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A collaborative approach to support document structuring process in the context of open government data

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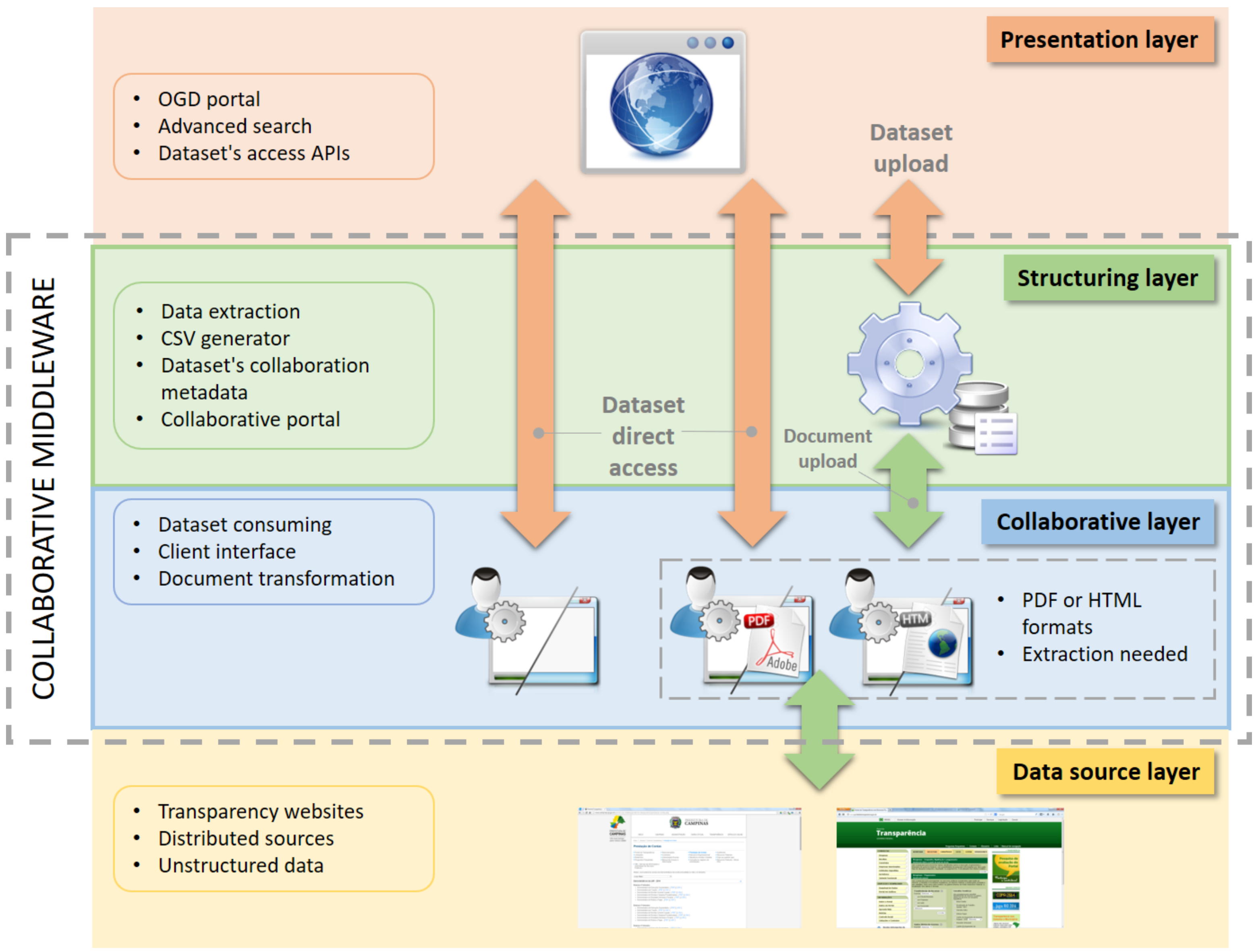
ABSTRACT

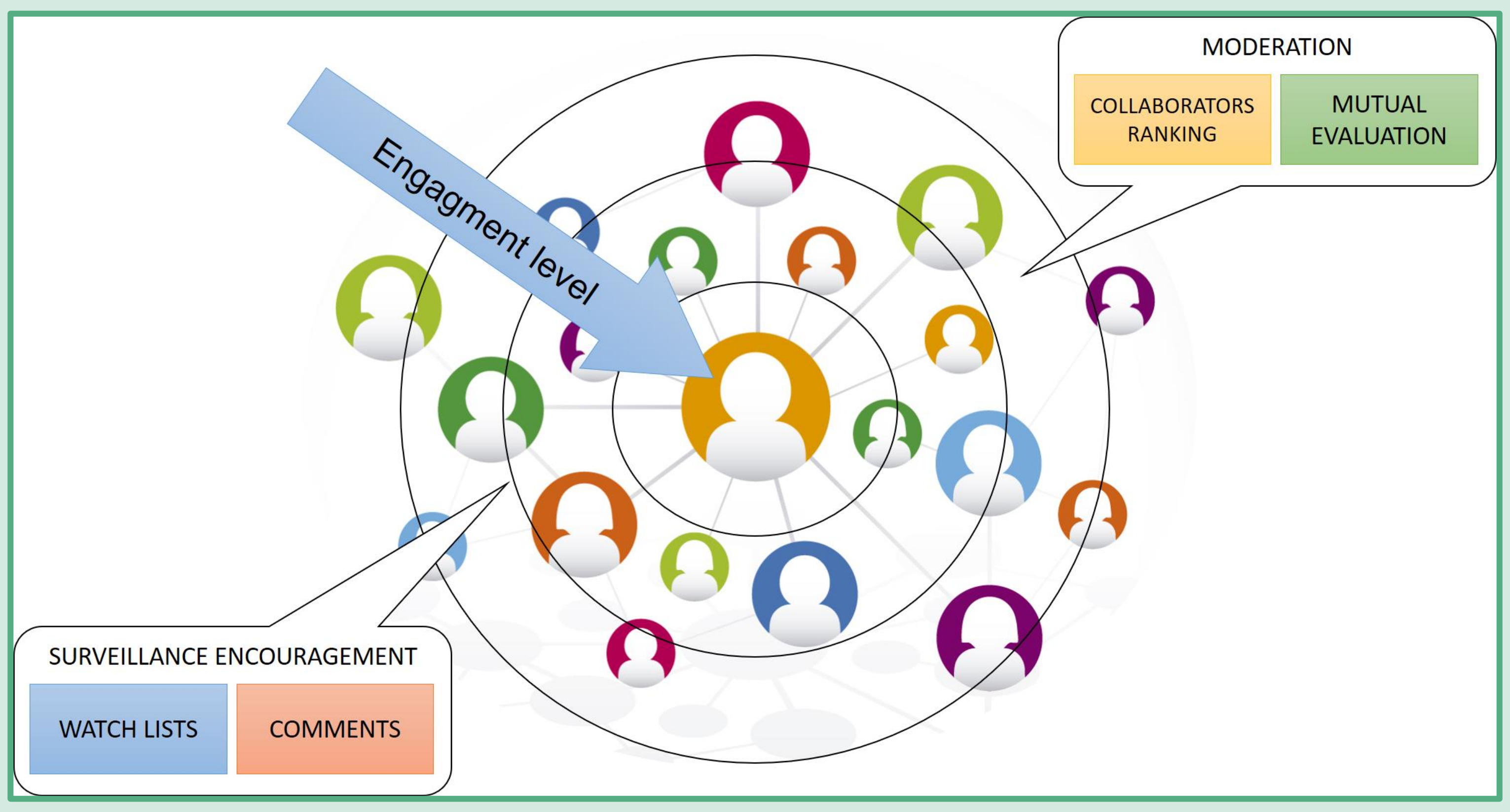
- Unstructured documents (*e.g.* PDF) and non-open file formats (*e.g.* XLS) are still found in the context of Open Government Data
- As they do not comply with Open Data, unlocking data from them is not a trivial task directed to everyone
- It was defined a software architecture that envisaged structuring of information into open data
- This work elaborates the collaborative approach to engage the open data community in the structuring process
- Contributions of this work are shown in the form of software requirements
- Expected outcomes include elements to guide implementation of fully operational software systems that provide to users tools to easily open data from any data source

BACKGROUND

- Data openness occurs when data is published in a way that complies with (among others) *accessible* and *machine processable* open data principles
- It is estimated that roughly 13% of published files in some main open data portals around the world have their data made available in PDF [1]
- Dynamic-generated HTML is the most widely preferred format followed by PDF, where both formats represented 79% of all published documents in Brazilian cities [2]
- PDF and HTML lack essentially machine-readability feature
- It was introduced a conceptual **layered software architecture** that envisaged a collaborative structuring of information into open data [3]



DESIGN & METHODOLOGY



- The main reason of a network of collaborators is to handle the numberless of unstructured and non-open data sources at any levels of government
- Collaborators conduct the structuring process in order to make data accessible and machine processable
- They can be encouraged by the dissemination of content in the press that demands opening data, *e.g.* when an agency discloses budgetary information
- The proposed collaborative approach is based on two main requirements: **moderation** and **surveillance encouragement** [4]

EXPECTED OUTCOMES

- Involve the open data community in the structuring process
- Support process and provide tools to foster greater civic participation thus meet the need of public interested in consuming data
- Guide the implementation of fully operational software systems to easily open data from any agency
- Define a model as well as a solution (even temporarily) to push organizations to the data revolution by opening public records

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