

AI@Work

Knowledge Sharing Platform



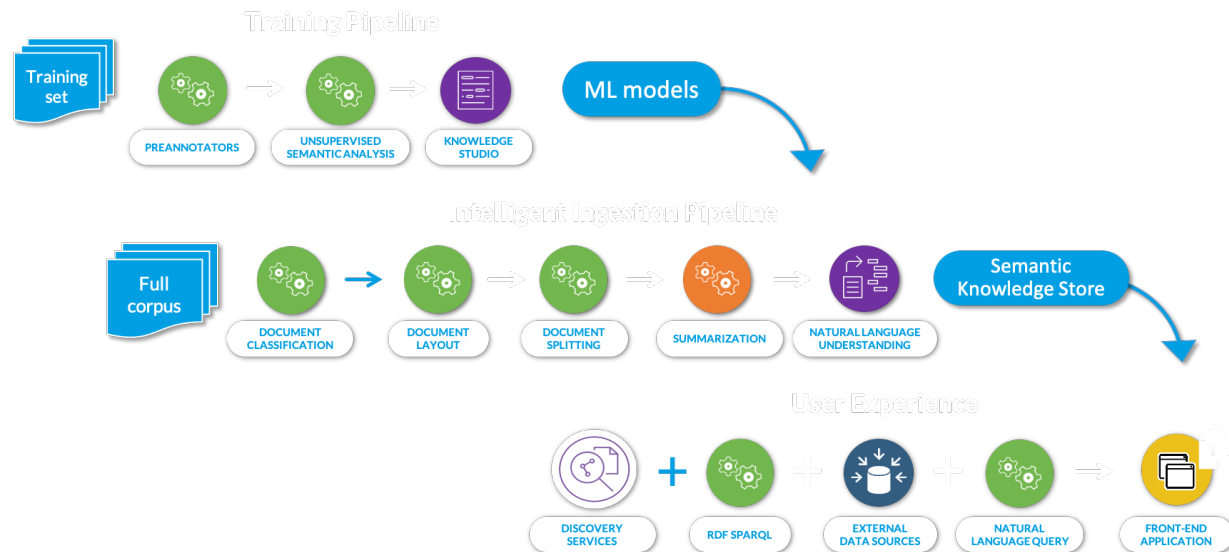
Project overview

The Knowledge Platform can automatically identify and extract all essential information to enable the comprehension of documents and multimedia contents related to the smart grids sector.

The final goals of the platform is:

- Foster and accelerate the smart grids deployment
- Enlarge the collaboration between parties.
- Identify innovative enabling technologies and business models.

Due to the research nature of the customer it was a good option to experiment new cutting edge technologies emerging from IBM Research, that either helped during implementation and training phases or provided some new functionalities inside the solution itself



Document Understanding

The Impact of 5G Telecommunications Technology on US Grid Modernization
2019 - pp 30

Document Summary
Provided by: IBM Watson

ABOUT The 5G PPP brings together a broad range of stakeholders from the communications technology sector and from its extended value chain including the user industries or actors from the microelectronics and IT sectors. PPP 5G is involved in the following segments of the RD&I value chain: COMPOSITION/GOVERNANCE In the 5G PPP, the 5G Infrastructure Association (5G IA) represents the private side and the European Commission the public side. The Board is supported by the 5G IA Office. The Head of Office ensures the operational well-functioning of the 5G IA. The 5G IA is committed to the advancement of 5G in Europe and to building global consensus on 5G. The currently active work groups have their origins in both 5G-Infrastructure Association activities and from decisions on needs by the 5G-PPP projects themselves. In that respect, this third edition aims to present how 5G PPP Phase II master 5G technologies and look into their application with relevant users in particular vertical industries. CEM The Clean Energy Ministerial (CEM) initiatives focus on regular reports on their respective areas of interest, offering a global view of the state of affairs and outlooks on future developments, going beyond the European reality.

Additional information

Title
The Impact of 5G Telecommunications Technology on US Grid Modernization 2017-2020

Year
2019

Editor/Organization
Author(s)
Reference/Link
Copyright
Copyright text
Contact
Document type
Position or white paper
Document topic

Entities
2020 5G Big Data Investors Clean Energy Ministerial ETIP SNET ETIPs Europe
European Energy Research Alliance RES

Keywords
5G PPP PRESENTATION OF THE RD&I DEFINITION VALUE CHAIN SMART ENERGY DEFINITION OF R&D STRATEGY
PRIORITIZATION OF RD&I ETIP SNET EJR/SFEAN Innovative technologies SMART CITIES ERA-NETs ENSCC
scale of research ETIP SNET EJR/SFEAN 5G research Social Entrepreneurs

Concepts
European Union City Industry Energy policy Vertical market International Energy Agency Policy
Energy Efficient energy use European Commission

Table of content

1 INTRODUCTION11
2 JOINING EFFORT FOR TACKLING THE CHALLENGES OF CLIMATE CHANGE.....12
2.1 EUROPEAN INITIATIVES14
2.2 GLOBAL INITIATIVES21
3 MUTUAL RELATIONS AMONGST THE MAIN INITIATIVES IDENTIFIED26

Table of content

1 INTRODUCTION11
2 JOINING EFFORT FOR TACKLING THE CHALLENGES OF CLIMATE CHANGE.....12
2.1 EUROPEAN INITIATIVES14

on several feature:

- Domain based Entity and Relationship recognition with tools to speed up training operations
- Document layout recognition to identify and isolate only meaningful portion of the document
- Automatic summary generation
- Content classifier for document types and topics



Multimedia management

Augmented Reality for Smart Grids
duration 00:46:09

Highlights

- 00:00:02
- 00:06:04
- 00:09:43
- 00:10:54
- 00:12:30
- 00:13:00

Augmented Reality for Smart Grids
Diego Sagasti – AR Technical Manager (Tecnalia)
Diego.sagasti@tecnalia.com
@tsasti
@tecnalia

Transcript search

00:02 hi yeah thank you very great metronomic for...
00:09 hello my we're not field grids connect on both...
00:17 L. E. nother presentation I okay give lot of...
00:29 add okay today Electrical great great I would...
00:36 talking about different documentary ID cooki...
00:46 I would also took a lot of different devices that...
00:53 then I will show more different application...
01:08 maybe you have already heard about...
01:20 today and I am going to talk about all of them...
01:28 mission of the government the reality...
01:34 here you can see one of the even between lot...
01:39 showing the address of the building directly...

Multimedia file analysis:

- Speech transcript extraction with trainable speech recognition (accents, inflections, dictionaries)
- Speaker labeling for scene detection
- Domain based semantic analysis over the transcript

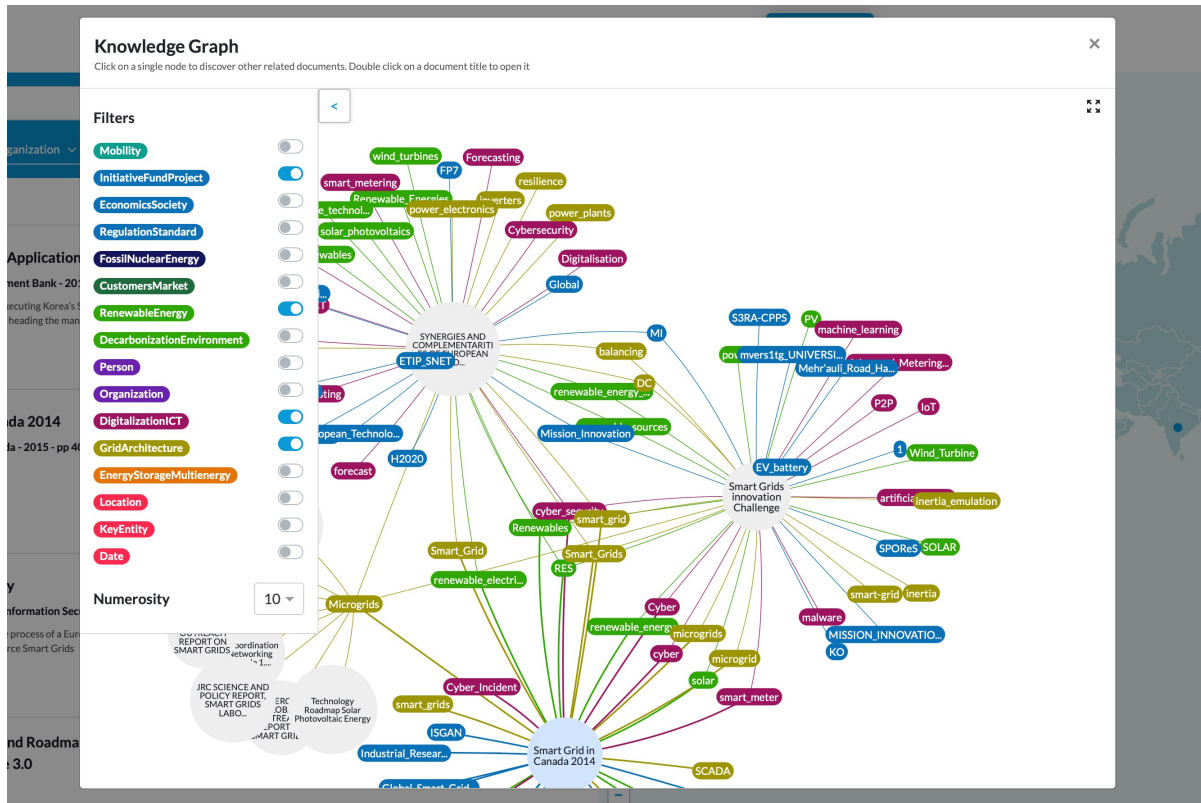


Data exploration

User can search information in natural language in their own language.

Asked question are semantically analyzed to discover only really relevant information for users.

Knowledge Exploration is enabled leveraging entities and relationships extraction coupled with RDF descriptions and navigation (SPARQL)



Conclusion

This experience shows us many points of interest:

- Methodology, the use of IBM Garage methodology focused all the teams to synergistically work to reach the final goal, particularly effective in the task of AI services training, directly performed by real SMEs (customer people)
- Cutting edge technology, provided by IBM Research for helping and speeding up AI training tasks (unsupervised entity recognition and recommendation) or for implementing new innovative functionalities (summarization)
- Business results, platform publicly available allowing users to query in their own language, already more than 1000 smart grid domain specific documents shared through the platform, strict editorial and approval workflow for validating effectiveness and quality of published documents

