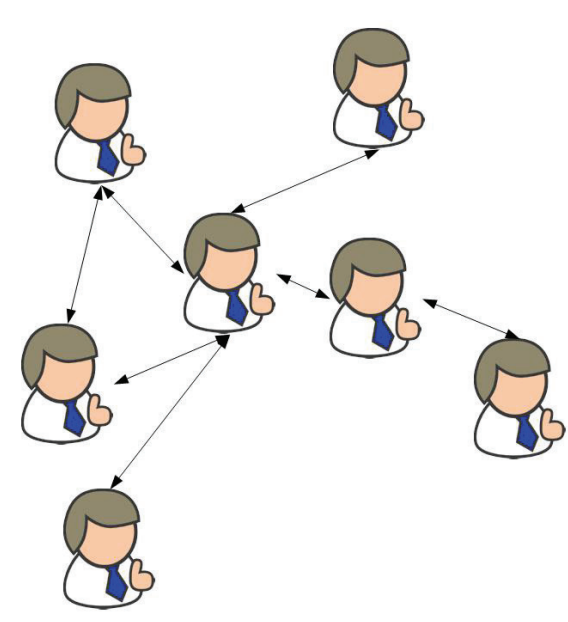


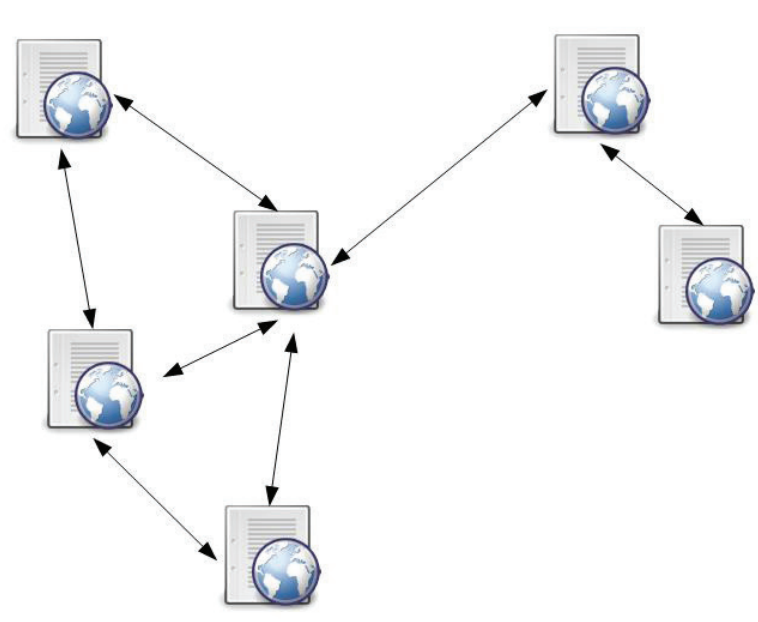


Framework

Actor Network

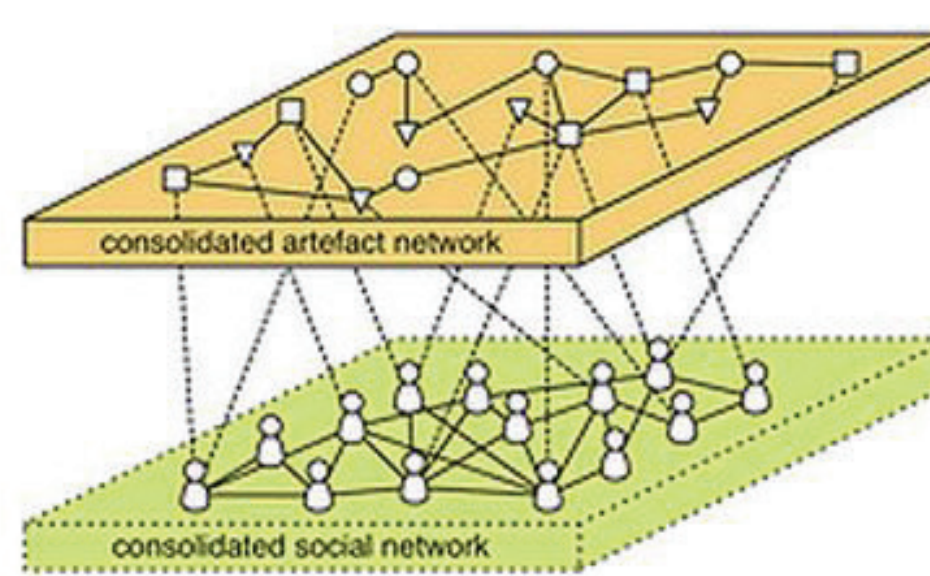


Artifact Network



Artifact-Actor Network (AAN)

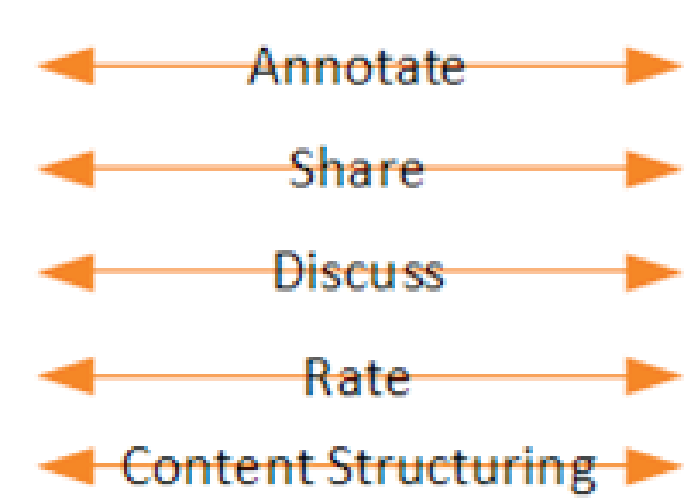
Creation of more meaningful relations between artifacts and actors



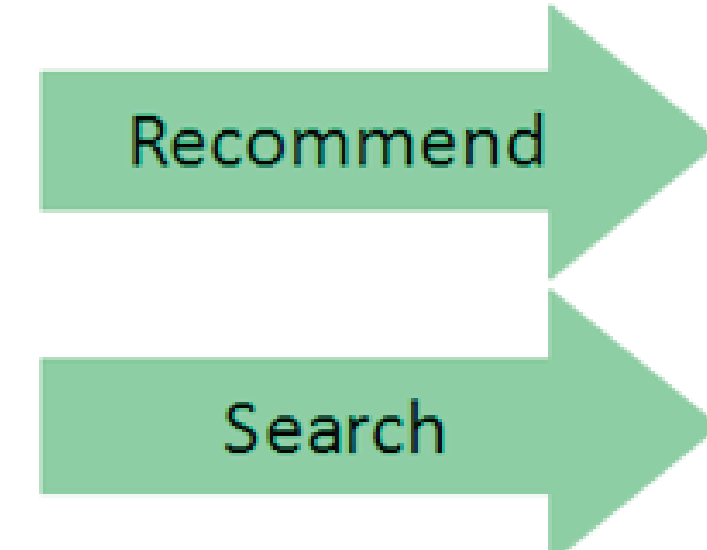
Services of SSS

Explanation of how these relations emerge and how they can be exploited

Low Level Services:

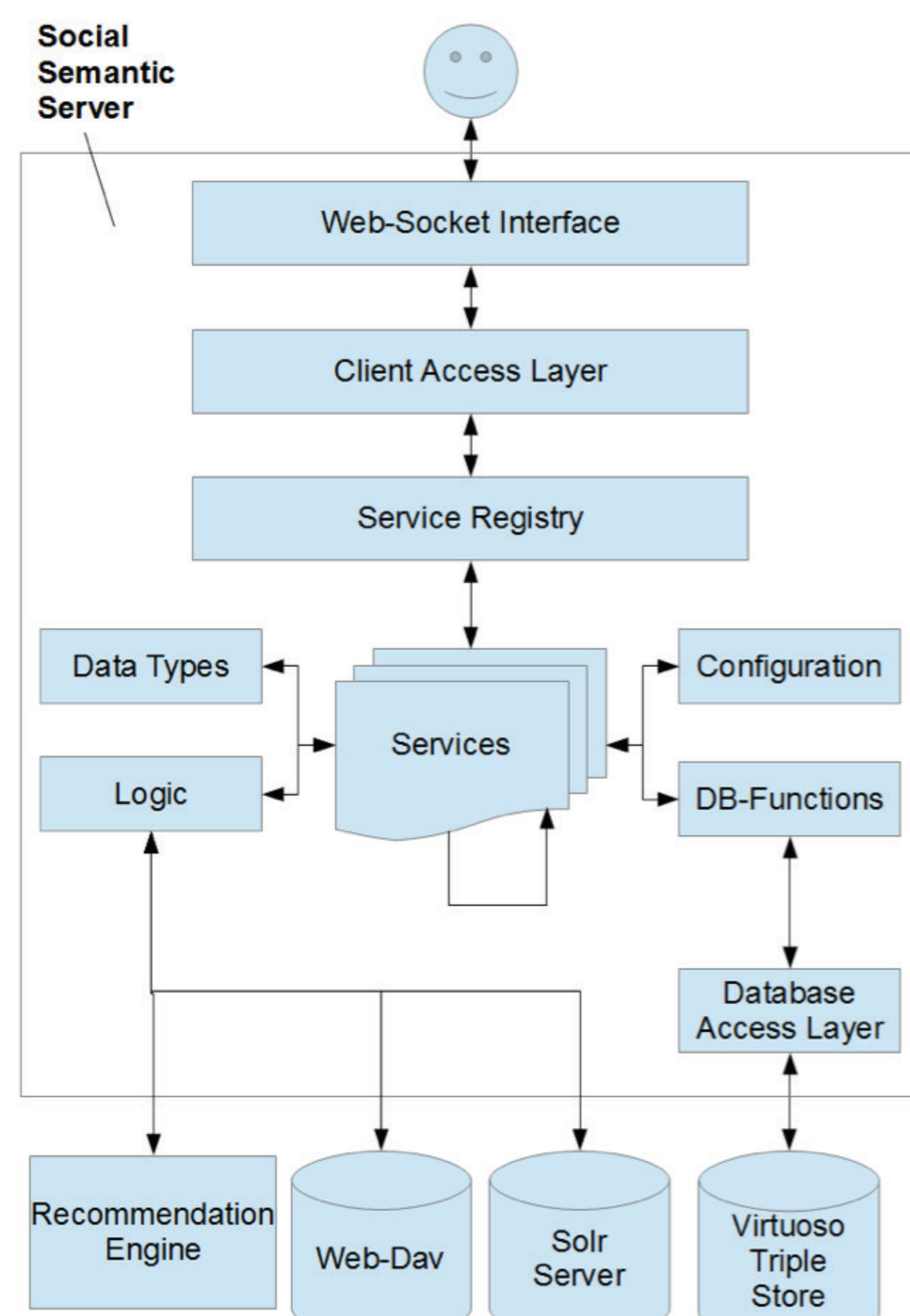


High Level Services:



...and many more to come!

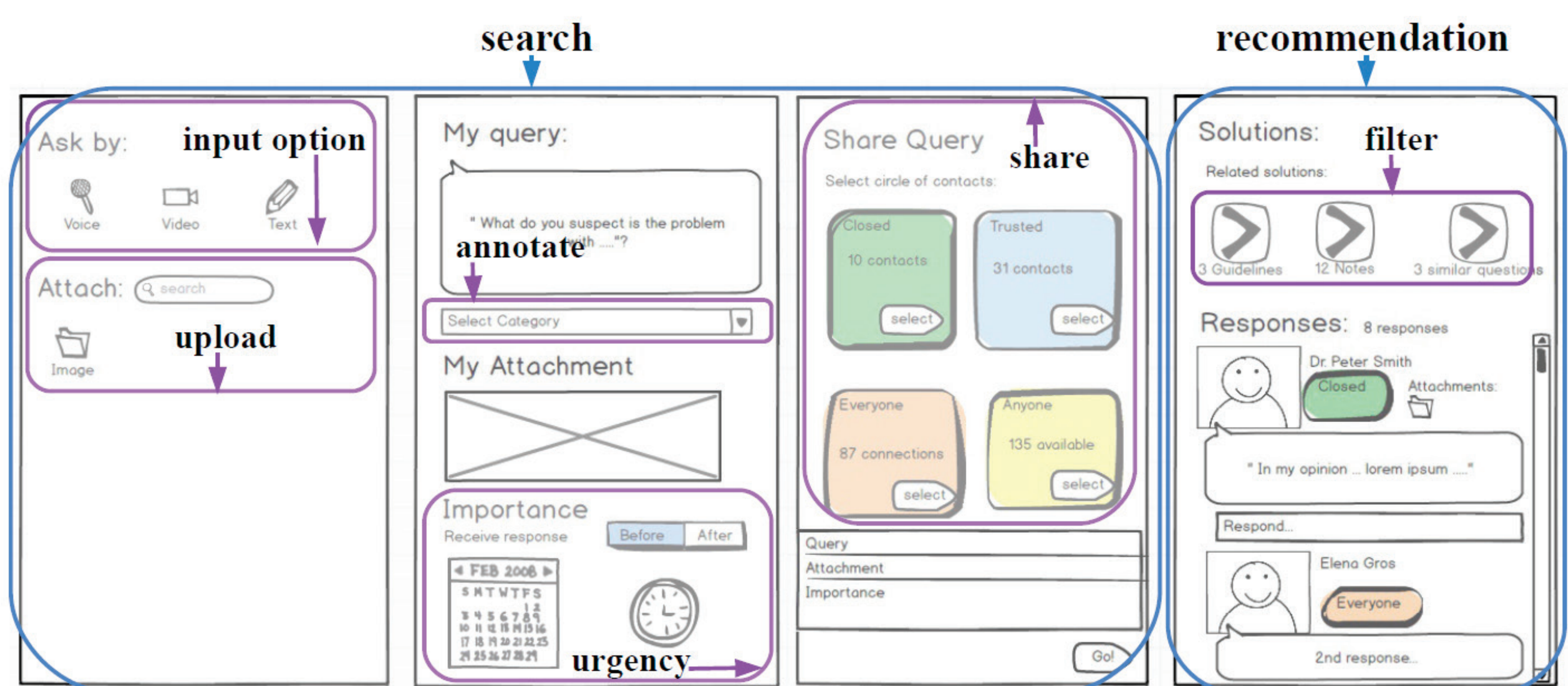
Architecture



Use Case

Work in progress application scenario from health care domain:

- National Health Service establishes guidelines for e.g. General Practitioners (GPs) for managing particular situations and diseases, but these guidelines do not cover all issues encountered by GPs in practice.
- This triggers seeking support and related discussions, which can be facilitated by a tool that enables GPs to state clearly defined questions for a chosen group of people and to receive meaningful scaffolding with appropriate documents, videos, pictures or unknown experts in order to address ambiguities.



Low-Level Services

Content Structuring

- Add or upload entities (e.g. text, notes, pics, audio, voice, video, links) to collections
- Structure entities in collection hierarchies
- Order collection entities with regard to their sequence

Rating

- Rate various types of entities and search results
- Rate entities with the help of extended metadata sets (e.g. likes, dislikes)

Annotating

- Annotate entities with metadata (e.g. tag or label)
- Add extended sets of metadata to entities (e.g. questions, comments)

Sharing

- Share (private) collections with other users
- Share entities via public metadata
- Subscribe to collections

Discussing

- Create, comment or answer discussions and questions
- Use discussions, comments and answers for metadata as well

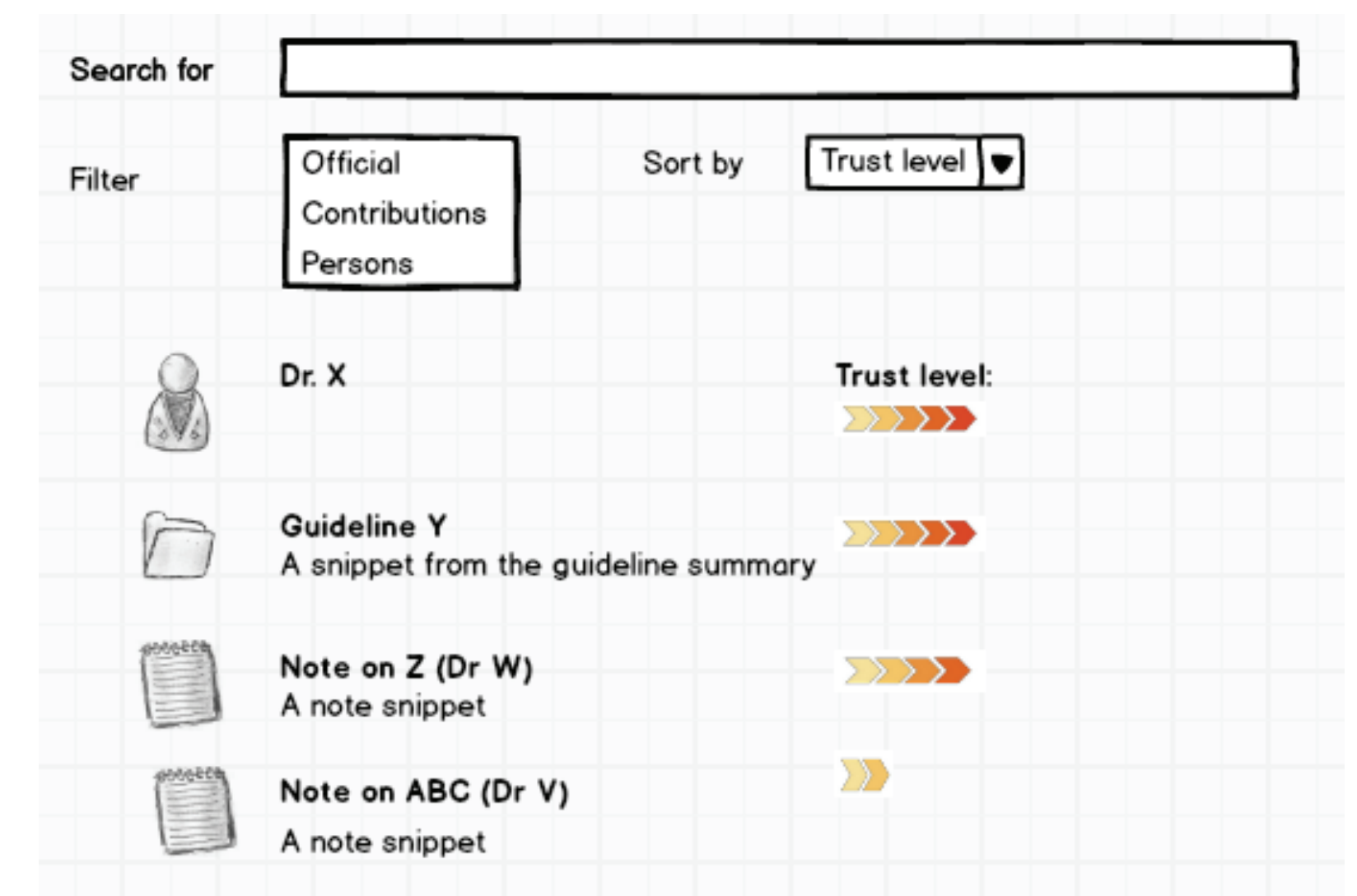
High-Level Services

Searching

- Search for entities via metadata or content
- Filter search results with regard to entity type or metadata

Recommending

- Users (e.g. experts), digital artifacts (e.g. documents) and metadata (e.g. tags)
- Based on metadata, content, emerging semantic structures, artifact/user models or usage paths



Components

Web-Socket Interface

Handles the socket communication between the SSS and the client applications

Client Access Layer

Handles the client requests

Service Registry

Determines the corresponding service based on the client request

Data Types

The necessary data types for a service

Configuration

The configuration of a service

Logic

The logical implementation of a service

DB-Functions

Handles the service specific database functions

Database Access Layer

Encapsulates the access to the database

Vitioso Triple Store

A triple store to save semantic relations

Recommendation Engine

Calculates recommendations for entities

Web-Dav

Used to save and access files

Solr Server

Holds an index for the files in the Web-Dav for faster access