



Evo-KnoMo: How to Evolve with the Current Times

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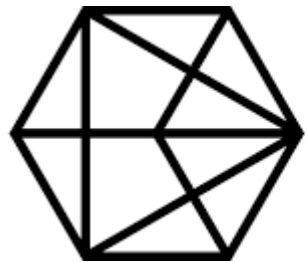
Ontology Engineering Group
Universidad Politécnica de Madrid, Spain

DO YOU REMEMBER 2030?!

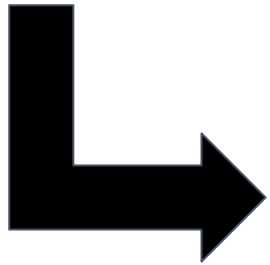
DO YOU REMEMBER 2030?!



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**Mobility
Data Space**



DO YOU REMEMBER 2030?!

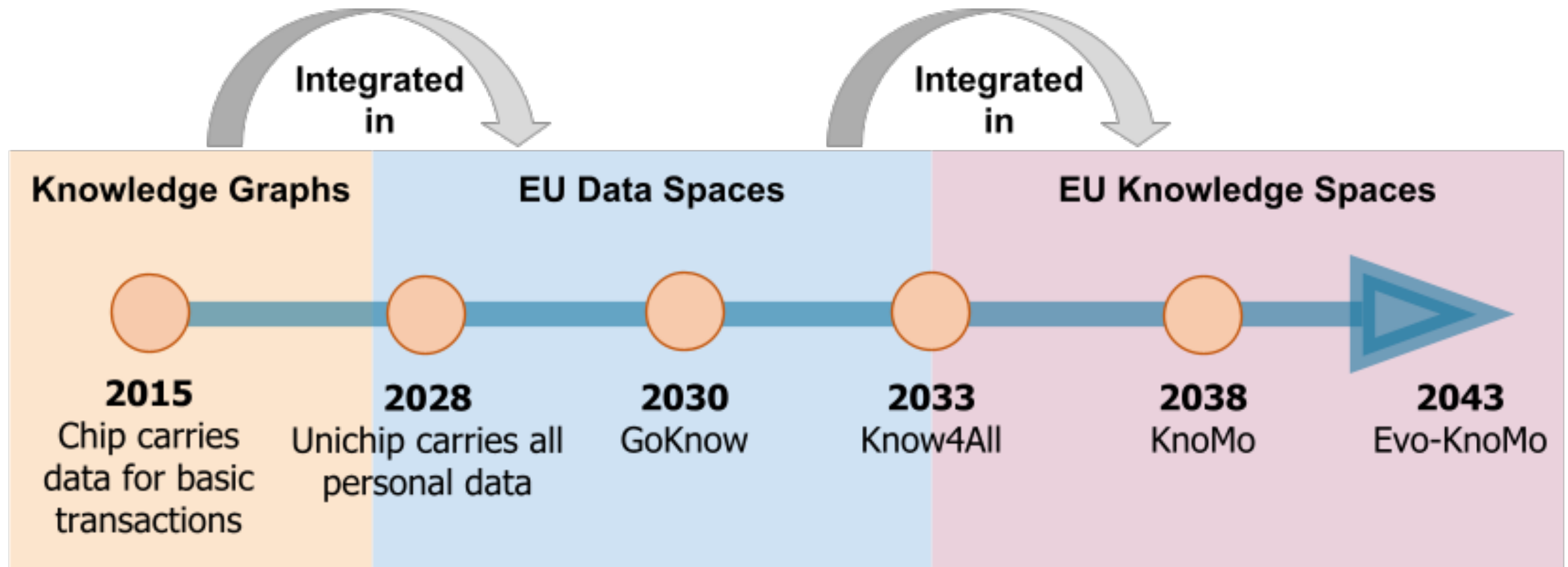


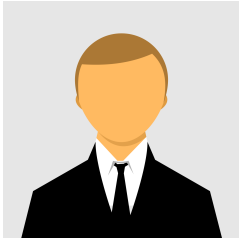
DO YOU REMEMBER 2030?!



DO YOU REMEMBER 2020?







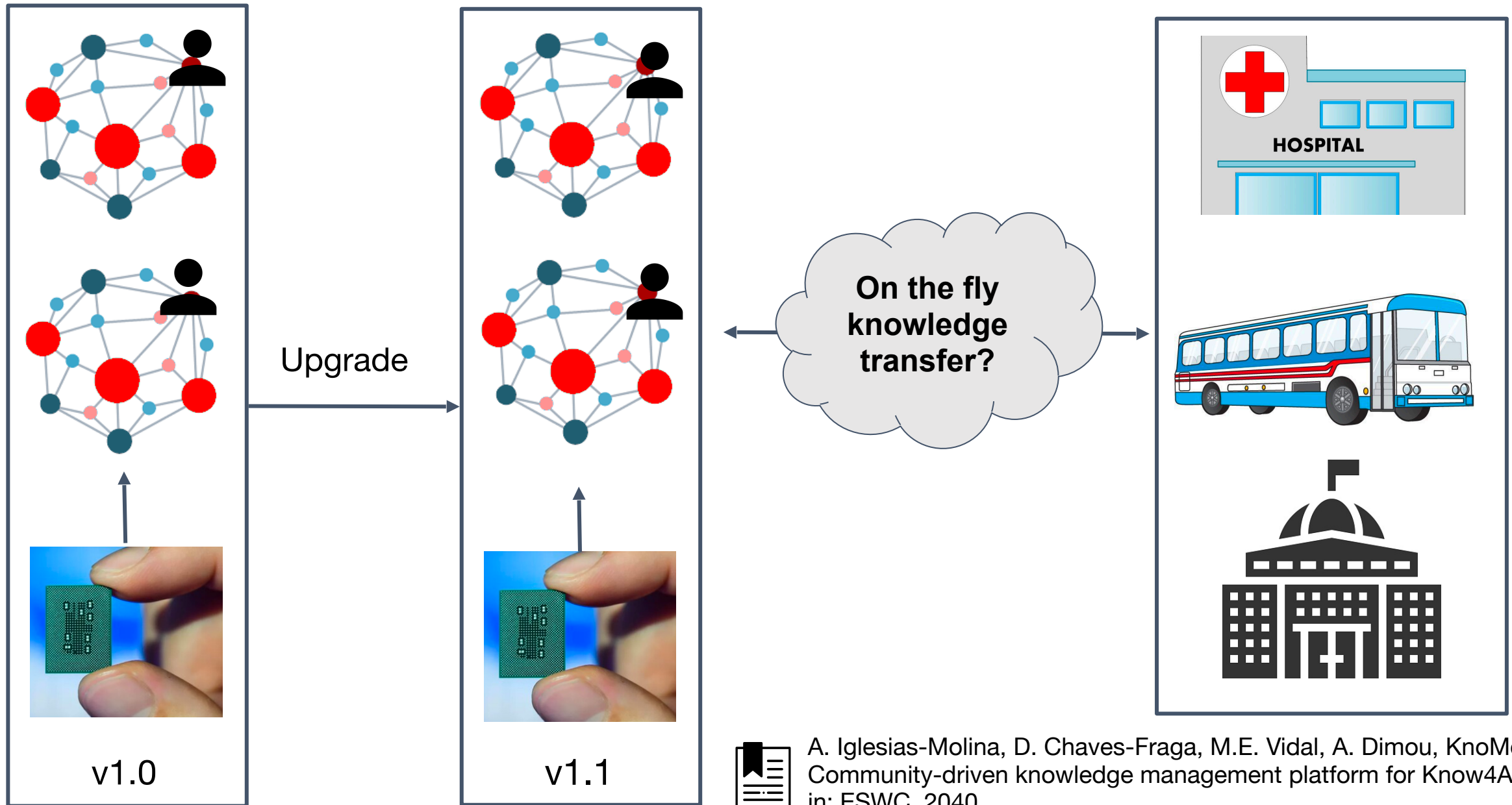
GoKnow

- Centralized data management
- Private services (e.g., health, transport, etc)
- High performance
- No personal data control
- Private systems/data structures
- UniChip materialization

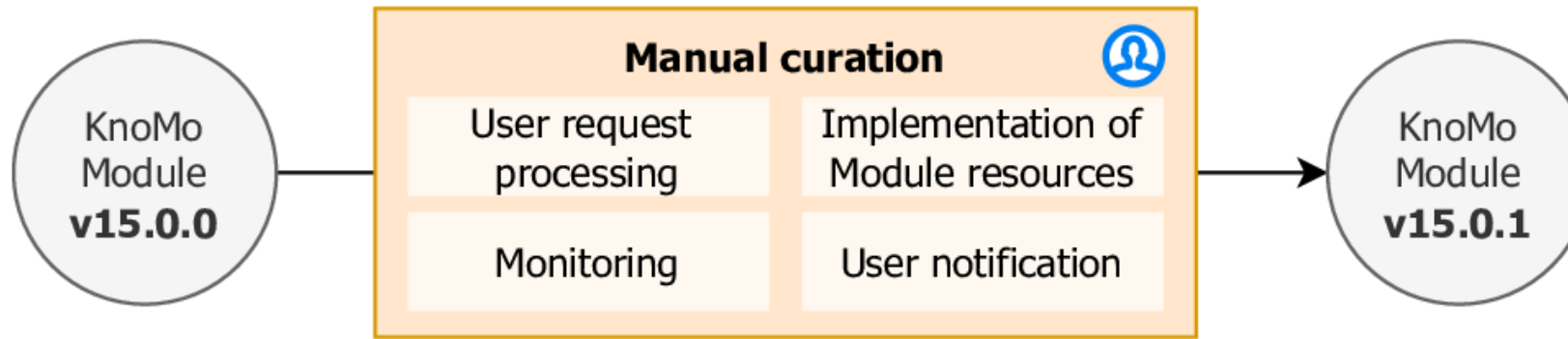
Know4A11



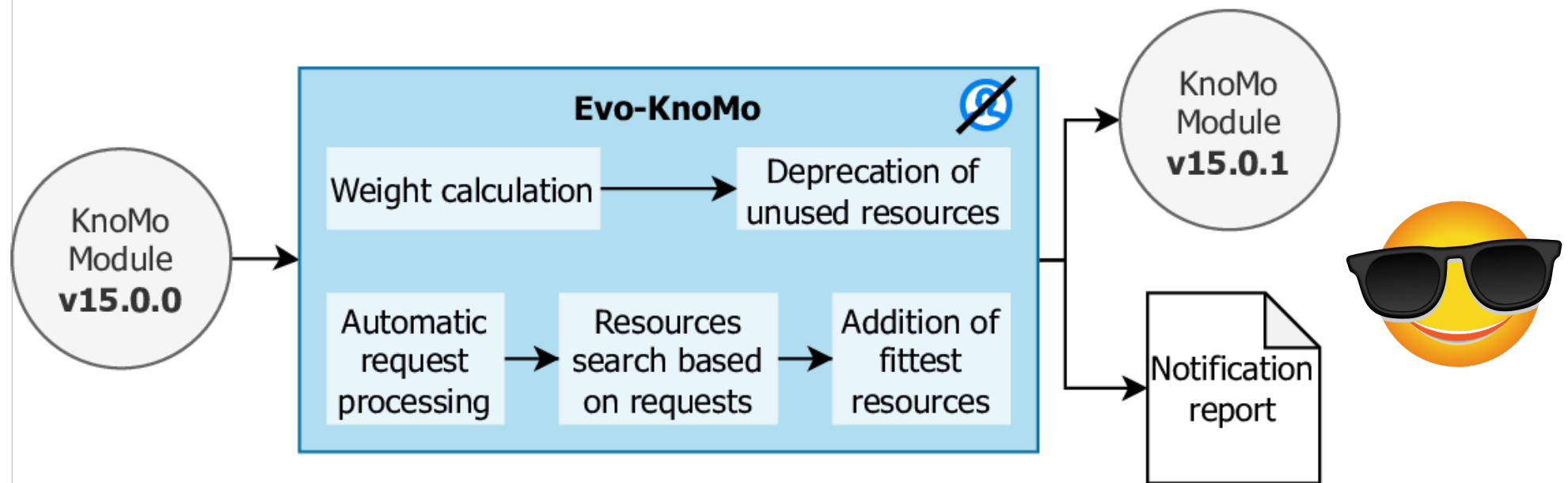
- Decentralized data management
- Public services (e.g., health, transport, etc)
- Domain vocabularies
- Semantic Web technologies
- **UniChip on-the fly integration**



A. Iglesias-Molina, D. Chaves-Fraga, M.E. Vidal, A. Dimou, KnoMo: Community-driven knowledge management platform for Know4All, in: ESWC, 2040.



Current KnowMo workflow



Automatic Evolution of KnowMo Modules

Domains: Transport and Healthcare KnowMo Modules

First evaluation: **accuracy of the framework**

- Evo-KnoMo VS manual evolution (curators during an eight-week).
- Correct evolution changes VS total of changes

Second evaluation: **usability questionnaire**

- 5 aspects: ease of use and learn, lack of complexity, understandability, and clarity
- Healthcare module: 5 institutions and a total of 63 curators
- Transport module: 3 institutions and a total of 55 curators



Domains: Transport and Healthcare KnowMo Modules

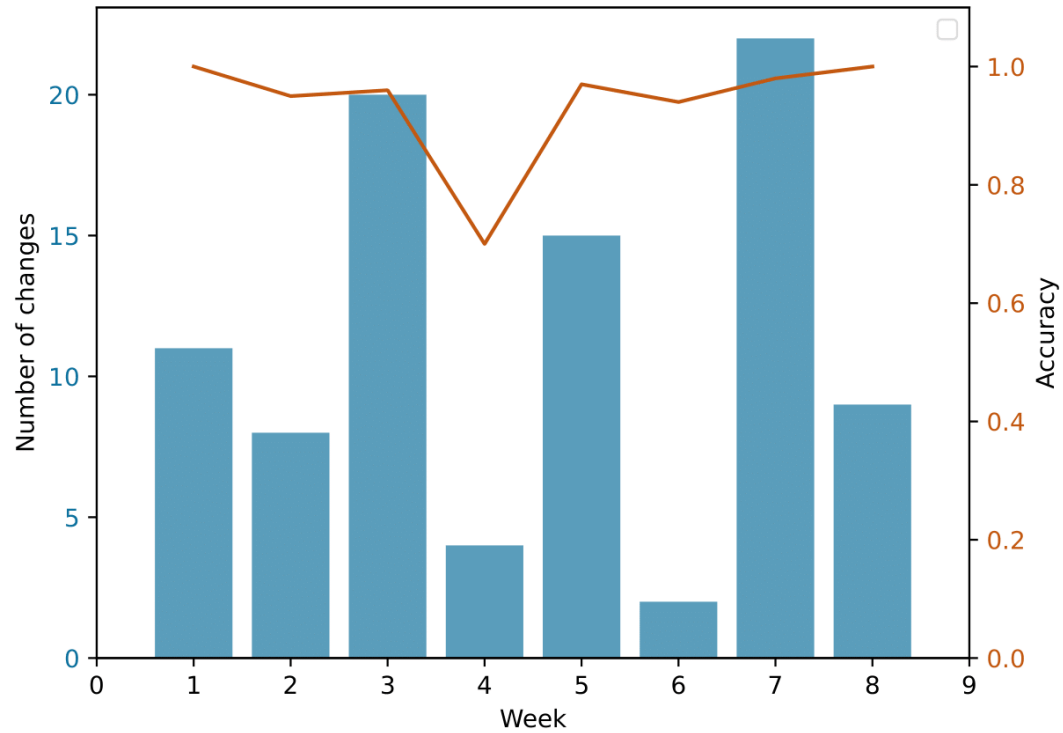
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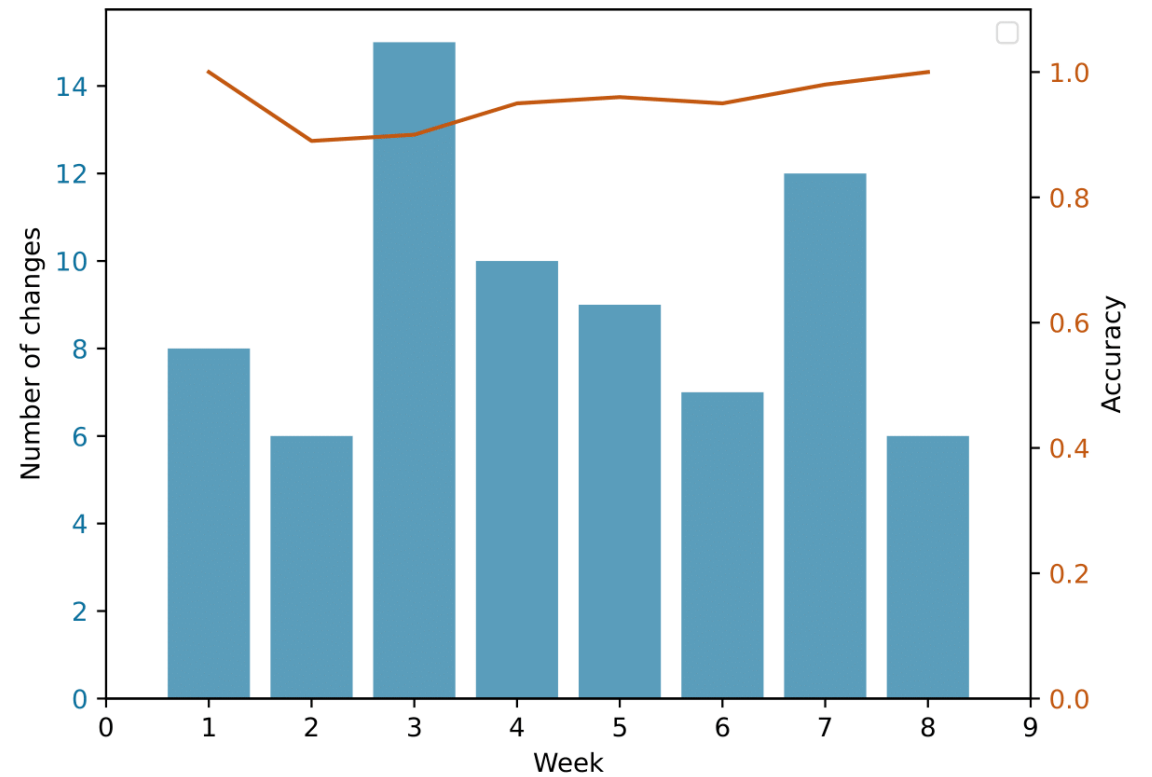
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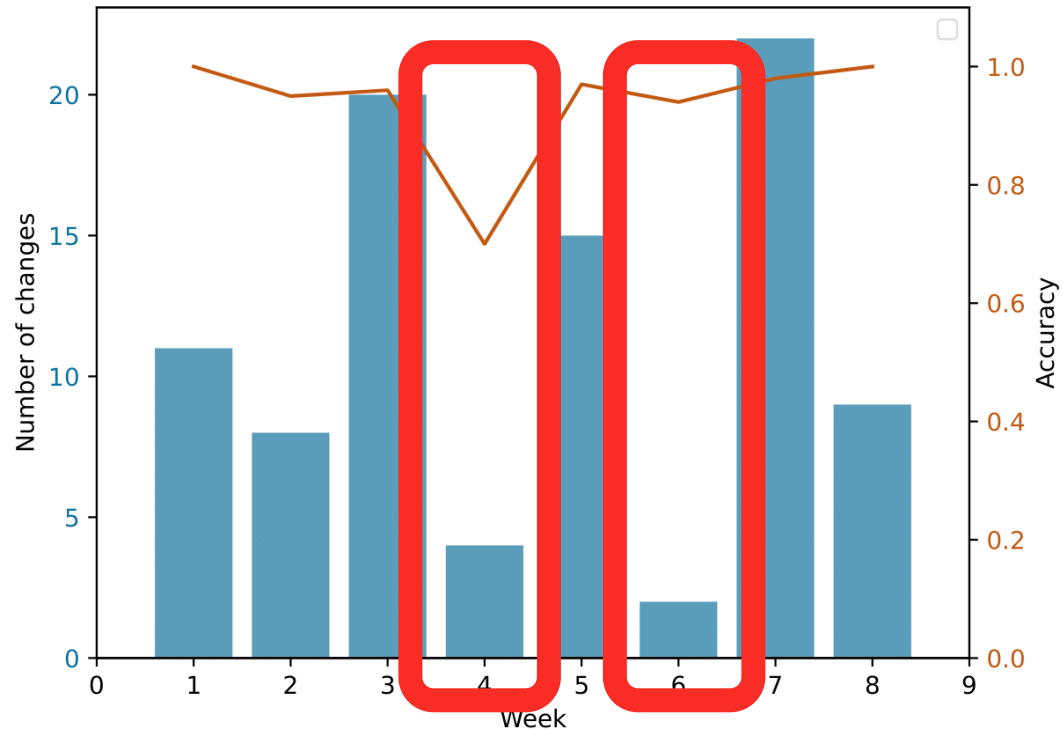




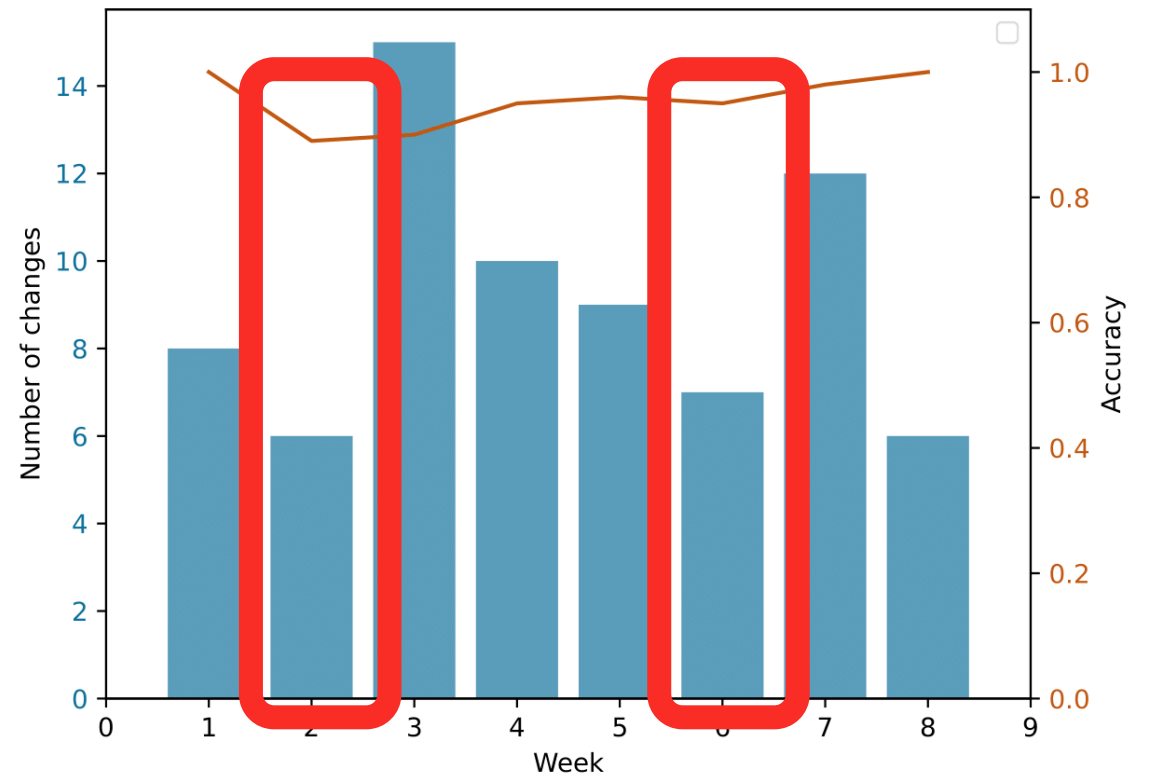
Healthcare KnoMo Module Accuracy



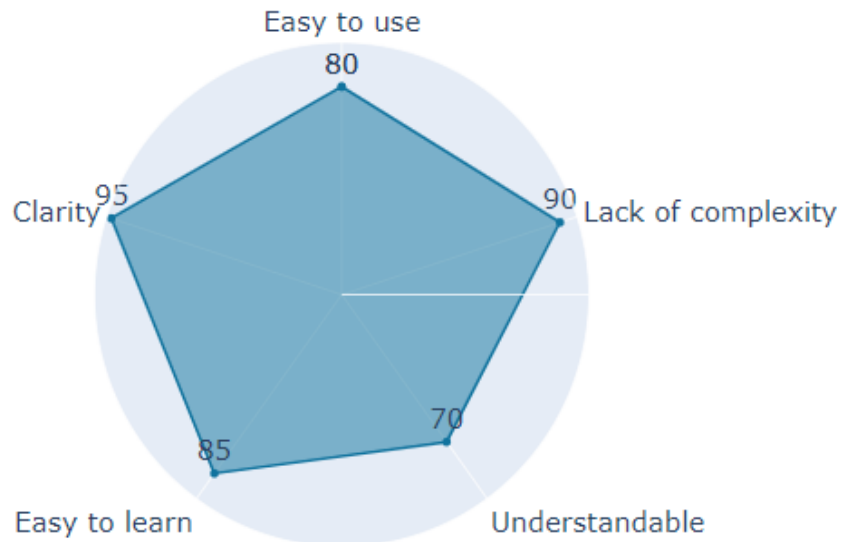
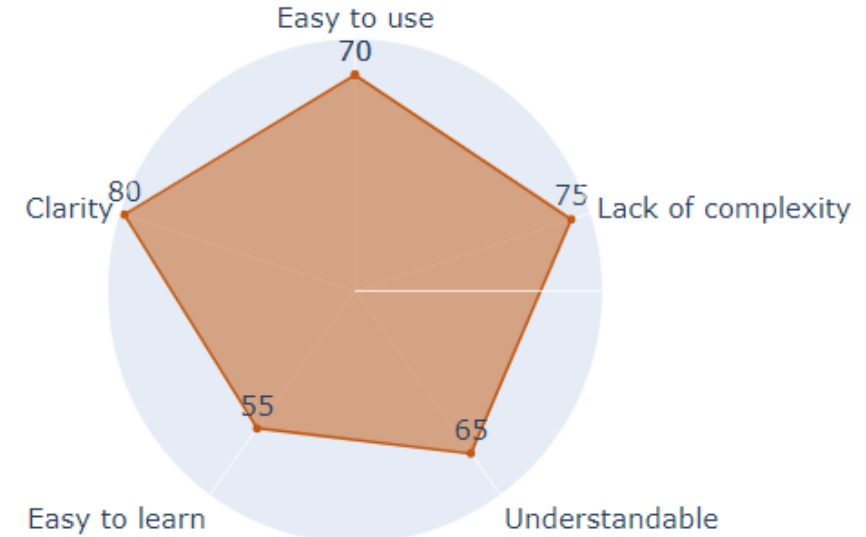
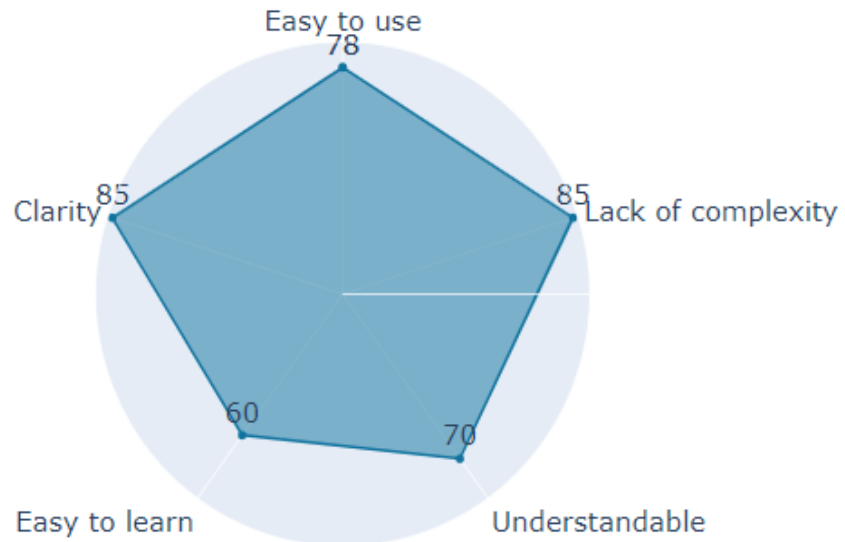
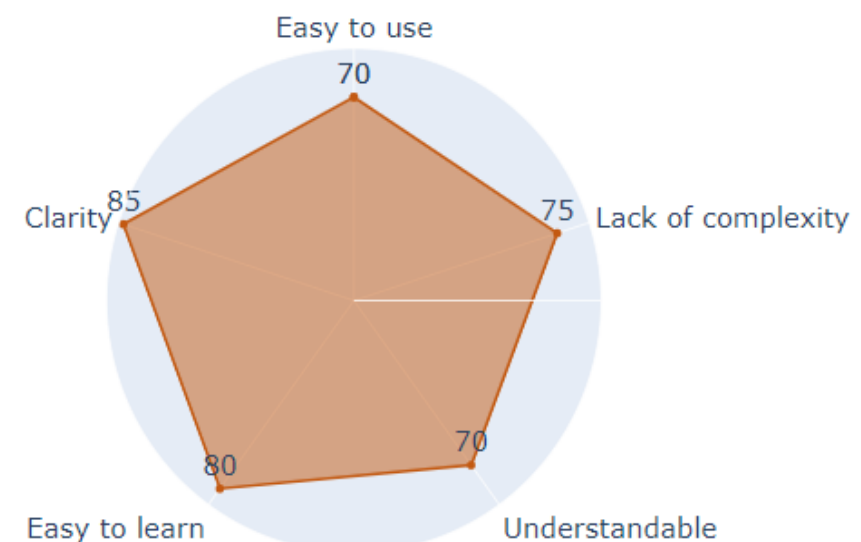
Transport KnoMo Module Accuracy

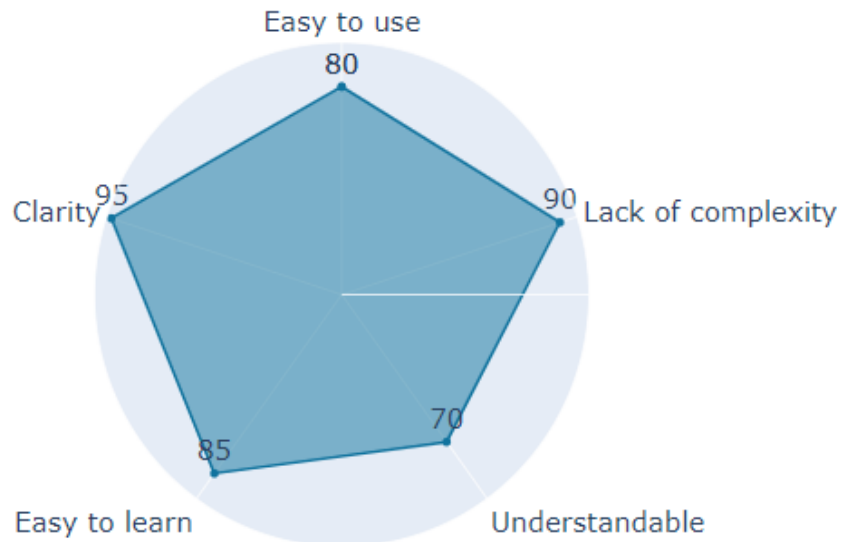
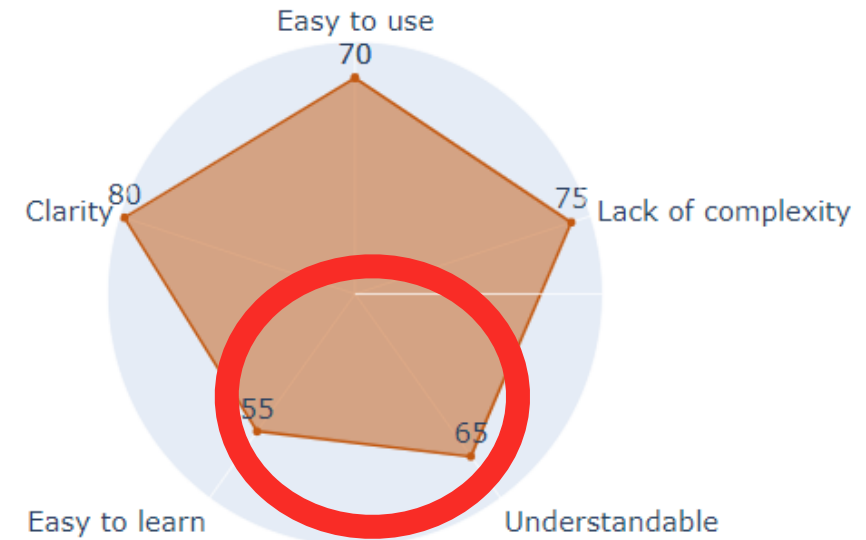
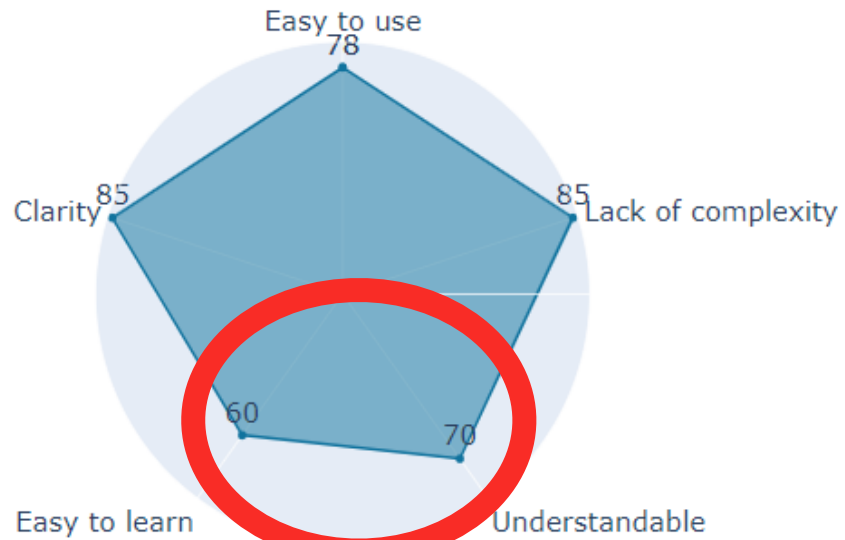
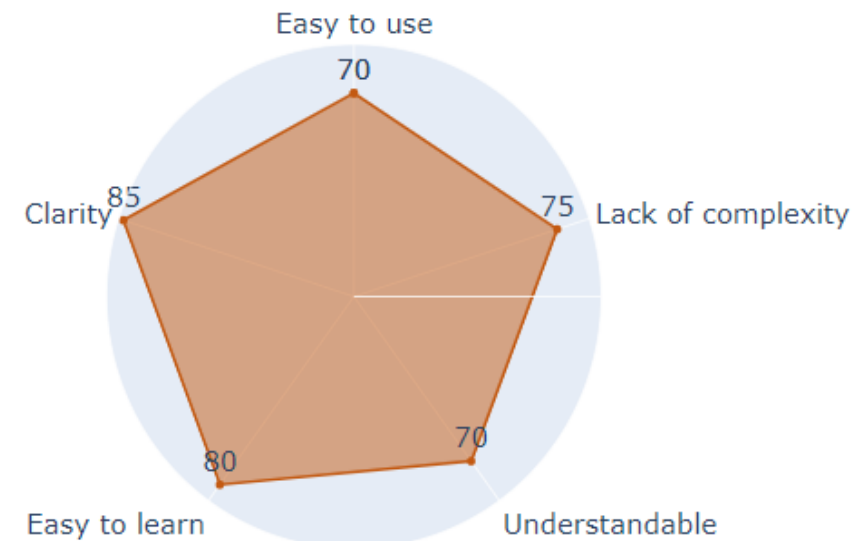


Healthcare KnoMo Module Accuracy



Transport KnoMo Module Accuracy

**Users of Health Module****Curatos of Health Module****Users of Transport Module****Curatos of Transport Module**

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Knowledge management + users in the loop



Interorganizational agreement (researchers, public administration, etc)



Decentralization is a must for public services and citizens



Try to not trip over the same stone twice (again)



Let's continue pushing together against the centralized movement



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Creete