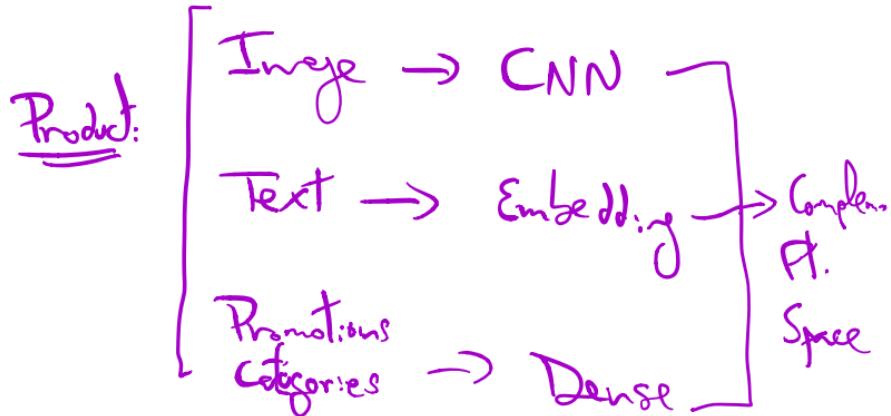


Avg.? X



nib.ai

(Triplet Loss)





Data

- What data/information is relevant to the problem?
 - Granularity, relevant patterns, target values, etc
- What patterns have you observed that correlate with the objective?

Target: Subjective Assessment from fashion experts

Data: Set of Query Products

“ “ Missing Products

Product:
Image
Descr:pt.
Category



Key Performance Indicators



- Which KPIs will improve with the opportunity? (business and technical)

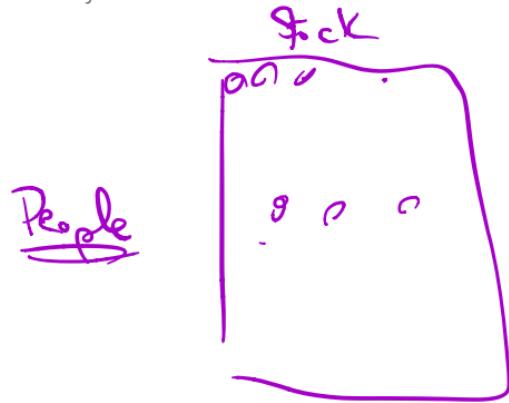
ARPU



Decision Process

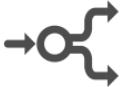


- How the predictions will be used to create value to the business?
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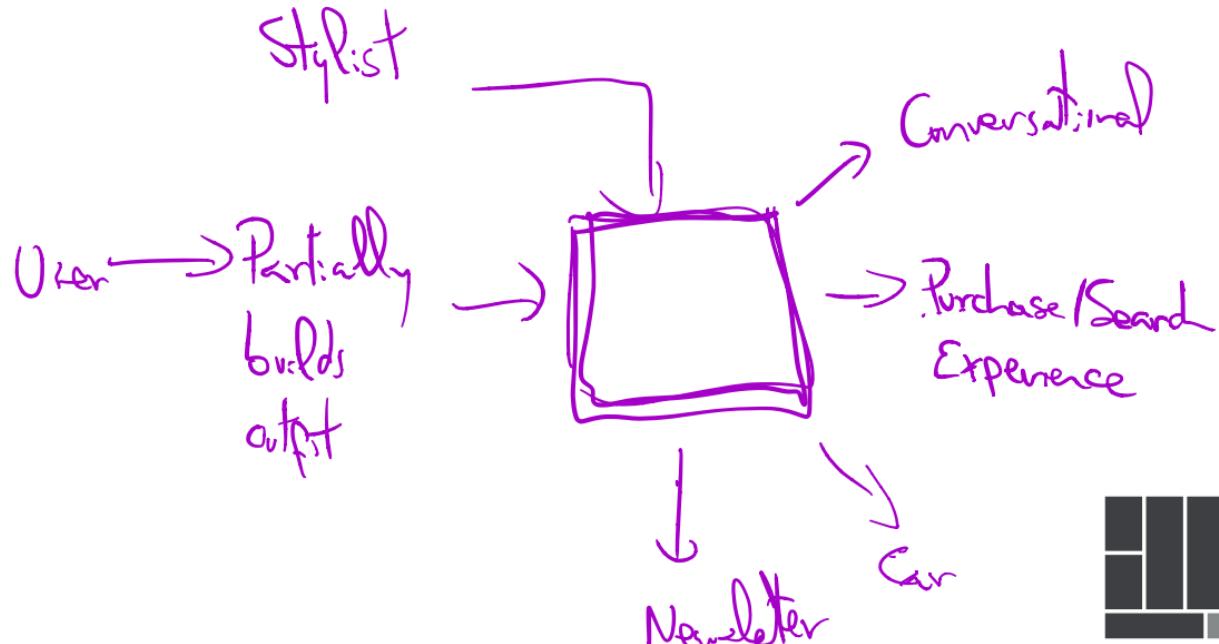
ML + Optimization





Business Integration

- Where will the decision process be integrated in the value chain?
- What will change in order to integrate the model in the company workflow?



Consequences



- What are the potential by-products of the use case?
- What will change in the value chain?





Risks

- What are the potential risks for wrong decisions?
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Collaborative Filtering Retired:
- New Items?
Inconsistent Labels

⊗ GDPR





Opportunity Size

- What is your (gross) estimation for the use case potential?

Accuracy, ROC AUC

$$1M \times 1\% \times \underbrace{10€}_{\substack{\text{Searches} \\ \uparrow}} + 10\% \rightarrow \text{Profit}$$

conversion
rate

$1 \rightarrow 1.1x$



90%; AUC



Thank you!
Questions?





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