L'Intelligence artificielle Dialoguez avec vos données…

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L'IA, comment ça marche ? Cas de figure

- L'expert, comment devient-il expert ? Les échanges…
- Coopérer avec Watson: Entraîner l'expert qui assiste
- L'interaction citoyen-machine
- Des exemples…A MEDITER !

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Energy Platform in Australia
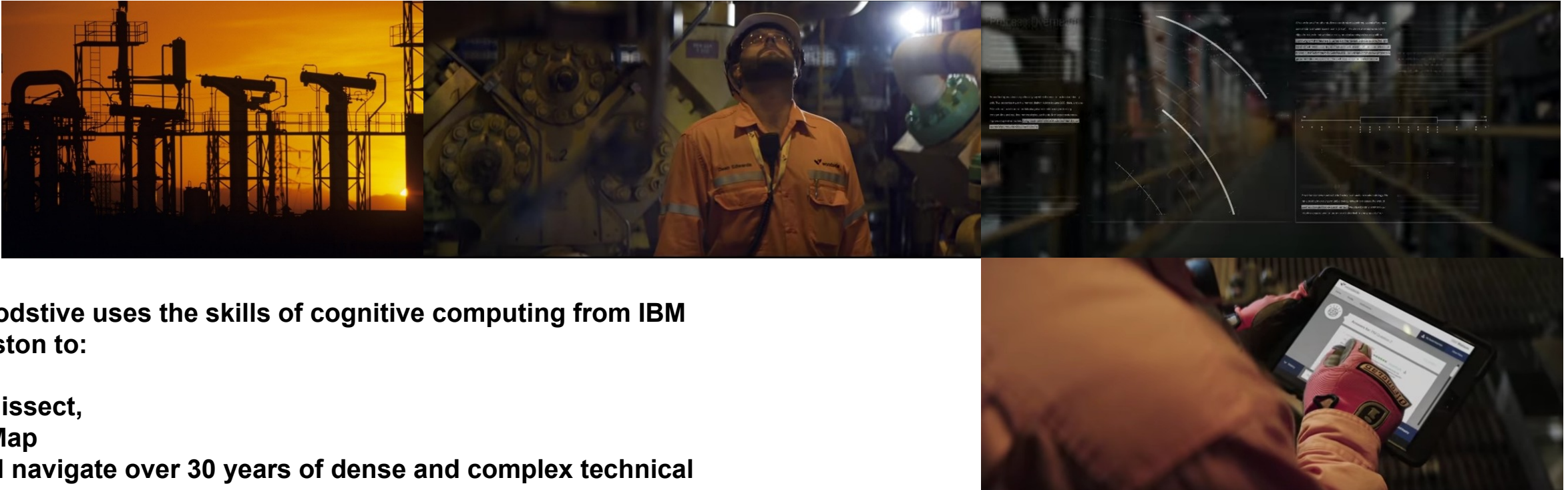
Woodstive uses the skills of cognitive computing from IBM Waston to:

- **dissect,**
- **Map**

And navigate over 30 years of dense and complex technical knowledge.

Identify and mark logical connections between unstructured documents of all kinds,

And that allow employees of all profiles to submit queries and get responses from the machine

$ 7.5M Reduced employee costs with faster access

75% reduction in the time spent by the geoscience team in reading and searching data sources.

Increases productivity by enabling a wider range of employees to examine the cognitive system (conversation)

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Business benefits

Saves

9,000 hours per day

for tax auditors and caseworkers as a result of faster, better data analysis

Expands

360-degree view

of taxpayer information from more than 60 million cases, notes, activities and real-time sources

Improves

quality metrics

by resolving cases with more speed and accuracy, boosting the organization's reputation

Business challenge

Tax fraud and noncompliance are complex issues that involve substantial data and take a long time to investigate. One taxation office's investigations took an average of 8 months, and 90 percent ended in "no further action." The biggest problem was that the organization could not effectively use its structured and unstructured data. The agency wanted to use its data to improve the speed and quality of its auditing and case management.

Cognitive transformation

The new solution plugs into the organization's constant flow of new and historical tax information, giving auditors and case managers a clearer, deeper view into each case's web of complex data. The solution uses natural language processing (NLP) and cognitive ranking to analyze more than 60 million cases, notes, activities and other real-time sources, spotting suspicious trends and prioritizing the cases that warrant investigation.

Government taxation office

Using cognitive data discovery to detect signs of fraud in tax records

This government taxation office collects income tax, goods and services tax (GST), and other federal taxes. The organization has around 23,000 employees and an annual budget of USD 2.6 billion.

Solution components

- Frisk (BP) – Frisk Retrieval
- IBM® Watson™ Explorer Advanced Edition
- IBM Watson Natural Language Classifier API
- IBM Watson Retrieve and Rank API
- IBM Watson Tradeoff Analytics API

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Administration assistant for Coding at the hospital

- CD-10 is a coded medical classification classifying diseases and a wide variety of signs, symptoms, traumatic injuries, poisonings, social circumstances and external causes of injury or disease.

- Currently, the coding is done by the administrative staff of the hospitals **several months** after the discharge of the patient.
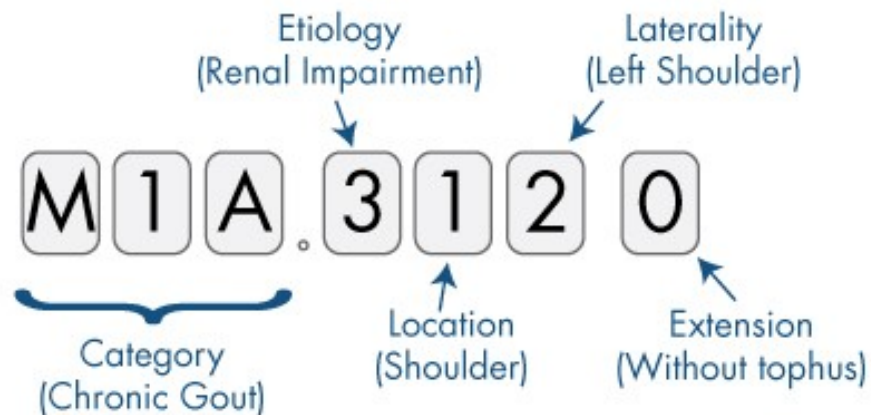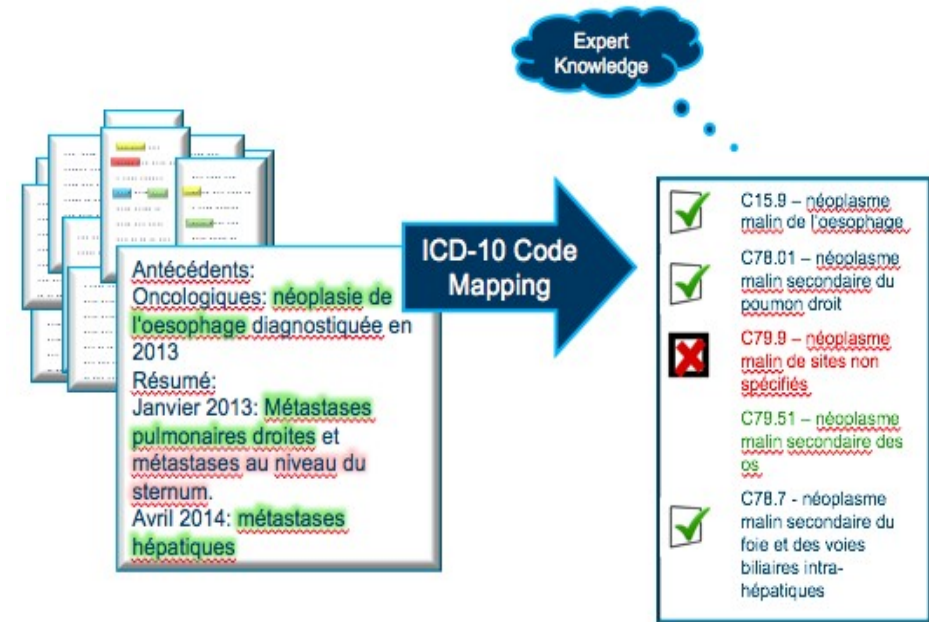

Benefits:
- The coding is **done in a few seconds**, reducing the time spent by employees on this type of task.

- **New codifications were discovered** resulting in new sources of funding.

- **Better view on clinical data for research** and benchmarking.

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Connected cars assists the traffic center

Peugeot – Citroën , IBM and the Walloon Region SPW-DGO1 program
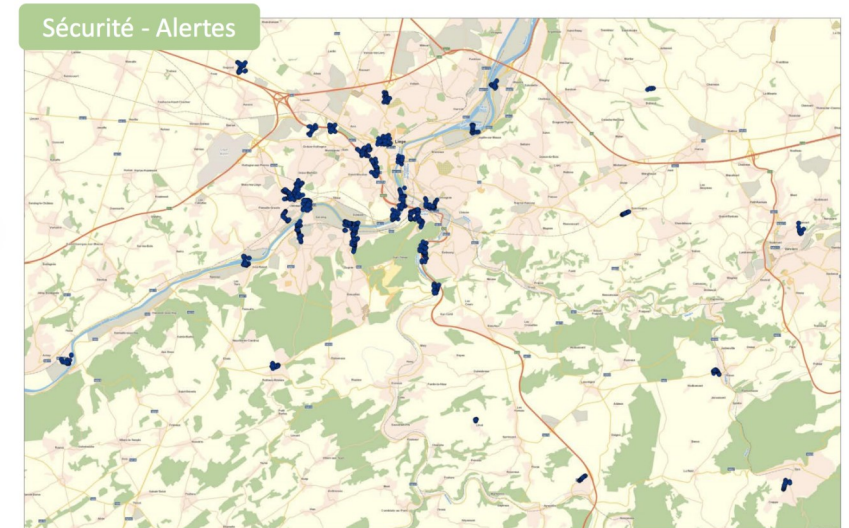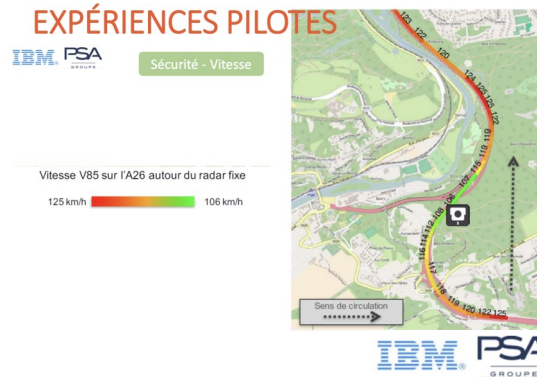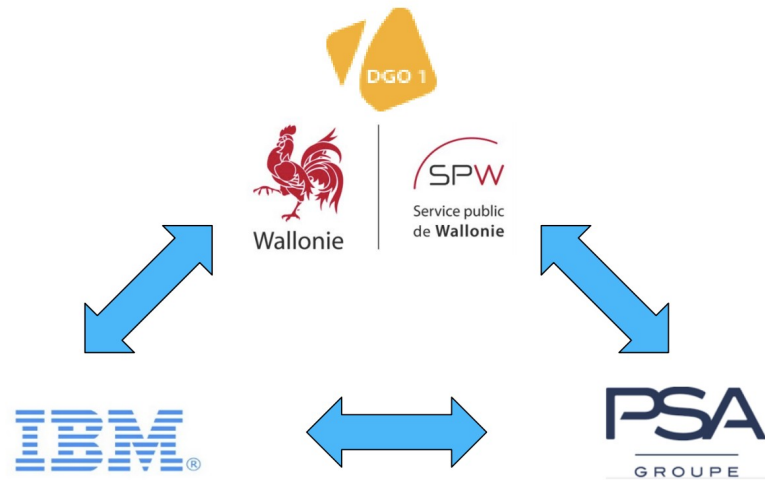
Roads infra & security with IBM-PSA
Watson IoT + Cognitive…Weather company…1
more

In US:
General Motor: 10 years with 740 million
– 11 sources

KBC's K'Ching powered by Watson

Primary benefit of Watson Conversation/assistant on the IBM Cloud is its **business interface.**

Some stats:
- 3 months of development
- **Since April 2017**, K'Ching has answered more than **120,000** questions from more than **24,000 users** primarily aged 15 to 17 years old.
- The top user has asked more than 200 questions.
- Many conversations last more than 15 minutes.

Based on this success, other 'chatbots' are starting and an internal HR bot is already in production
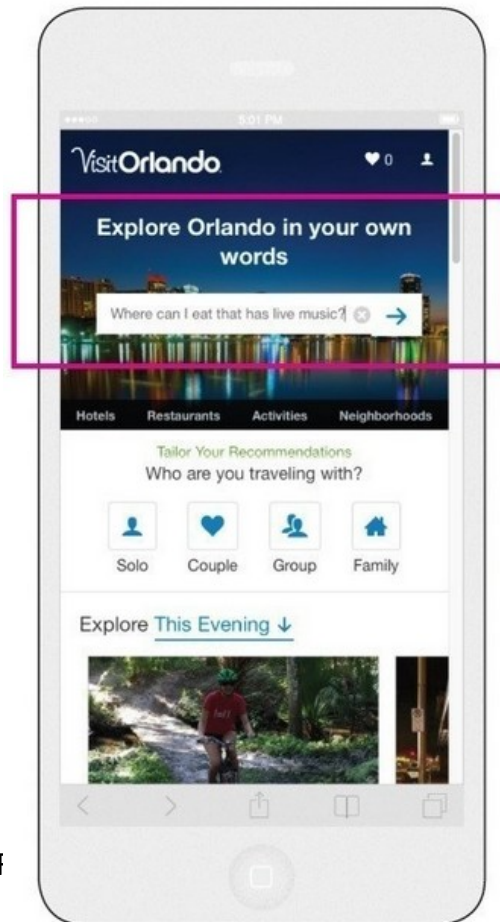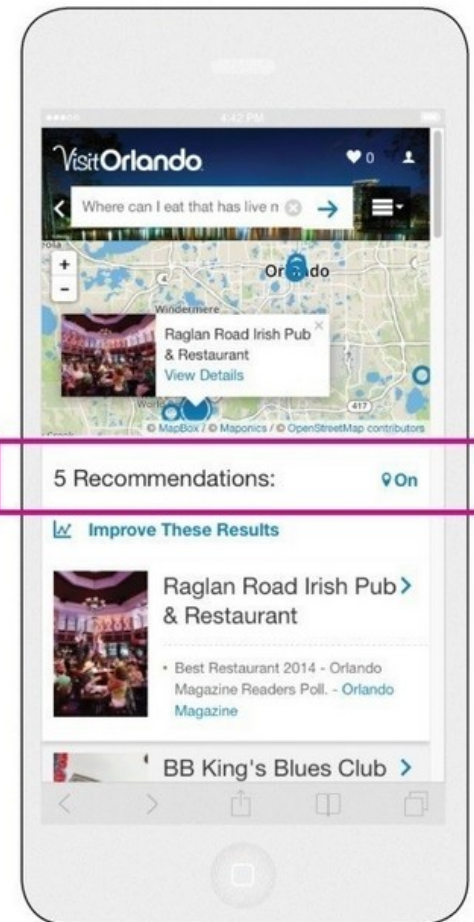
Citizens dialog for cities…

Watson Assistant answers to the major & usual questions to the citizens (Surrey, Lanzarotte, Orlando…)

Séminaire SMART GOVEI

Virutal Assistant
IBM Cognitive Call Center, Virtual assistant, Commercial advisor: *Watson augments the capacity of the operators*

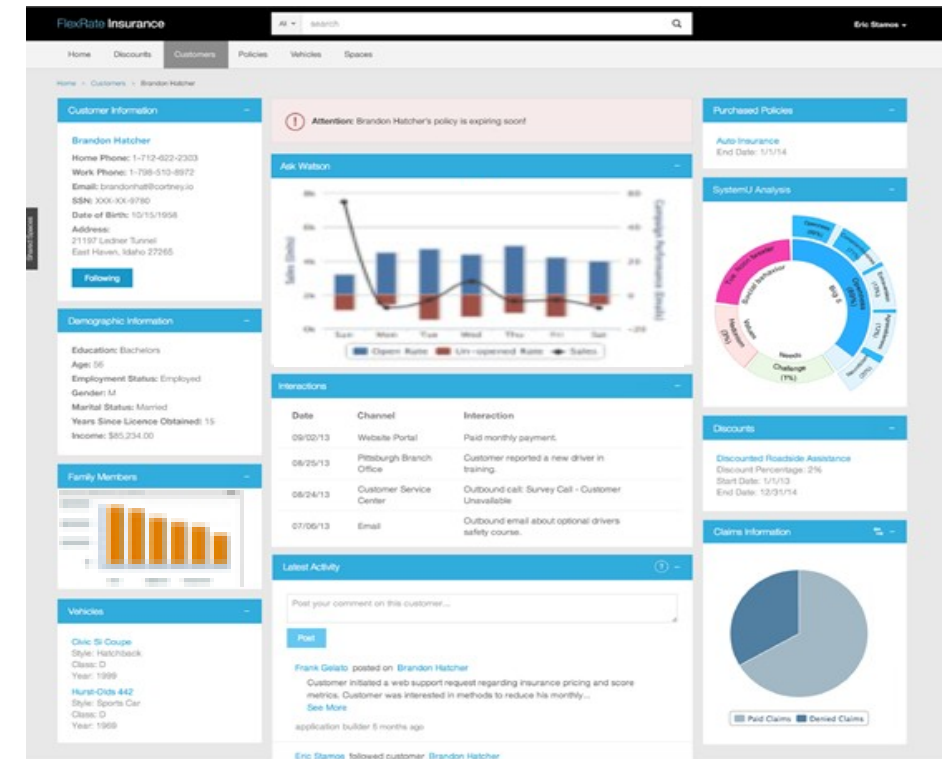**360° View of the solutions to help the operators**

Virtual assistant, Contact mgr
AT&T, CIC, Engie, ….

Contact Centers are struggling to cope

- High staff attrition rates
- Long average handle times
- Low First Contact Resolution
- Long waiting time for free agent
- Inconsistent Level 1 support
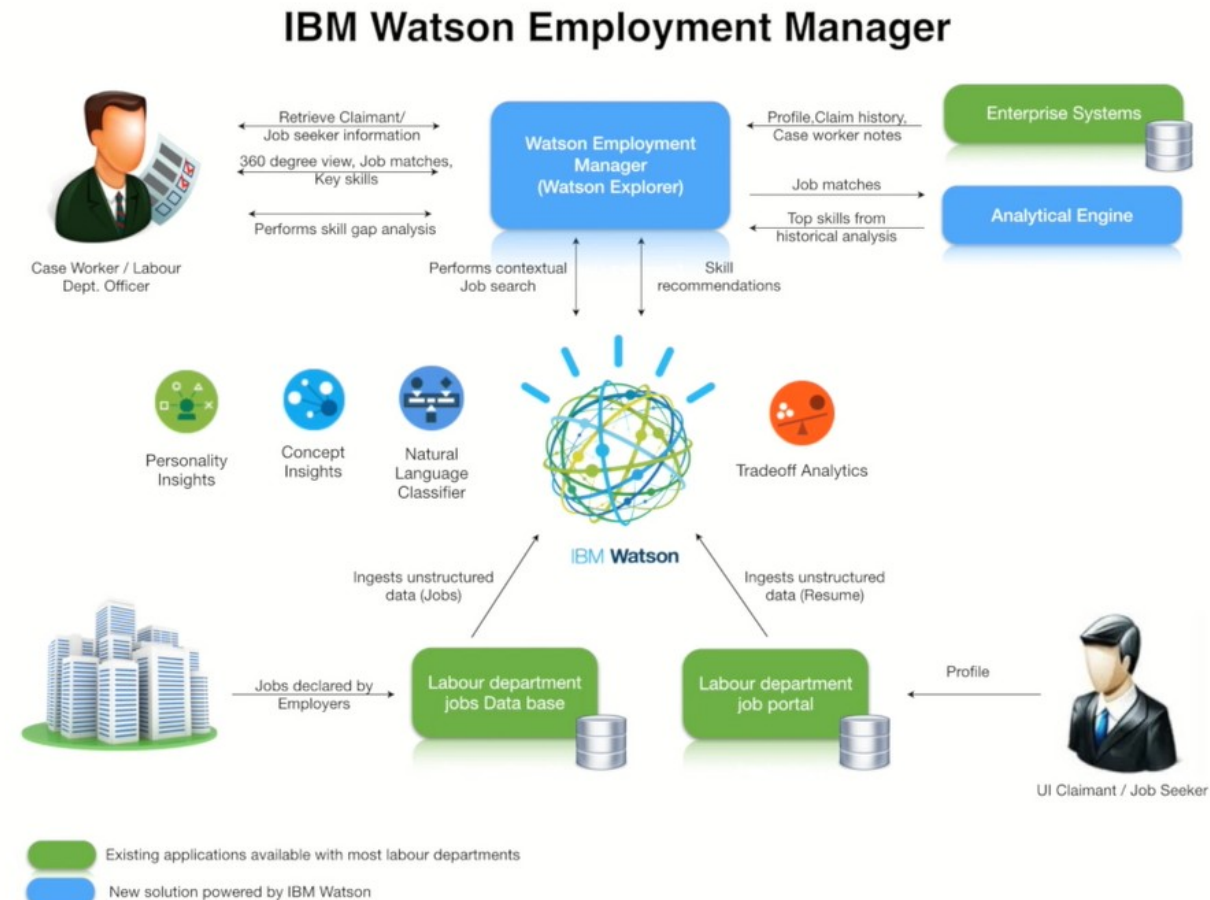
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Cognitive services for the citizens...

Watson for Employment management
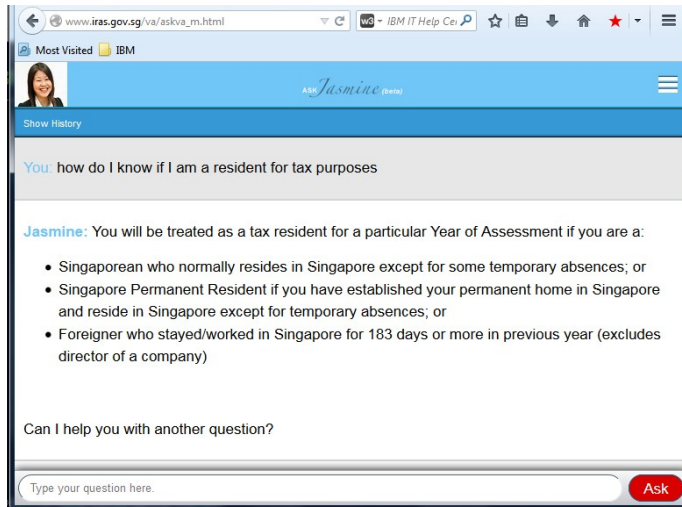
Read the profile (CV...), Understand it, Analyze the market for opportunity, compare, match, propose new education....

IBM Watson Employment Manager

Cognitive for research & investigation…

Tax management

Watson for Tax Services
Singapore Ministry of Finance:
"Ask Jasmine"
In ATO, 9000 hours of work a
day, were reduced

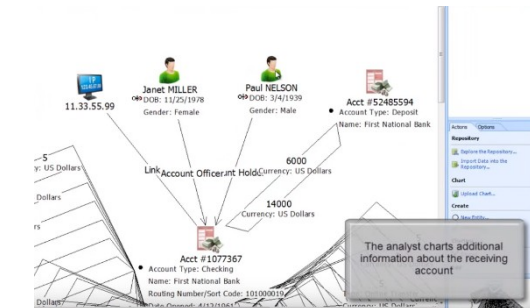**Admin & legal assistance e.g.** legislation & jurisprudence.
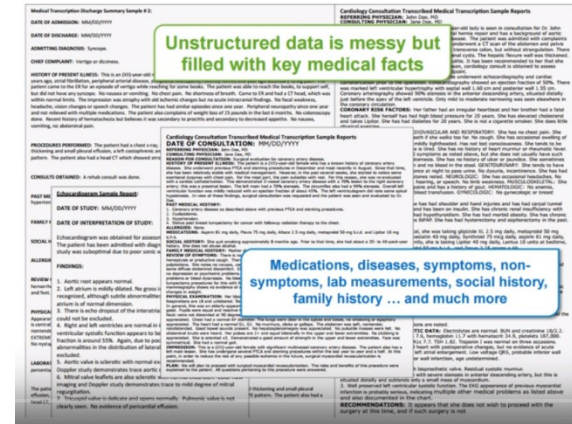
Unstructured data analytics *assistance*

Public & Cyber Crime/security

Watson for Security, identifies relationships, & more…
Threat prediction & prevention

Watson Platform for
Fraud intelligence detection

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View Details   Attribute View

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Mention

Relation

Coreference

Entity   Mention

Type   Subtype   Role

2004-49-168A.txt

1 V1, a 1999 Toyota Camry, was traveling southbound in the second lane of a four-lane divided (seven lanes overall, divided by raised median), concrete roadway, approaching an intersection.

2 V2, a 2004 Mercedes S430, was northbound in the fourth lane of a four-lane, divided (seven lanes overall, divided by raised median), concrete roadway, about to turn left into westbound traffic at the same intersection.

3 As both vehicles entered the intersection, the front of V1 impacted the front of V2.

4 V1 rotated clockwise as V2 rotated counter-clockwise, and the left side of V1 impacted the right side of V2 in a sideslap configuration.

5 Both vehicles moved southwest to final rest.

6 Both vehicles were towed due to damage.

7 The unrestrained driver of V1 was hospitalized with foot and rib fractures as well as a liver laceration.

8 The restrained driver of V2 was treated and released with minor abrasion and contusion as well as a finger fracture.

9 The restrained front right passenger in V2 was pronounced brain dead two days later from multiple brain injuries.

10 V1 was equipped with redesigned dual frontal airbags, which deployed

a	ACCIDENT_CAUSE
o	ACCIDENT_OUTCOME
-	CONDITION
i	IMPACT
f	MANUFACTURER
m	MODEL
y	MODEL_YEAR
l	PART_OF_CAR
p	PERSON
s	STRUCTURE
H	VEHICLE

Merci !

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