

Smart Innovation Set

coordinated by
Dimitri Uzunidis

Volume 29

Data Control

Major Challenge for the Digital Society

Jean-Louis Monino

Color Section

Digital golden jobs in 2018

Raw fixed annual salaries for 2018 and progression compared with 2017



Source : Robert Half

statista

Figure I.1. Digital golden jobs in 2018

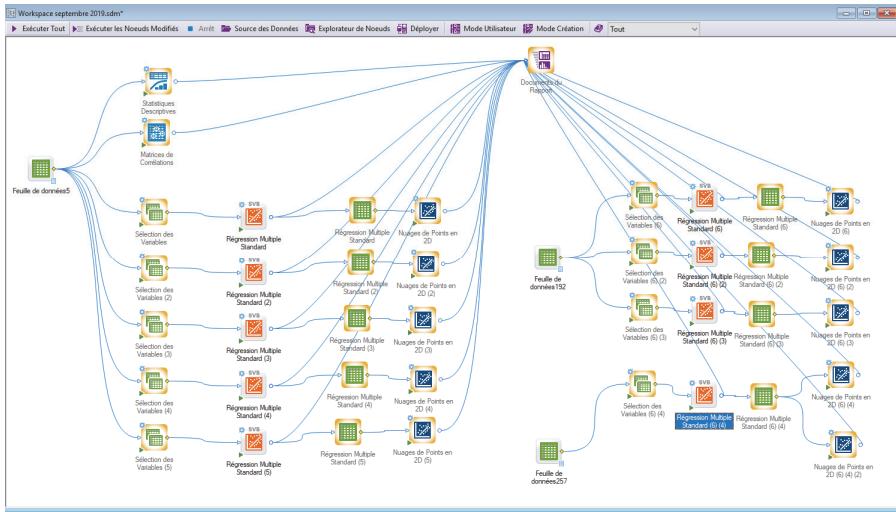


Figure I.2. TIBCO's data mining and Statistica software. The research and development project of E2S-Conseils in collaboration with the TRIS laboratory has been developed using Tibco's Statistica Data Mining for health research (MONINO L., TIBCO's data mining and Statistica software. The research and development project of E2S-Conseils in collaboration with the TRIS laboratory has been developed using Tibco's Statistica Data Mining for health research, Thesis, 2019)

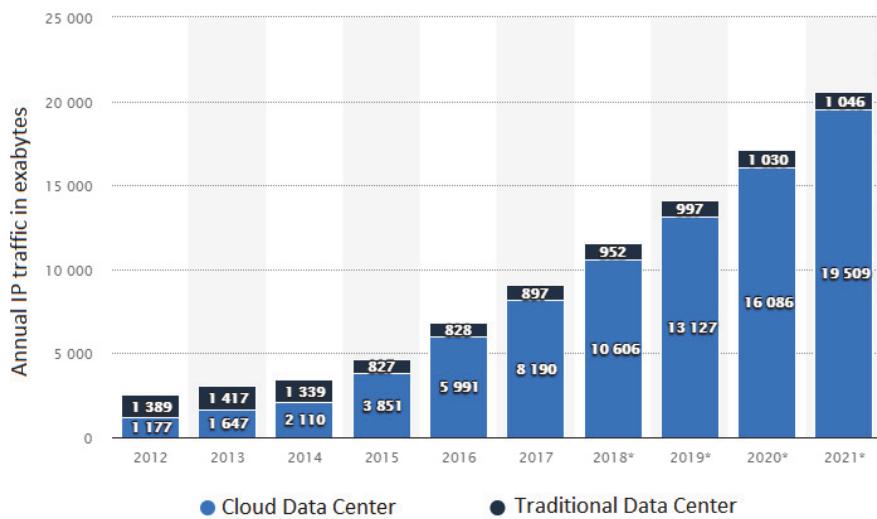
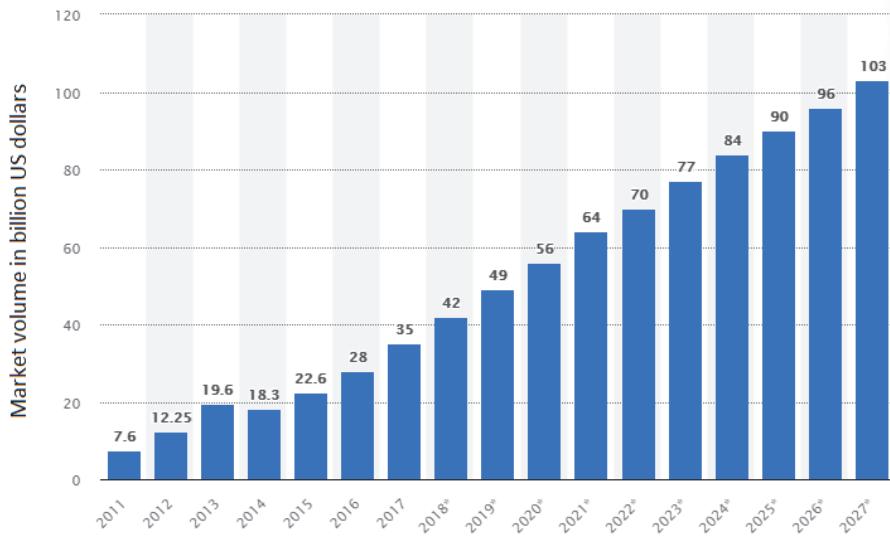


Figure I.3. Forecasting Big Data market size, based on revenues, 2011–2027 (source: Statista)

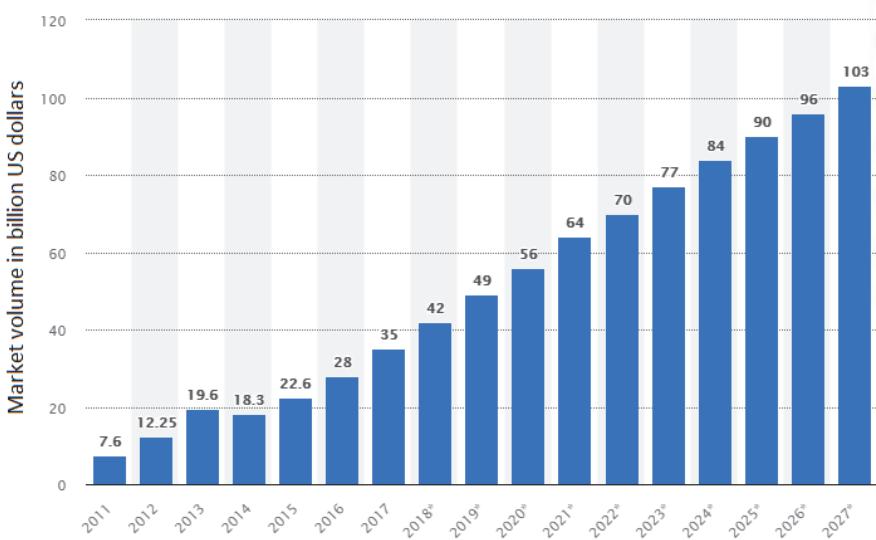
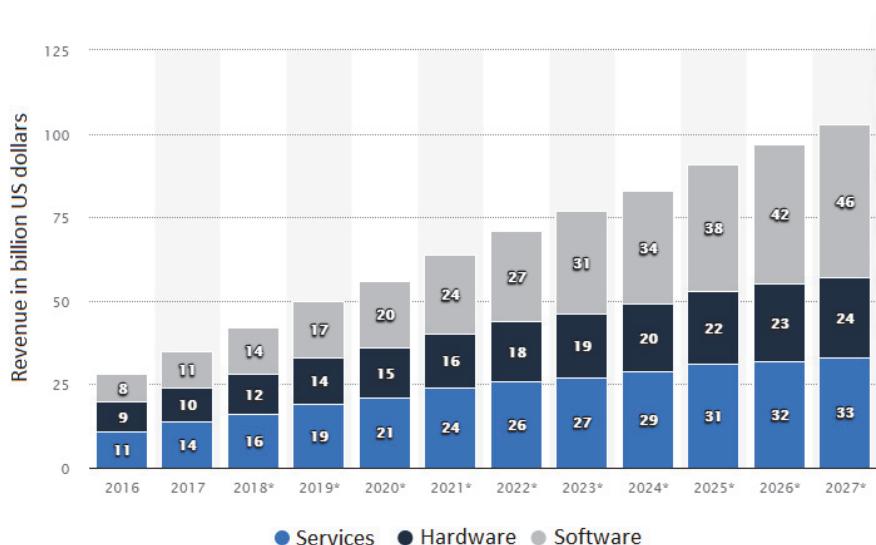


Figure I.4. The Big Data turnover and market size (source: Statista)

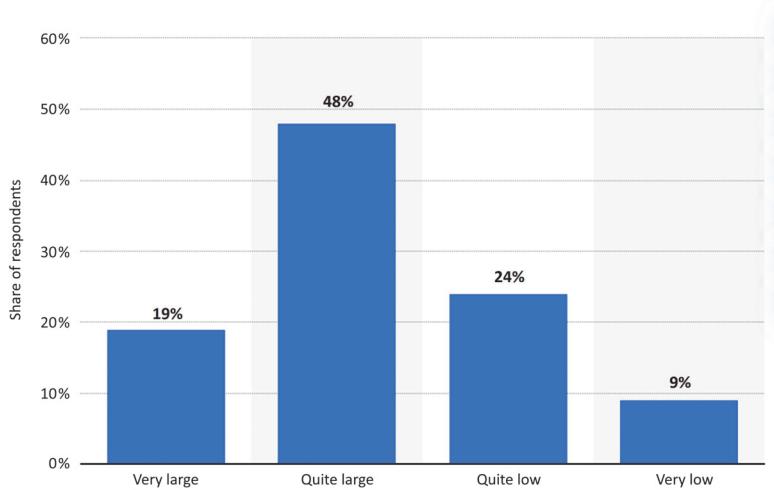


Figure 1.5. With what interest do you follow the news through the information media (press, radio, television)? (source: Statista)

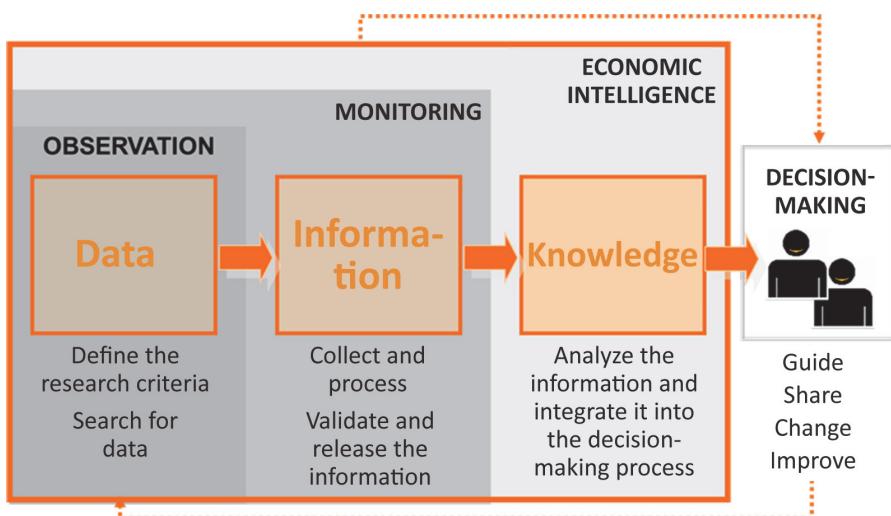


Figure 1.2. Business intelligence model of data to decision-making (source: Monino and Lucato 2005)

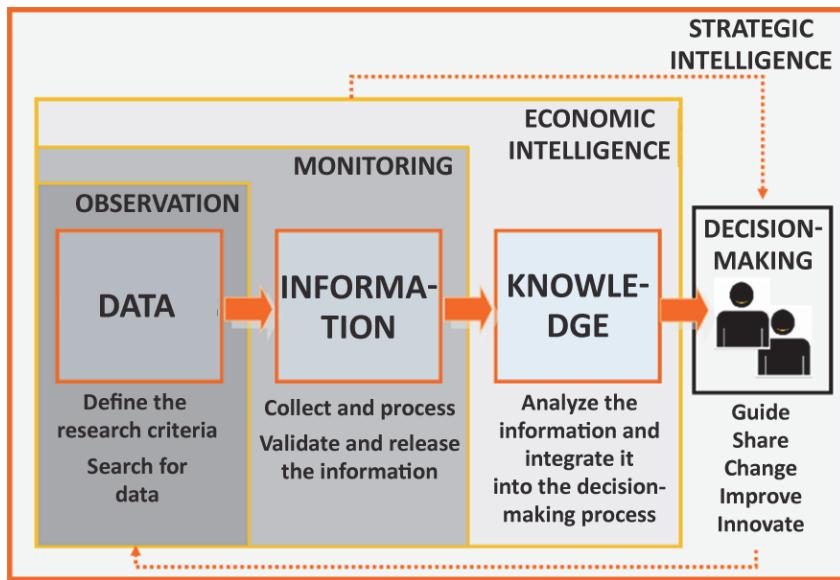


Figure 1.3. From data to decision-making strategic intelligence (source: Monino and Lucato 2005, Conference Fondation Maison du Maroc Paris October 2019 “Economic intelligence and data control in the digital world”)

Bienvenue sur le MOOC de la CNIL

Vous y trouverez l'ensemble des informations pour vous initier au RGPD et débuter ainsi la mise en conformité de votre organisme.

Ce dispositif gratuit est accessible jusqu'au mois de septembre 2021. En suivant l'intégralité de ce MOOC, vous pourrez obtenir une attestation.

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FAQ
DONNÉES PERSONNELLES
MENTIONS LÉGALES

CNIL.
COMMISSION NATIONALE
INFORMATIQUE
ET LIBERTÉS

**L'ATELIER
RGPD**

Figure 2.1. MOOC introduces you to the GDPR. The CNIL offers professionals the opportunity to discover or better understand the GDPR, in order to enable them to initiate compliance within their organization and help raise awareness among operational staff.

SecNumacadémie.gouv.fr
Formez-vous à la sécurité du numérique

Bienvenue sur le MOOC de l'ANSSI.

Vous y trouverez l'ensemble des informations pour vous initier à la cybersécurité, approfondir vos connaissances, et ainsi agir efficacement sur la protection de vos outils numériques. Ce dispositif est accessible gratuitement jusqu'au mois d'avril 2021. Le suivi intégral de ce dispositif vous fera bénéficier d'une attestation de réussite.

[Accéder au MOOC de l'ANSSI](#)

MENTIONS LÉGALES | DONNÉES PERSONNELLES | F.A.Q.

ANNECY DE LA CYBERSECURITE ET DE LA PROTECTION DES DONNEES PERSONNELLES

Figure 2.2. ANSSI and information security. Raising French people's awareness of digital security is a major challenge. In response, ANSSI is launching its first online course, the MOOC SecNumacadémie.

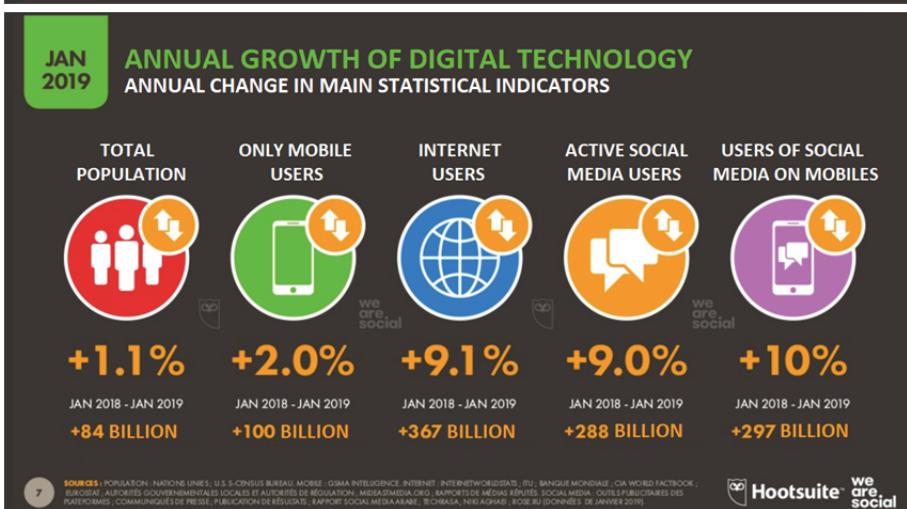
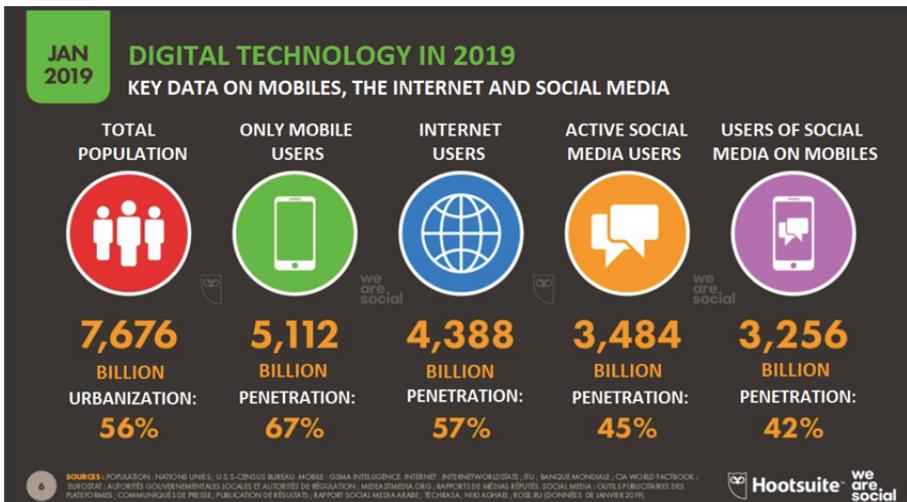


Figure 2.3. Digital technology in the world and its growth (source: We Are Social/GlobalWebIndex)



Figure 2.4. Types of subscriptions and e-commerce activities in France (source: We Are Social/GlobalWebIndex)

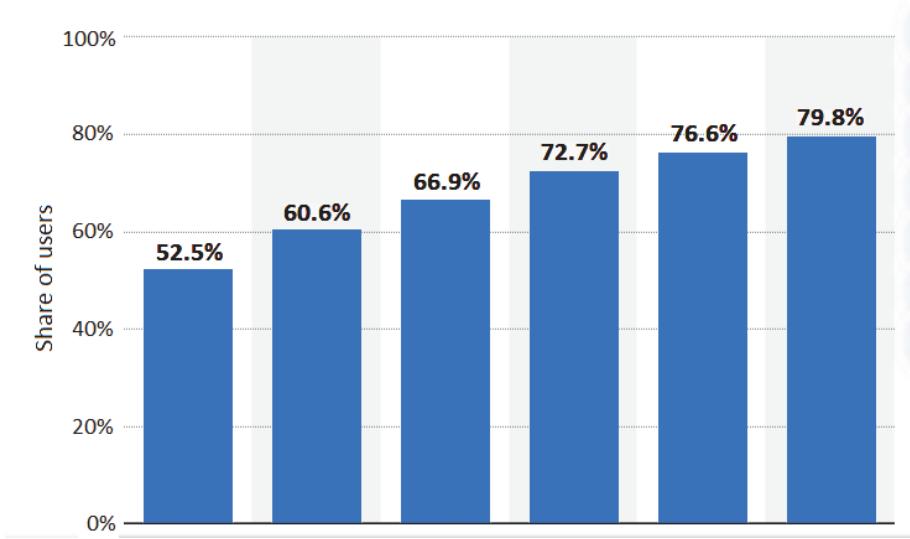


Figure 2.5. Penetration rate of smartphones among mobile phone users in France from 2014 to 2019 (source: Statista)

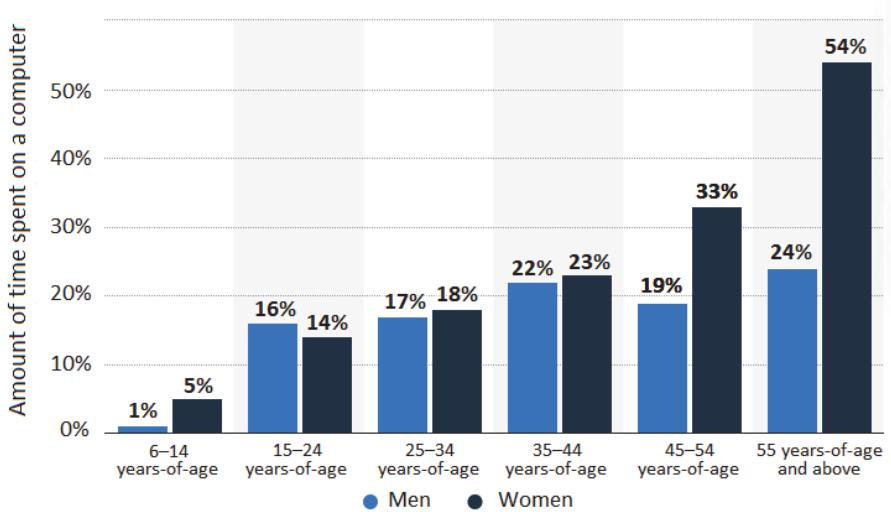
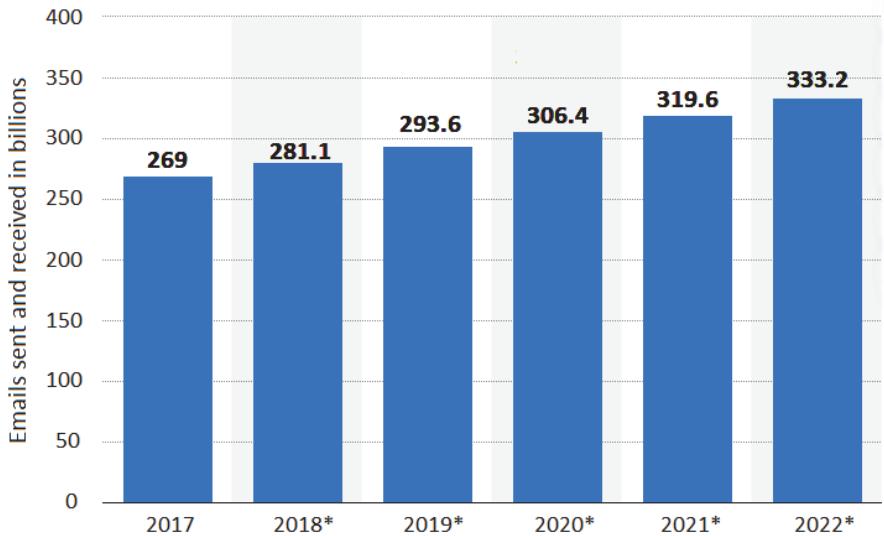


Figure 2.6. Number of emails sent and received every day in the world from 2017 to 2022 (in billions). Breakdown of time spent on the computer by the French in 2015, by age and sex (source: Statista)

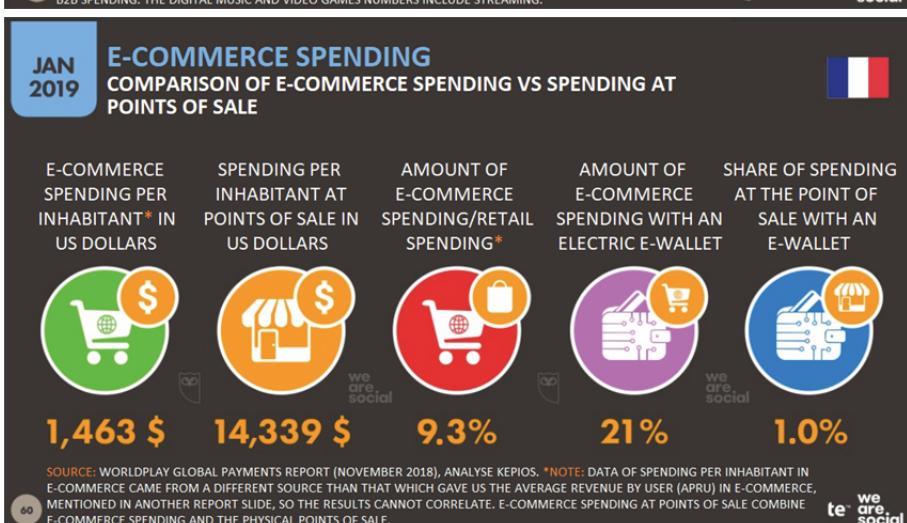
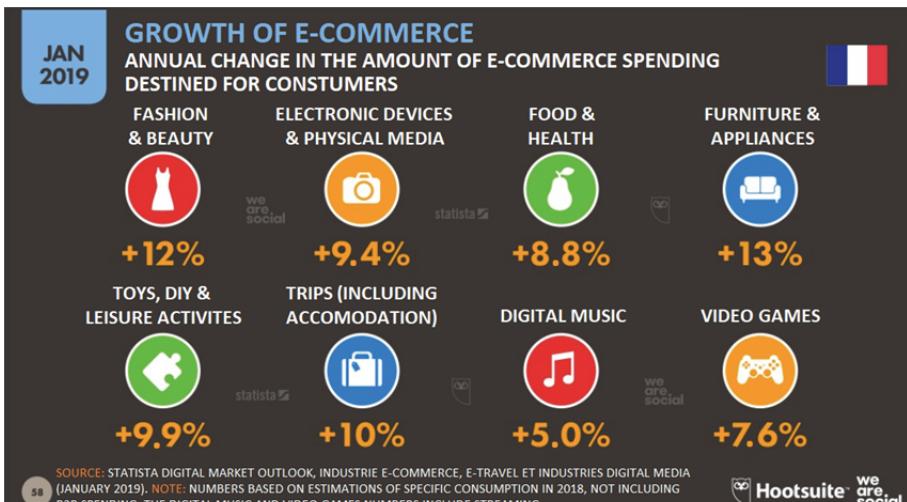


Figure 2.7. Comparison by age of the number of hours spent on the Internet per week in France in 2019 (source: We Are Social/GlobalWebIndex)

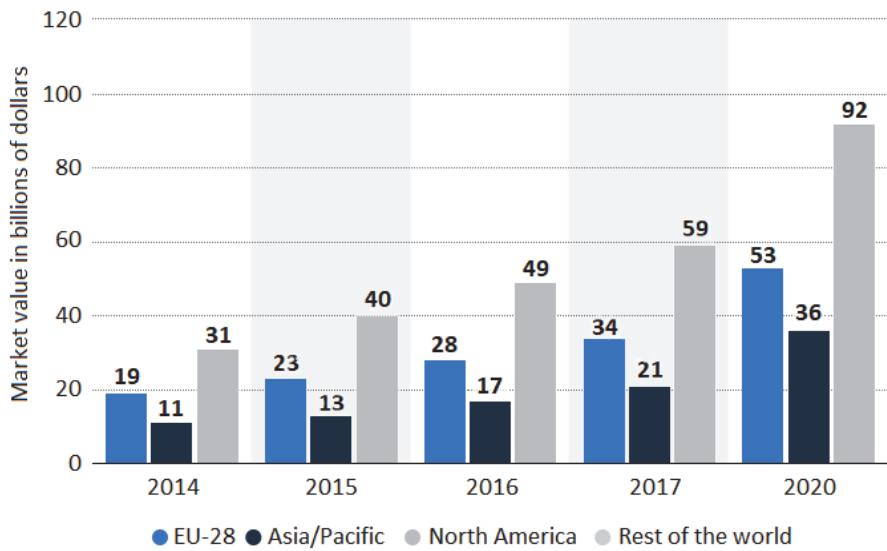


Figure 2.8. Value of the Cloud computing market for companies worldwide from 2014 to 2020, by region (in billions of euros) (source: Statista)

OCT
2019

SOCIAL MEDIA OVERVIEW

BASED ON MONTHLY ACTIVE USERS OF THE MOST ACTIVE SOCIAL MEDIA PLATFORMS IN EACH COUNTRY / TERRITORY

⚠ CHANGES IN DATA PROVIDER METHODOLOGIES MEAN THAT DATA ON THIS SIDE IS NOT DIRECTLY COMPARABLE TO DATA IN OUR PREVIOUS REPORTS

TOTAL NUMBER
OF ACTIVE SOCIAL
MEDIA USERS



3.725
BILLION

ACTIVE SOCIAL MEDIA
USERS AS A PERCENTAGE
OF TOTAL POPULATION



48%

TOTAL NUMBER OF ACTIVE
SOCIAL USERS ACCESSING
VIA MOBILE DEVICES



3.660
BILLION

ACTIVE MOBILE SOCIAL
USERS AS A PERCENTAGE
OF TOTAL POPULATION



47%

23

SOURCES: LATEST DATA PUBLISHED BY SOCIAL MEDIA PLATFORMS VIA INVESTOR EARNINGS ANNOUNCEMENTS AND IN SELF-SERVICE ADVERTISING TOOLS; ARAB SOCIAL MEDIA REPORT; TICHEBAGI, NBS AGENCE, BOSEJEL, KENOS ANALYSIS [4]; TO OCTOBER 2019



OCT
2019

ANNUAL DIGITAL GROWTH

THE YEAR-ON-YEAR CHANGE IN KEY STATISTICAL INDICATORS

⚠ CHANGES IN DATA PROVIDER METHODOLOGIES MEAN THAT DATA ON THIS SIDE IS NOT DIRECTLY COMPARABLE TO DATA IN OUR PREVIOUS REPORTS

TOTAL
POPULATION



+1.0%

OCT 2018 – OCT 2019

+79 MILLION

UNIQUE
MOBILE USERS



+2.4%

OCT 2018 – OCT 2019

+123 MILLION

INTERNET
USERS



+10%

OCT 2018 – OCT 2019

+416 MILLION

ACTIVE
SOCIAL
MEDIA USERS



+9.6%

OCT 2018 – OCT 2019

+328 MILLION

MOBILE
SOCIAL
MEDIA USERS



+15%

OCT 2018 – OCT 2019

+476 MILLION

7

SOURCES: UNITED NATIONS, GEMINI INTELLIGENCE, ITEL, GLOBAL WEB INDEX, EU2018 SOCIAL MEDIA & INTERNET SELF-SERVICE ADVERTISING TOOLS AND INVESTOR EARNINGS

ANNOUNCEMENTS; THAI APP PIA, MYANMAR SOCIAL MEDIA REPORT; TECRADA, MKT ASIA, ROLLER (ALL LATEST AVAILABLE DATA IN OCTOBER 2019). ADVISORY: SOME GROWTH

FIGURES ARE BASED ON REVISED HISTORICAL DATA. SO NUMBERS REPORTED HERE MAY NOT CORRELATE TO NUMBERS PUBLISHED IN OUR DIGITAL 2018 Q4 GLOBAL DIGITAL STATSHOT REPORT.



Figure 2.9. Statistical social networks (source: We Are Social/GlobalWebIndex)

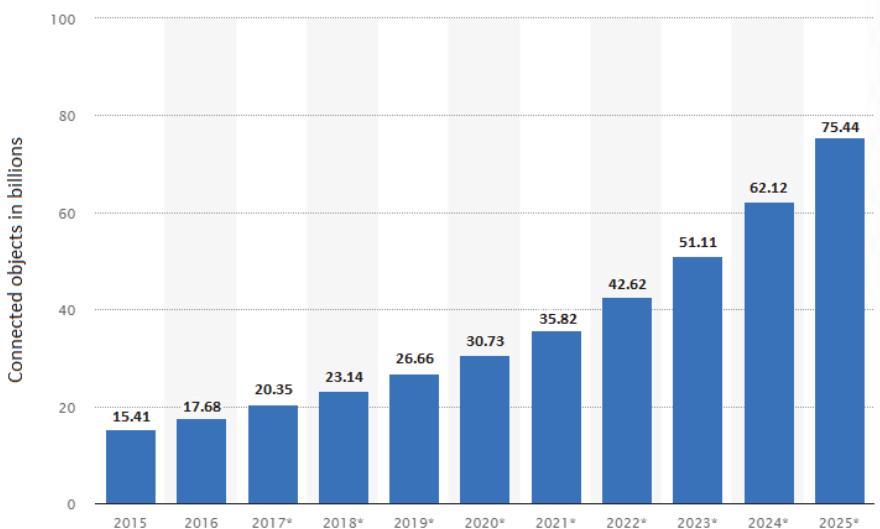
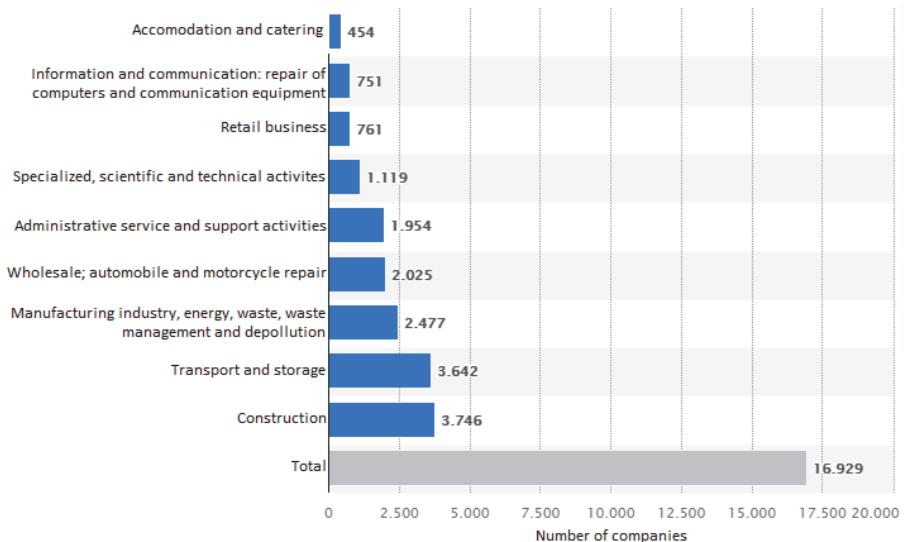


Figure 2.10. Number of companies analyzing Big Data using geo-location data from handheld devices in 2017, by sector* Internet of Things (IoT): number of connected devices worldwide from 2015 to 2025 (in Billions) (source: Statista)

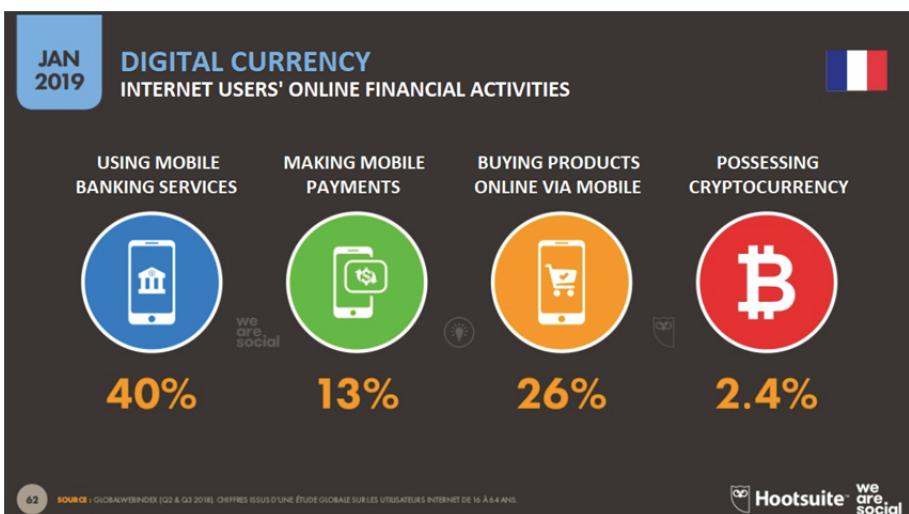
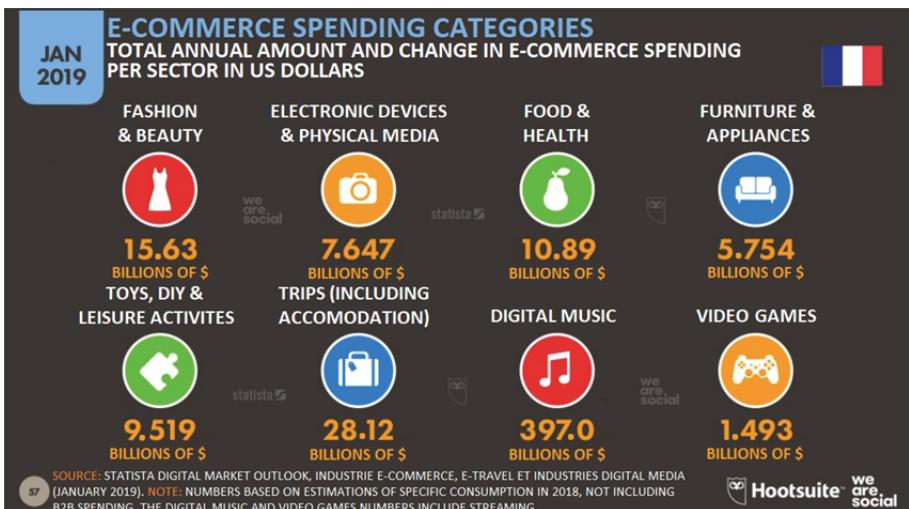


Figure 2.11. Categories and digital currency (source: We Are Social/GlobalWebIndex)

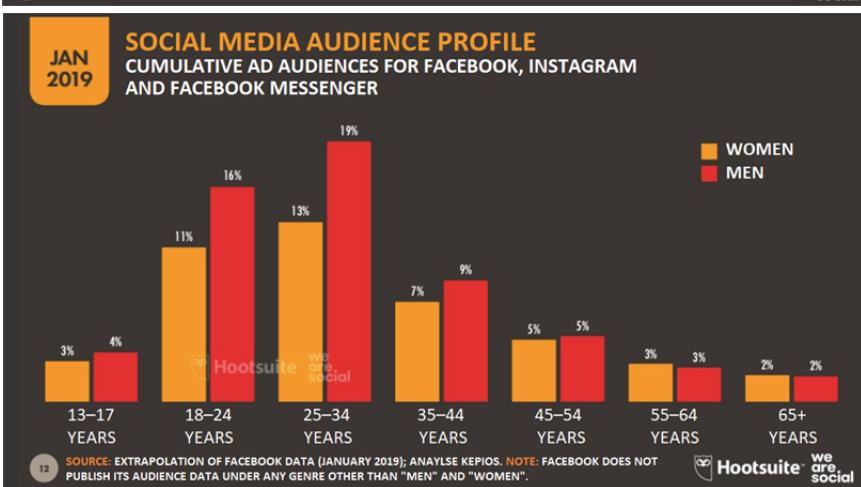
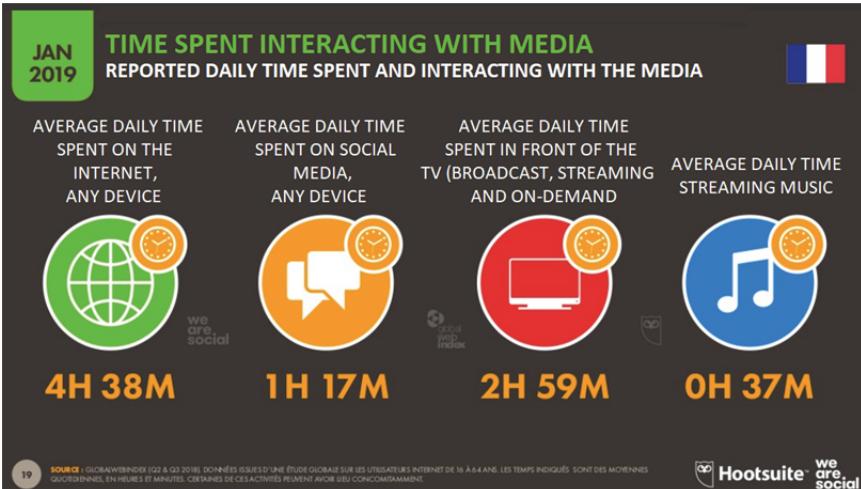


Figure 2.12. Time spent and profile of the social media audience in France 2019 (source: We Are Social/GlobalWebIndex)

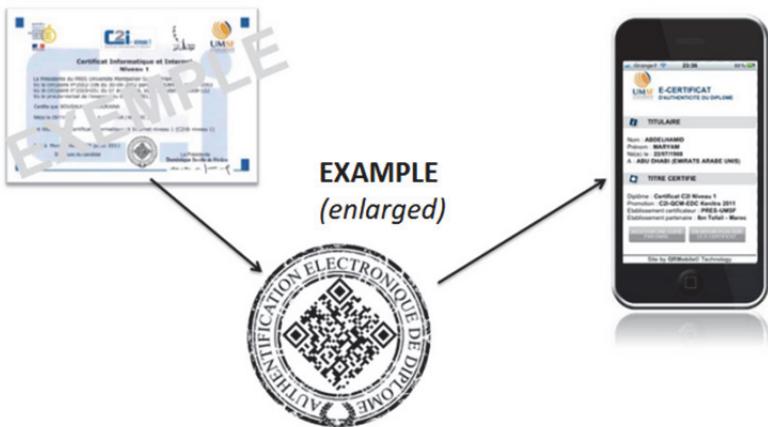


Figure 2.13. Information processing. Security and mass processing of C2i certificates using QRCode. In recent years, multiple initiatives have been launched to certify the origin of diplomas. In this respect, it is interesting to recall that the University of Montpellier and in particular its TRIS Laboratory have been pioneers in the fight against diploma falsification since 2011. Research work

[-https://www.contrefacon-riposte.info/technologies/4423-l-universite-de-montpellier-pionniere-dans-la-lutte-contre-la-contrefacon-des-diplomes.](https://www.contrefacon-riposte.info/technologies/4423-l-universite-de-montpellier-pionniere-dans-la-lutte-contre-la-contrefacon-des-diplomes)

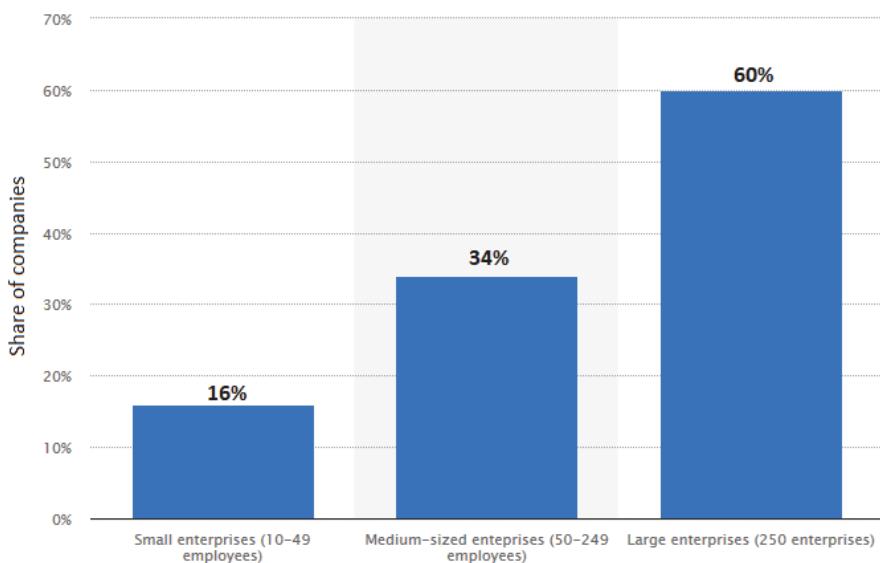


Figure 2.14. Percentage of companies purchasing Cloud computing services used on the Internet in France in 2018, by company size (source: Statista)

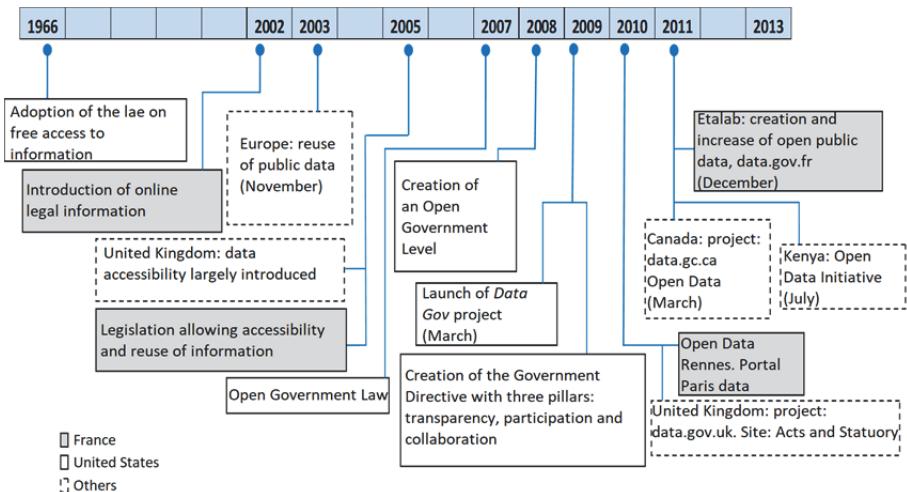


Figure 2.15. History of open data (source: Monino and Sedkaoui)

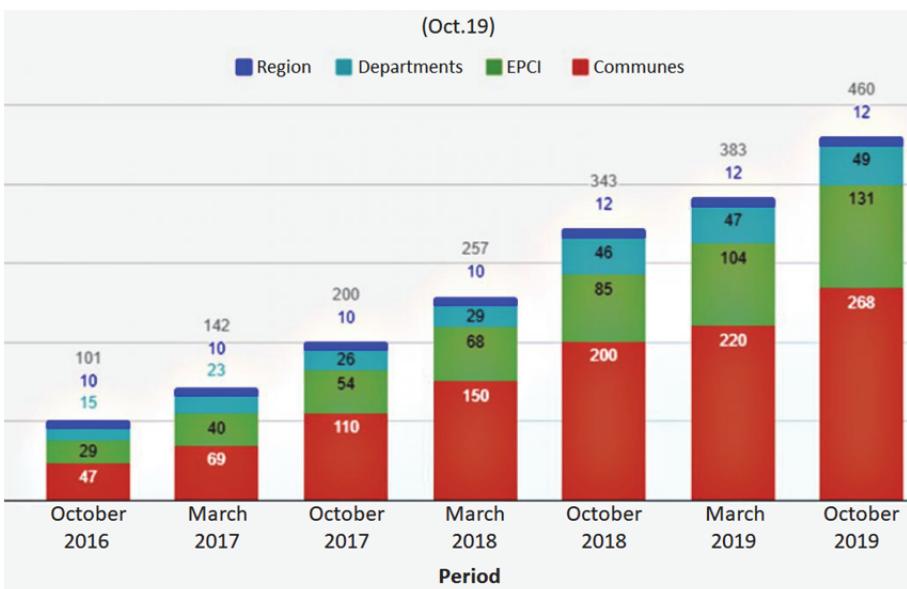
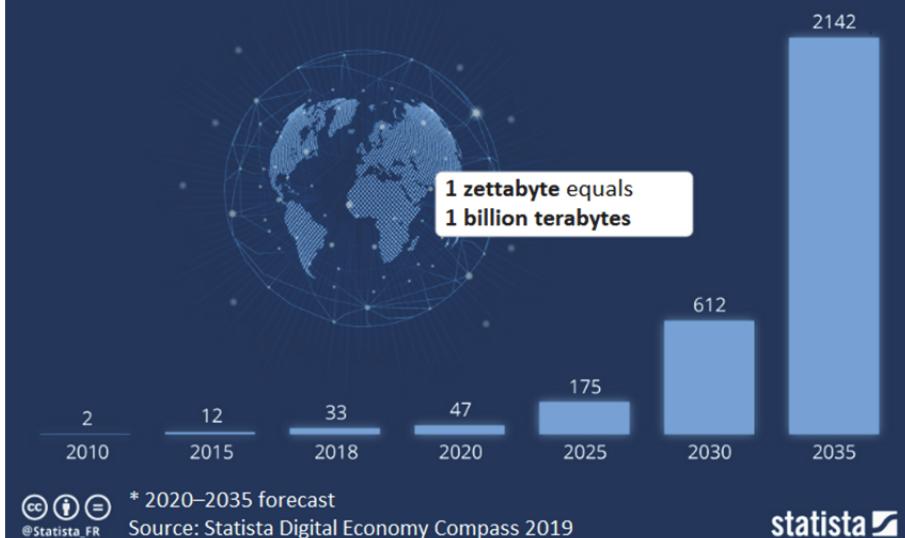


Figure 2.16. History of communities that have opened their data (source: Coudercy and Delobelle 2014)

Big data: the volume of data created will explode

Volume of digital data created in the world in 2010 (in zettabytes)*



France, European leader of Open Source

Breakdown of 2017 revenue from the Open Source European market*

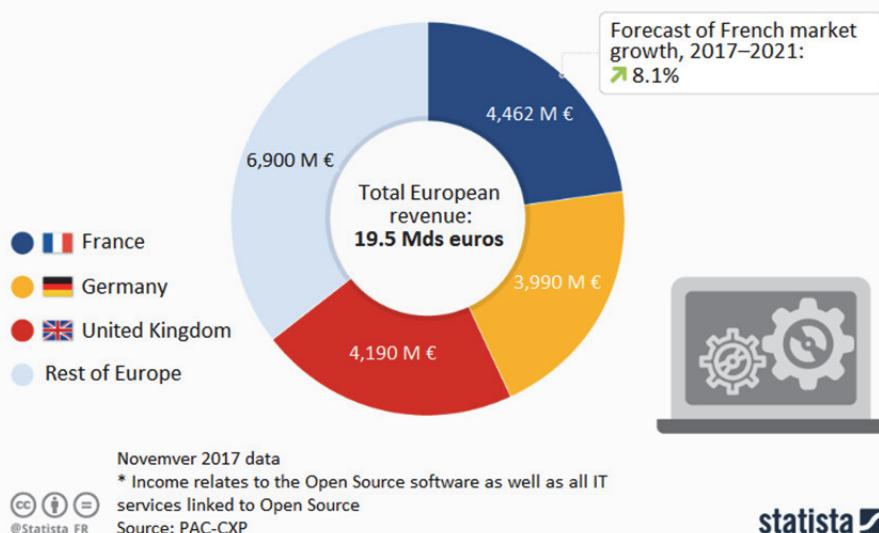


Figure 2.17. Big Data and open data volumes (source: Statista)



Figure 3.1. Map of the divisions of the population

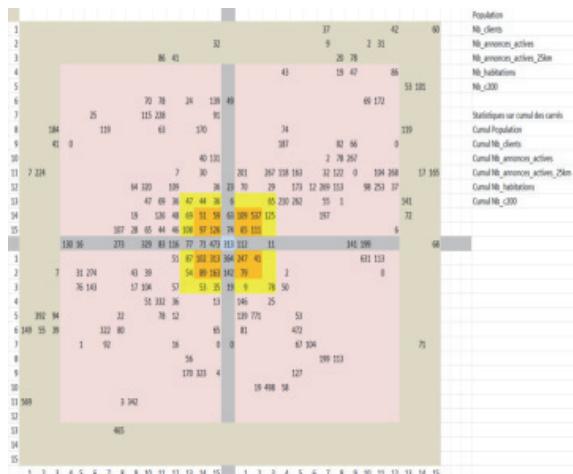
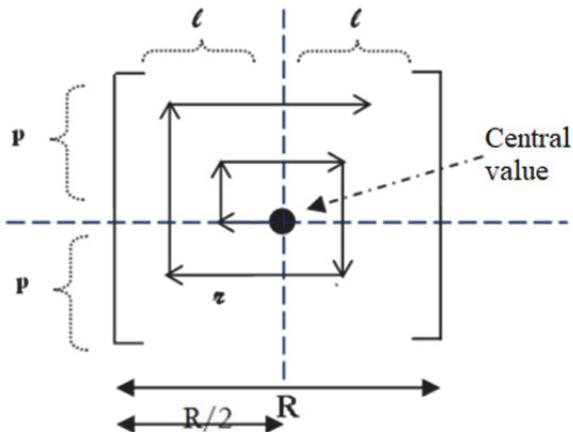


Figure 3.2. AUTOUR.CIM.

Figure 3.3. Open data on the city of Paris. The site of the Open Data initiative of the City of Paris. You will find here all the datasets published by the City services and its partners under ODbL license

Figure 3.4. The data.gouv.fr website. In the same perspective and in order to make the best use of open data, the Open Data portal “data.gouv.fr” in France makes available more than 350,000 datasets under the “Etabab Mission Open Licence”. The data released in this way is of very diverse nature and can generate interesting applications.



Figure 3.5. Clouds of text or words. “The keyword cloud”: it is a visual representation of the most used keywords on a website. Generally, words are displayed in larger fonts as they are used.

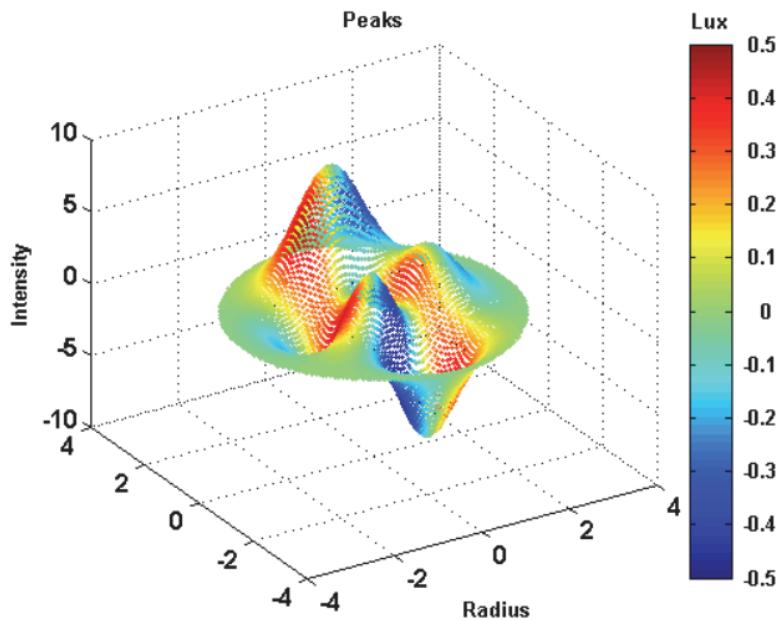


Figure 3.6. Three-dimensional visualization. Animated visualization in space: it is an interactive image that moves so that it can be seen from different sides, while positioning the information to better read the graph.

How the GAFAM generate billions

Main source of revenue for the GAFAM in 2017, in US dollars



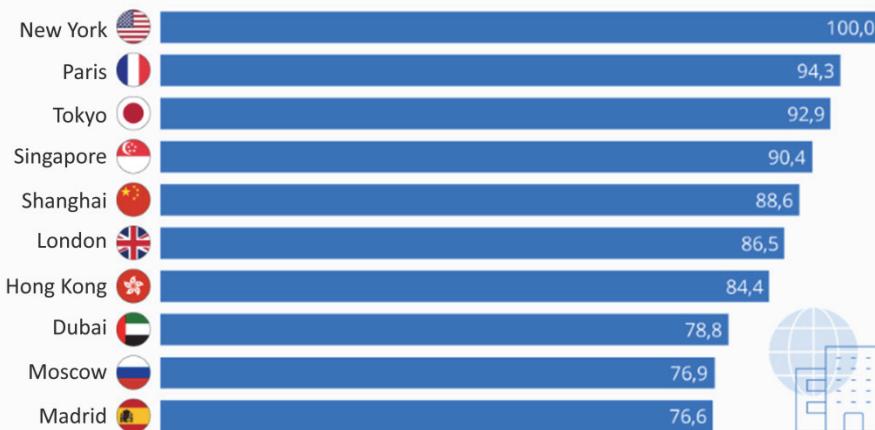
Source : informations des entreprises via le Statista Digital Economy Compass 2018

statista

Figure 3.7. AFSM their main sources of income

The most attractive cities for business

Classification of cities according to the "Global Business Cities 2025" index (score from 0 to 100)



* Index calculated using 17 socio-economic indicators of international attractiveness



statista

Figure 3.8. Ranking of the most attractive metropolises in the world


Montpellier
Méditerranée
Métropole

[NEWSROOM](#) | [CONTACT](#)
Recherche
Boîte à idées
[f](#)
[t](#)

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DOCUMENTS À TÉLÉCHARGER


Cité Intelligente |
Dossier Technique

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VIDÉOS


Cité Intelligente
Une approche globale
SERVICES AUX ADMINISTRATIFS

LA CITÉ INTELLIGENTE

Entreprendre > Grands projets économiques > La Cité Intelligente



Montpellier Méditerranée Métropole, fidèle à son esprit d'innovation, expérimente le concept de "Cité intelligente" en partenariat avec IBM, l'Université de Montpellier, l'IDATE et plusieurs entreprises locales.

Figure 3.9. The Intelligent City – Montpellier. Montpellier Méditerranée Métropole, true to its spirit of innovation, is experimenting with the “Smart City” concept in partnership with IBM, the University of Montpellier, IDATE and several local companies.

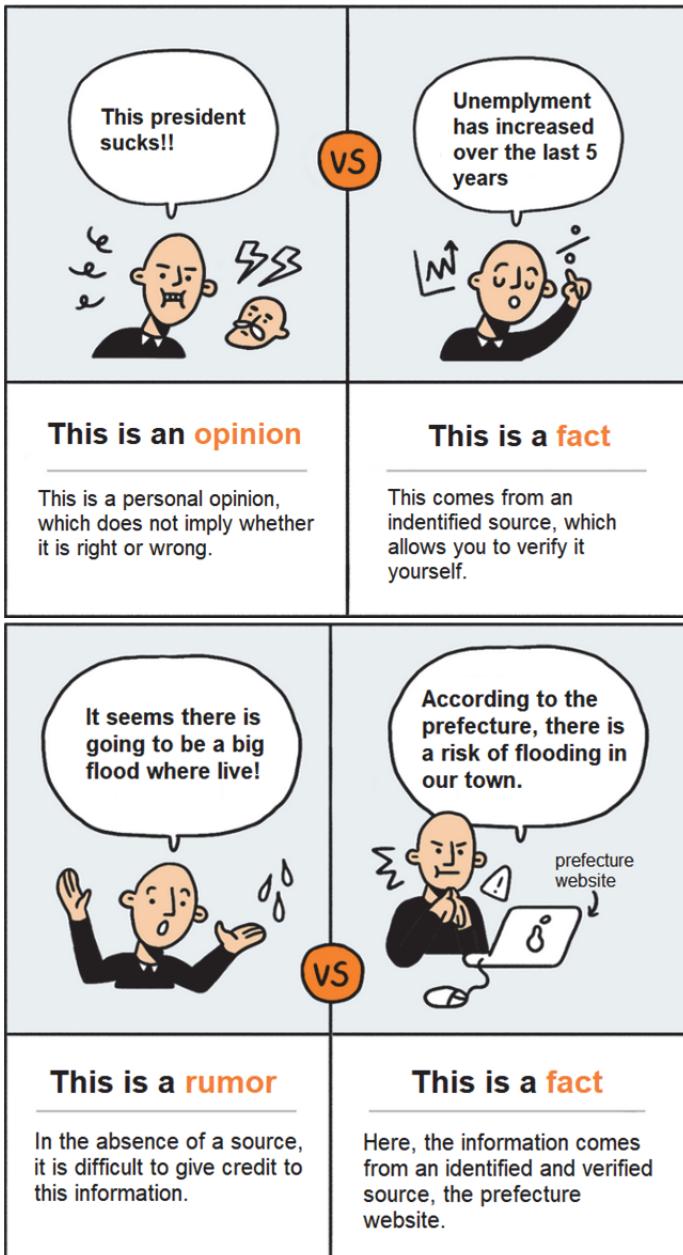


Figure 4.1. Advice, information, rumor. According to Agathe Dahyot/Le Monde, our translation of original figure (Les Décodeurs 2017).

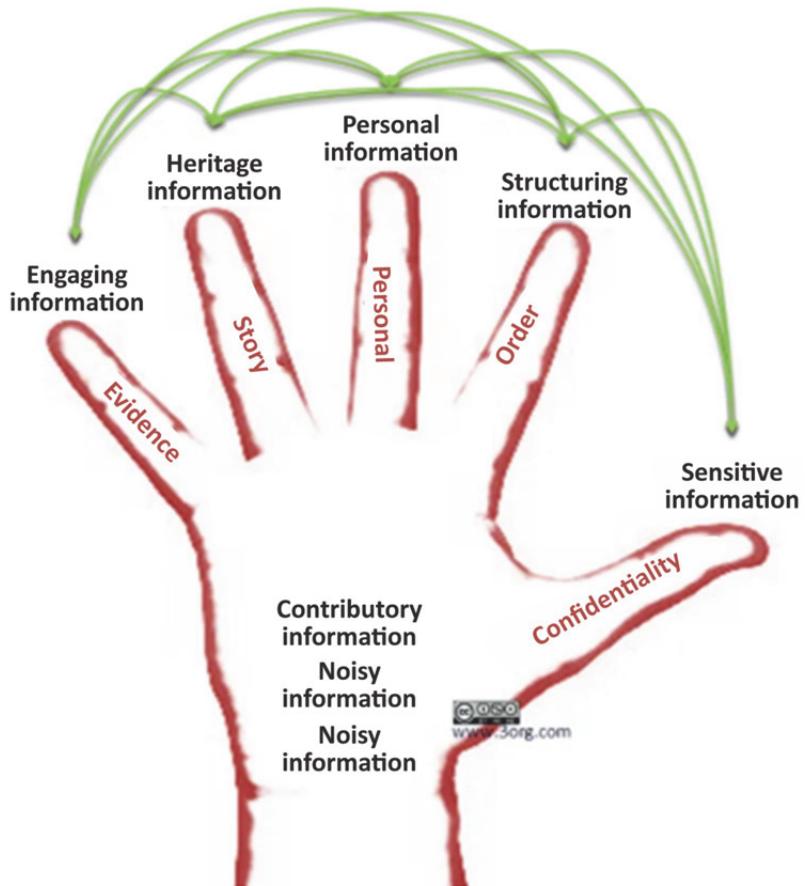


Figure 4.2. According to Jean-Pascal Perrein, the information flow is represented by seven families of information: engaging, heritage, structuring, sensitive, personal, contributory and noisy

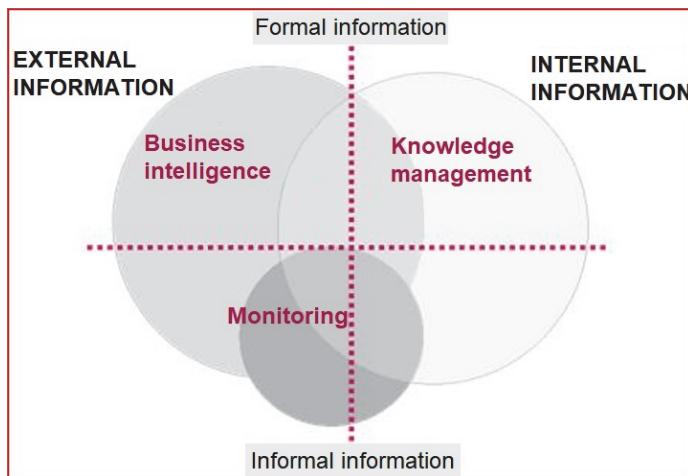


Figure 4.3. Several kinds of information (source: Monino 2016)

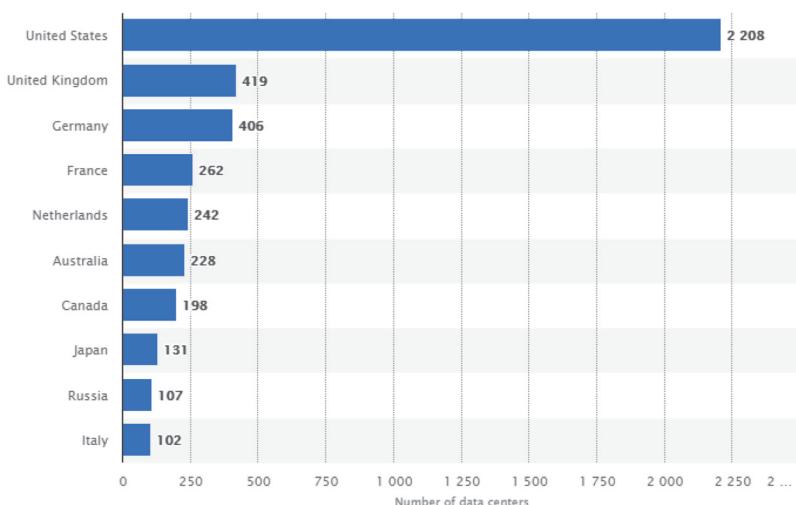


Figure 6.1. Data Centers worldwide

The following diagram summarizes the aim of this platform:

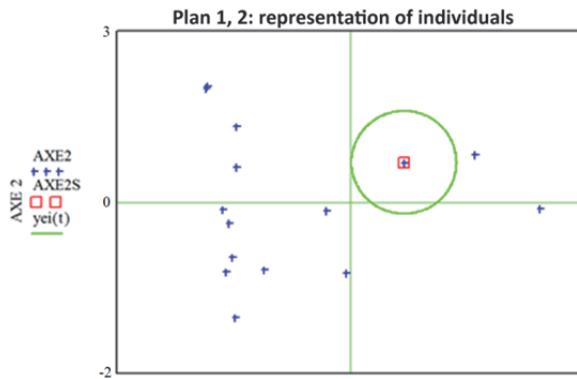
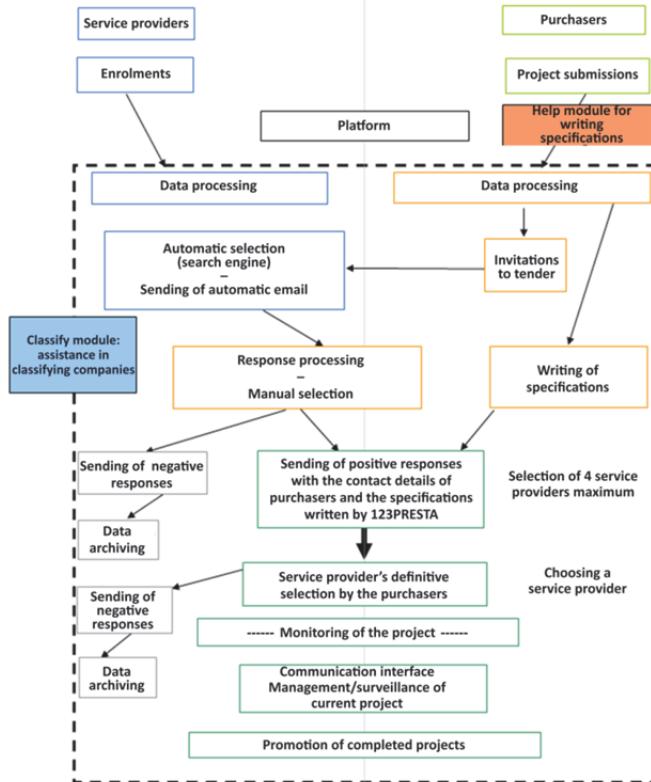


Figure 6.2. A classification by data analysis concerning a group

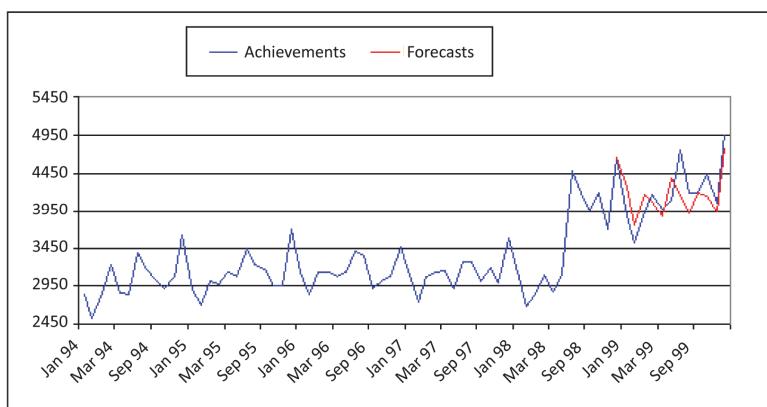
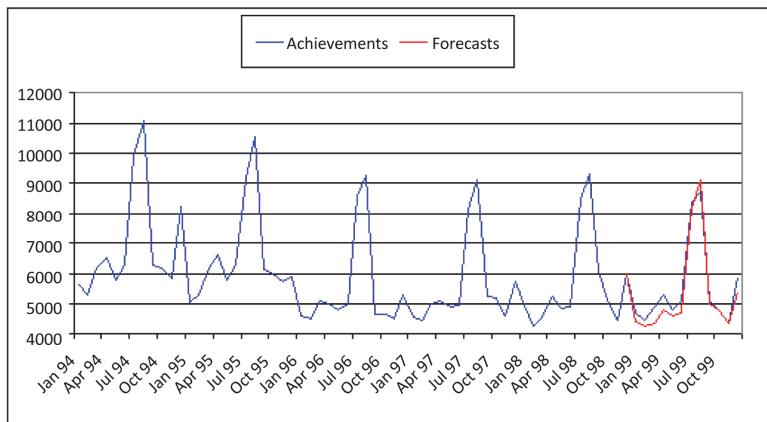
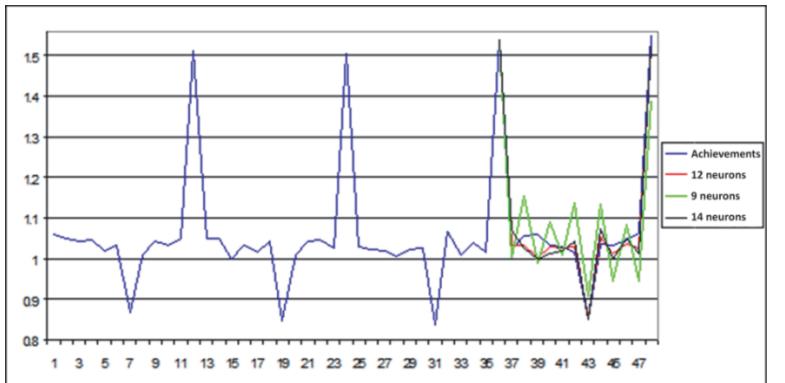
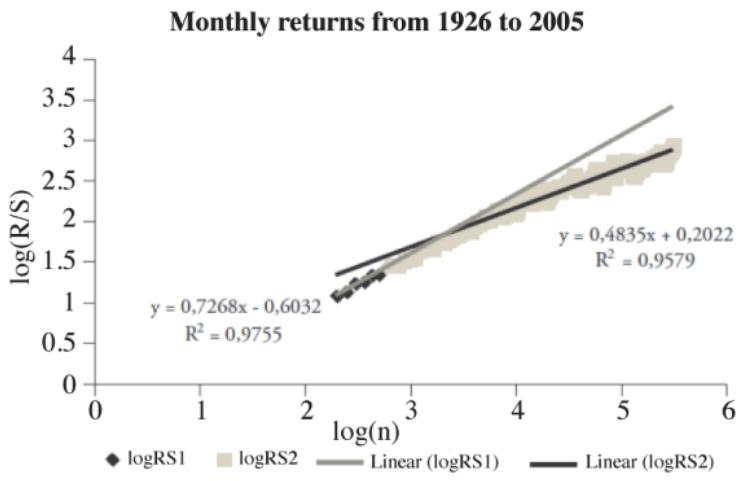


Figure 6.3. Predictions using the neuron method



Kurtosis bootstrap graph of convergence

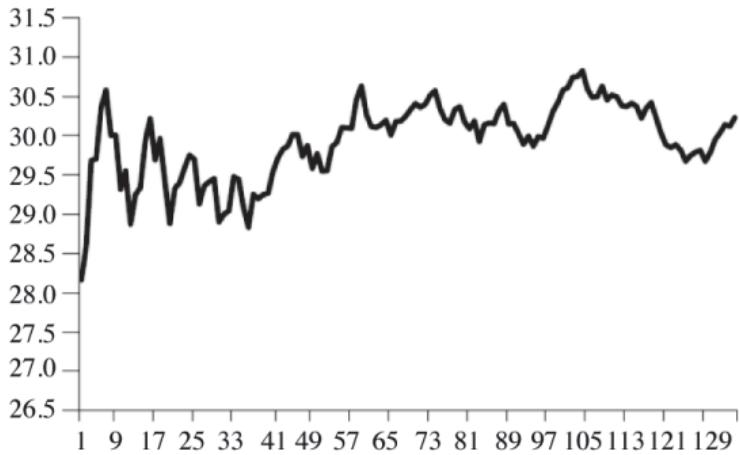


Figure 6.4. The stock market, chance, deterministic chaos

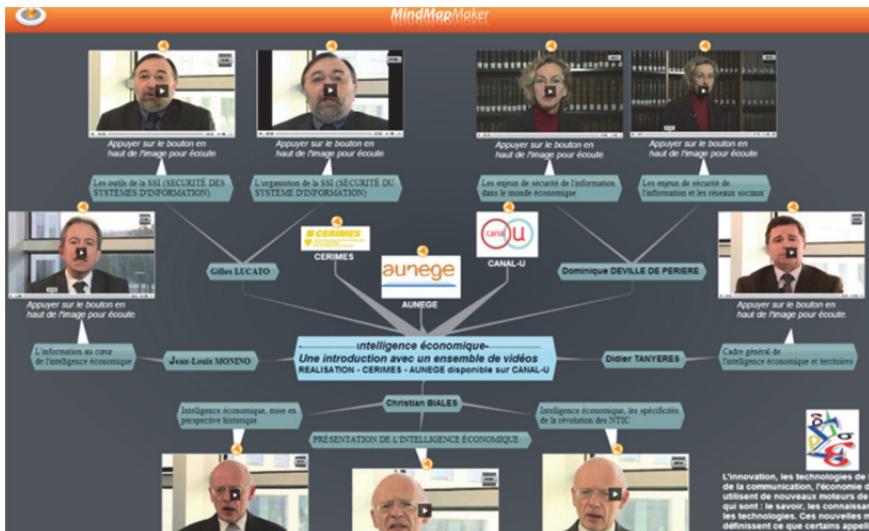


Figure 6.5. Example of educational resources put online by AUNEGE

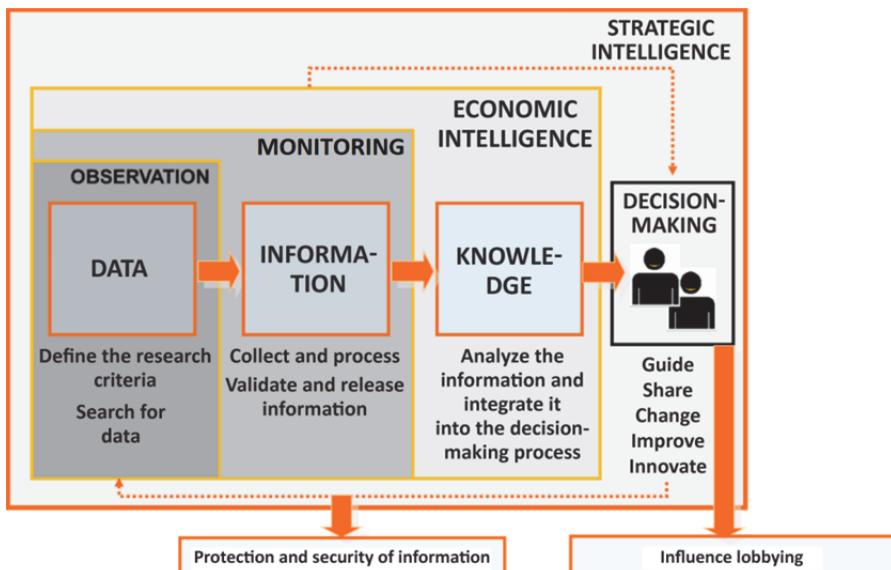


Figure 6.6. A model of strategic business intelligence, influence and information security

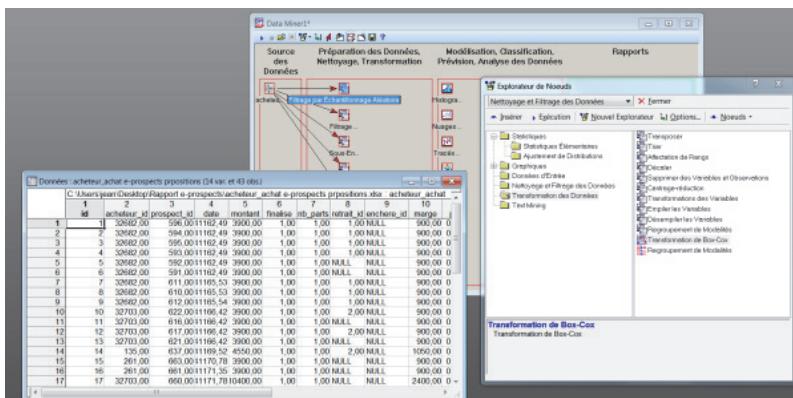


Figure 6.7. Example screen of TIBCO's Statistica

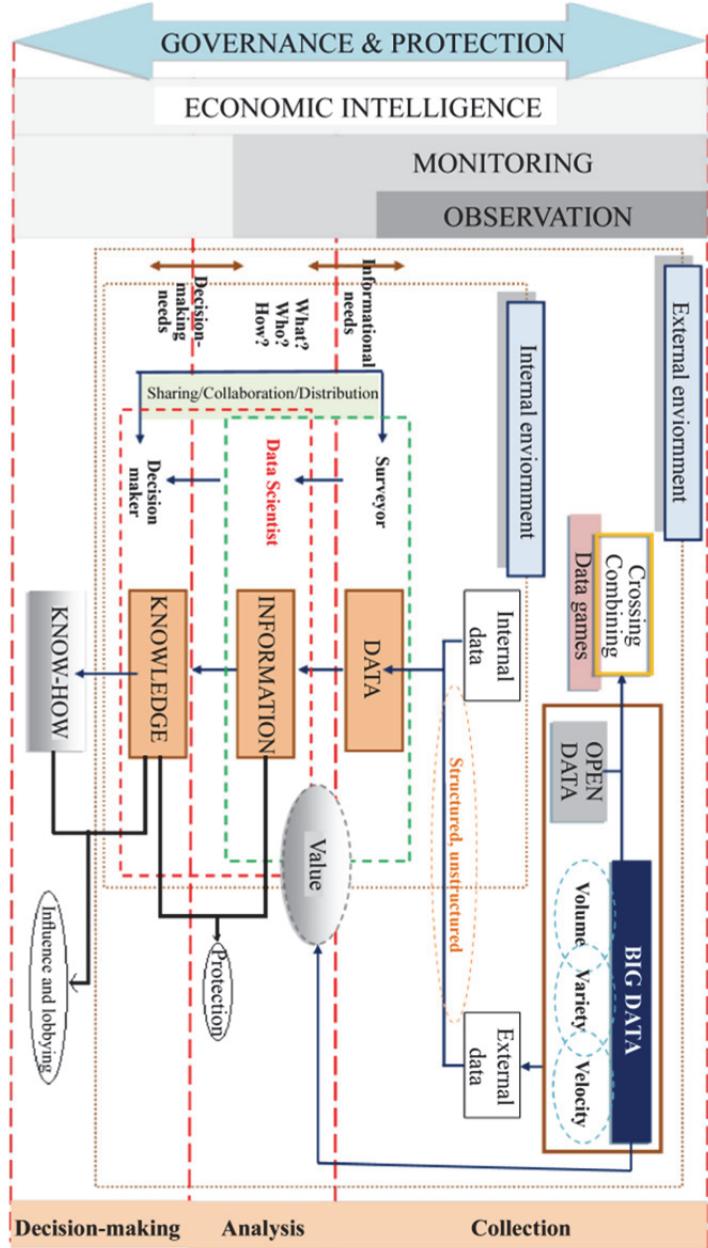


Figure C.1. The place of data in the digital society: a proposal for modeling through the concept of Economic Intelligence