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## Big Data Training Survey

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Preliminary results for AI aspects

Joint HMA/EMA Workshop on Artificial Intelligence in Medicines Regulation

Presented by Jörg Zinserling on 20 April 2021  
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Prepared with support from Andrea Mattsson (EMA)

An agency of the European Union



# Outline

- Background
- Objectives and participants
- Preliminary results
- Conclusions

## Background

- **'EU Network skills'**: Recommendation #4 in Big Data Steering Group work plan
- Existing training initiatives in the EU Regulatory Network:
  - **'Biostatistics & Clinical Trial Methodology'** for regulators' curriculum (*developed*)
  - **'Use of Real-world evidence'** for regulatory purposes' curriculum (*developed*)
  - **'Data Literacy'** for regulatory purposes' curriculum (*under development*)
  - Until finalisation of the three curricula, A **Big Data training signpost** is available.
- Questions:
  - Are there any gaps in the training curricula and signpost?
  - Which training modules to prioritise for development and delivery?

# Survey overview

## Objectives:

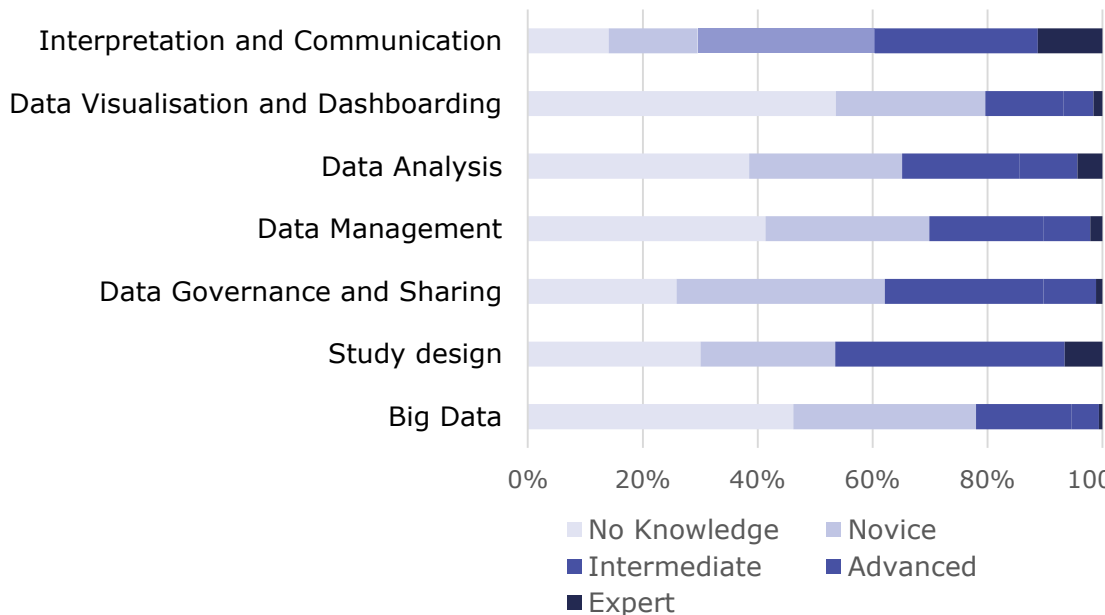
- Validate the scope of the three training curricula.
- Identify Big Data skills gaps and training needs in the EU Regulatory Network.
- Obtain feedback on the priority of the delivery and roll-out of trainings on Big Data skills.

## Participants:

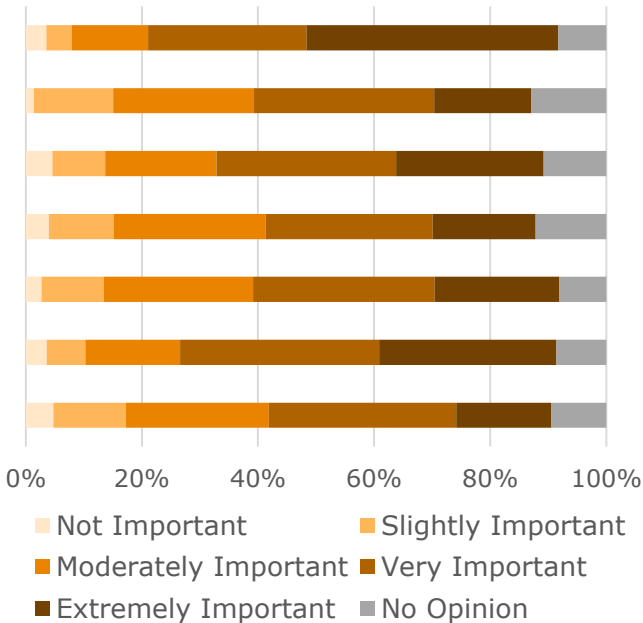
- 4715 experts in the EU Regulatory Network were invited to participate.
- 832 (17.6 %) responses were received.
- Response distribution by domain:
  - Human: 68 %
  - Veterinary: 18 %
  - Both: 13 %
  - Not defined: 1 %

# Preliminary results (1/3)

## Level of Proficiency

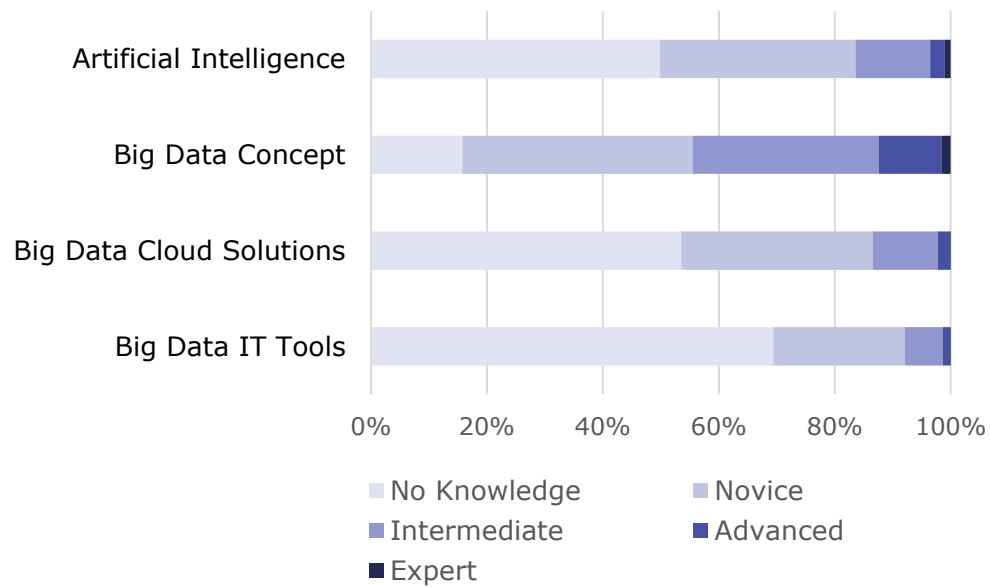


## Level of Importance

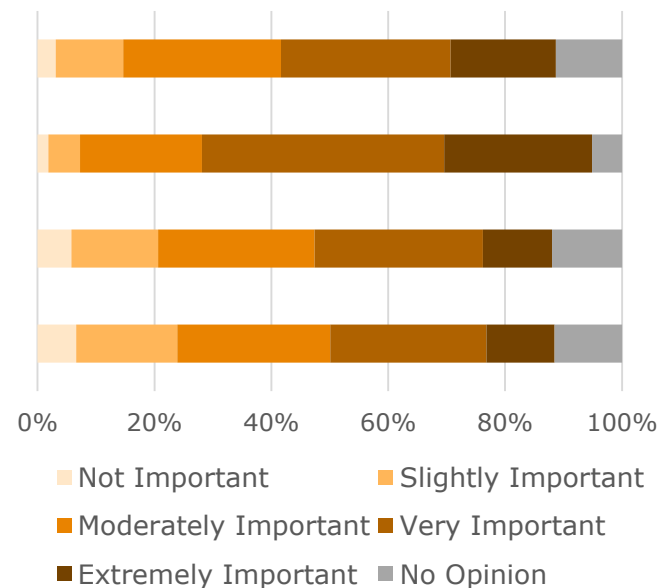


## Preliminary results (2/3)

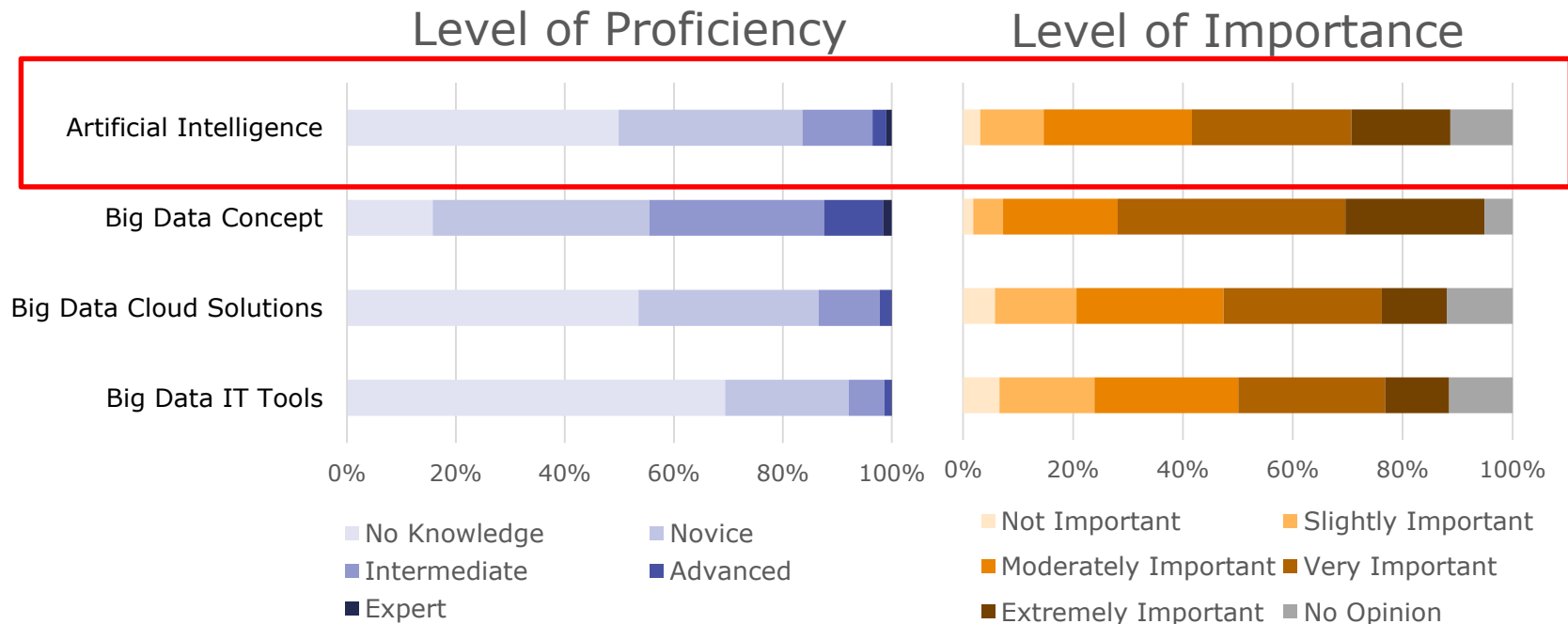
### Level of Proficiency



### Level of Importance



## Preliminary results (2/3)



## Conclusions

For the **Big Data – Concept, IT Tools** and **Cloud Solutions**, and **Artificial Intelligence** skills:

- Majority of the respondents have **no knowledge** or are **novices** with regards to listed skills
- Majority of the respondents consider it **at least moderately important** to develop training modules in these skills
- Among respondents there is an apparent **discrepancy** between the **reported skills** and the **perceived importance** of Artificial Intelligence as a topic.





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## Any questions?

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