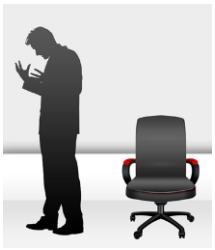


Intelligence d'affaires

Intro BI and Business strategy

Titre du cours : Intelligence d'affaires: principes et méthodes

2025

Agenda

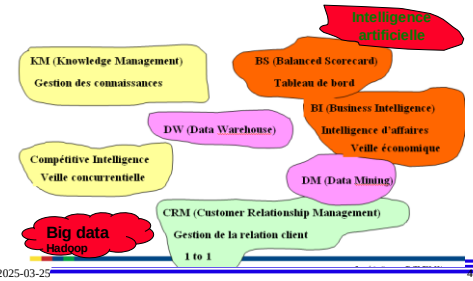
- Intro BI and Business strategy
- Exemple; BI

Objectifs du cours Intro BI and Business strategy

- **Objectifs:**
  - Définir l'intelligence d'affaires
  - Les éléments qui composent l'intelligence d'affaires (BI)
  - Définition de stratégie
  - Exemple de faire de l'intelligence d'affaires (BI)

Introduction

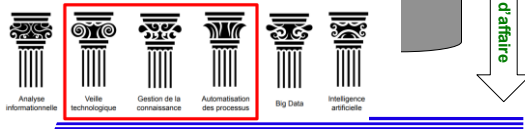
- Intelligence d'affaires ….une tour de Babel?
- Information structurée versus non-structurée



2025-03-25

Intelligence d'affaires

- L'analyse informationnelle (tableau de bord)
- La veille stratégique, technologique et concurrentiel
- La gestion de la connaissance (KM)
- Automatisation des processus (algorithme)
- + dernièrement le phénomème Big DATA
- + dernièrement l'Intelligence artificielle



Définition

Intelligence d'affaires - Business Intelligence (BI)

- Un ensemble de concepts, de méthodologies et d'application pour rassembler, stocker, analyser et permettre d'accéder à des données dans le but d'aider les utilisateurs d'entreprises dans leur processus d'affaires.
- Permet de transformer:
  - » Les données en information
  - » Les informations en connaissances
  - » Les connaissances en stratégies menant à des actions profitables à l'entreprise.

2025-03-25

Intelligence d'affaires - Business Intelligence (BI)

Business Intelligence and Information Management initiative leaders are faced with the following challenge: Enterprises have invested billions of dollars to create and manage information, but workers and managers still can't get the right information at the right time to make good decisions and improve business performance. **In other ways, the economic conditions brought a renaissance of thinking and activity regarding information — as enterprises realized that many of their cost and risk issues resulted from poor information management and business decision practices.**

Breaking down business, information and technology silos to better exploit information assets to make better decisions and improve business performance requires a strategic approach.

Our 202X research will focus primarily on providing guidance to help clients devise and execute such strategies.–

Bill Hostman, VP Distinguished Analyst, Gartner Research

Exemples Site web Classe Mondiale

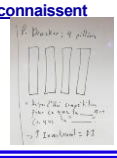
I

- Gartner | Delivering Actionable, Objective Insight to Executives and Their Teams
  - **Pour IT**
- Digital consulting | McKinsey & Company
  - https://www.mckinsey.com/
  - **Pour les affaires**

Peter Drucker a écrit 36 livres :

15 sur le management dont les 2 célèbres *The Practice of Management* (traduit :) et *The Effective Executive*

- **4 pilliers**
  - **Ressouces humaines**
  - **Ressources financières**
  - **Ressources matériels (actifs)**
  - **Ressources Informationnelles**
  - **Les entreprises compétitions pour ce qu'elles connaissent non pas pour ce qu'elles possèdent**



http://www.techno-science.net/

La stratégie - du grec stratos qui signifie « armée » et ageîn qui signifie « conduire » - est :

- l'art de coordonner l'action de l' des forces de la Nation - politiques, militaires, économiques, financières, morales... - pour conduire une guerre, gérer une crise ou préserver la paix. *«La stratégie est de la compétence du gouvernement et de celle du haut-commandement des forces armées.»* Charles de Gaulle
- ***La stratégie consiste à la définition d'actions cohérentes intervenant selon une logique séquentielle pour réaliser ou pour atteindre un ou des objectifs. Elle se traduit ensuite, au niveau opérationnel en plans d'actions par domaines et par périodes, y compris éventuellement des plans alternatifs utilisables en cas d'événements changeant fortement la situation.***
- *En contraste à la tactique dont l'enjeu est local et limité dans le (gagner des combats à l'intérieur d'une bataille), la stratégie à un objectif global et à plus long terme (gagner la bataille à l'intérieur d'une guerre qui est du ressort de la politique). En effet, il appartient à la politique le choix de la paix ou de la guerre et l'attribution des ressources mises en œuvre par des stratégies militaires sur le champ de bataille ou diplomatiques dans des négociations*
- *En fait, les militaires considèrent, dans cet art de combiner ses moyens et ses ressources en fonction des contingences, trois niveaux :*
  - » le niveau stratégique, ou plus couramment aujourd'hui politico-militaire, au plus haut niveau de l'État, dans un dialogue itératif entre responsables politiques, diplomatiques et militaires ;
  - » le niveau tactique, entre le haut-commandement militaire et le commandant d'un théâtre d'opération ;
  - » le niveau opérationnel, qui est celui, local, du commandant d'unité engagé dans une action particulière

Michael Porter - Big Ideas

- **Strategy is about making choices, trade-offs; it's about deliberatly choosing to be different.**
- **A strategy delineates a territory in wich a company seeks to be unique.**
- **Strategy 101 is about choices: You can't be all things to all people.**
- **The essence of strategy is that you must set limits on what you're trying to accomplish.**

Technology changes, strategy doesn't

- The underlying principles of strategy are enduring, regardless of technology or the pace of change.

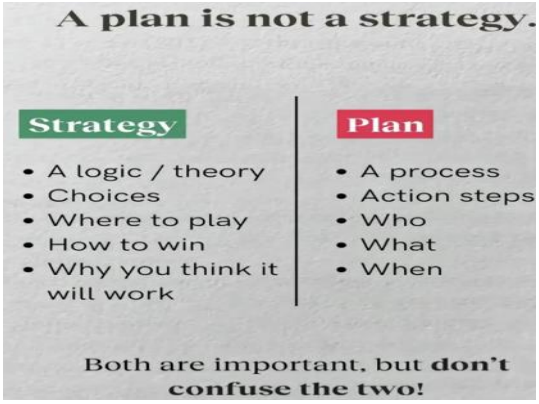
Strategy hasn't change, but change has

- On the other hand, I agree that the half-life of everything has shortened. setting strategy has become a little more complicated. In the old days, maybe 20 years ago, you could set a direction for your

Great strategies are a cause

-The **best CEOs I know are teachers and at the core of what teach is strategy.** They go out to employees, to suppliers, and to customers, and they repeat, **" This is what we stand for, this is what we stand for ."** So everyone understands it. This is what leaders do.

March 2001 FAST COMPANY

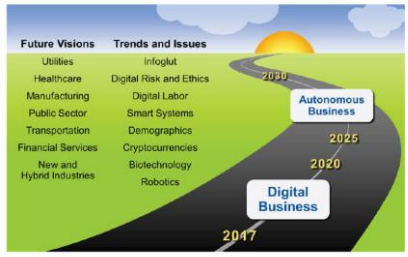


Recherche sur Gartner pour effectuer de l'Intelligence Affaires

Exemple …
Je suis, vous êtes CIO d'une entreprise !
Votre role ?
En grande partie faire de l'Intelligence Affaires

Agenda Overview for the Agenda for the Future, 2015..30

Figure 1. Overview of the Agenda for the Future



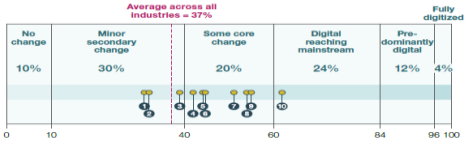
Source: Gartner (January 2015)

The case for digital reinvention; Mckinsey

Exhibit 1

Digital is penetrating all sectors, but to varying degrees.

Perception of digital penetration by industry,[1] % of respondents



Selected industries[2]

1. Consumer packaged goods (31%)
2. Automotive and assembly (32%)
3. Financial services (39%)
4. Professional services (42%)
5. Telecom (44%)
6. Travel, transport, and logistics (44%)
7. Healthcare systems and services (51%)
8. High tech (54%)
9. Retail (55%)
10. Media and entertainment (62%)

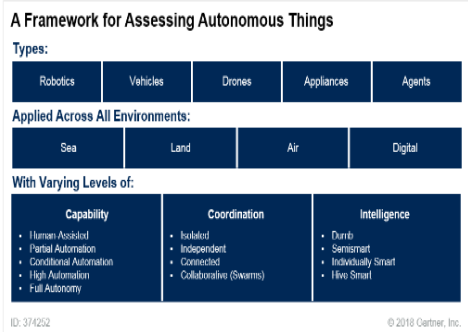
Top 10 Strategic Technology Trends for 2019-202X

Figure 1. Top 10 Strategic Technology Trends

Source: Gartner

Le plus important c'est que ca aide à faire des choix

Figure 2. A Framework for Assessing Autonomous Things



Source: Gartner (October 2018)

The Top 10 Strategic Technology Trends for 201X-2X

Figure 1. Gartner

Le plus important c'est que ça aide à faire des choix

Strategic Planning Assumptions (Gartner 202X)

Strategic Planning Assumptions

By 2021, 10% of new vehicles will have autonomous driving capabilities, compared with less than 1% in 2018.

Through 2020, the number of citizen data scientists will grow five times faster than the number of expert data scientists.

By 2022, at least 40% of new application development projects will have artificial intelligence co-developers on the team.

By 2021, half of large industrial companies will use digital twins, resulting in a 10% improvement in effectiveness for those organizations.

Through 2028, storage, computing, and advanced AI and analytics technologies will expand the capabilities of edge devices.

By 2022, 70% of enterprises will be experimenting with immersive technologies for consumer and enterprise use, and 25% will have deployed them to production.

By 2030, blockchain will create $3.1 trillion in business value.

By 2022, more than 50% of all people collaborating in Industry 4.0 ecosystems will use virtual assistants or intelligent agents to interact more naturally with their surroundings and with people.

By 2021, organizations that bypass privacy requirements and are caught lacking in privacy protection will pay 100% more in compliance cost than competitors that adhere to best practices.

By 2023, 20% of organizations will be budgeting for quantum computing projects, compared to less than 1% in 2018.

Strategic Planning Assumptions (Gartner 202X)

Le plus important c'est que ça aide à faire des choix

By 2019, digital business will require 50% fewer business process workers and 500% more key digital business jobs, compared with traditional models.

By 20XX, a significant and disruptive digital business will be launched that was conceived by a computer algorithm. Remote control (tower watch)

By 2019, the total cost of ownership for business operations will be reduced by 30% through smart machines and industrialized services. Automation + BI +Big DATA

By 2020, developed world life expectancy will increase by a half-year, due to the widespread adoption of wireless health monitoring technology. Mobile application

By 20XX, more than $2 billion in online shopping will be performed exclusively by mobile digital assistants.

By 20XX, U.S. customers' mobile engagement behavior will drive mobile commerce revenue in the U.S. to 50% of U.S. digital commerce revenue.

By 20XX, 70% of successful digital business models will rely on deliberately unstable processes designed to shift as customers' needs shift.

By 20XX, 50% of consumer product investments will be redirected to customer experience innovations.

By 2019, nearly 20% of durable goods "e-tailers" will use 3D printing to create personalized product offerings.

By 2020, retail businesses that use targeted messaging in combination with internal positioning systems will see a 5% increase in sales.

Figure 4. Technology Focus: North America vs. Global

North America	Global
1 BI/Analytics	1 BI/Analytics
2 Infrastructure and Data Center	2 Infrastructure and Data Center
3 Mobile	3 Mobile
4 ERP	4 ERP
5 Cloud	5 Cloud
6 Security	6 Networking, Voice and Data Communications
7 Networking, Voice and Data Communications	7 Digitalization/Digital Marketing
8 Industry-Specific Applications	8 Security
9 Legacy Modernization	9 Industry-Specific Applications
10 Digitalization/Digital Marketing	10 Customer Relationship Management
11 Customer Relationship Management	11 Legacy Modernization
12 Continuity	12 Collaboration

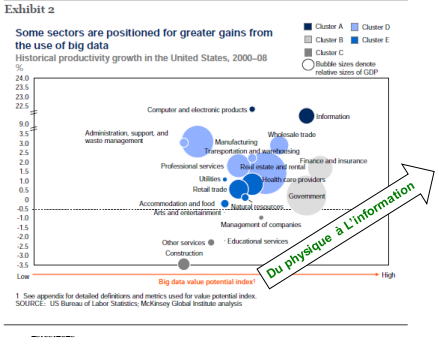
Le plus important c'est que ça aide à faire des choix. Supporter des choix stratégiques

McKinsey Global Institute
Big data: The next frontier for innovation, competition, and productivity

Exhibit 2

Some sectors are positioned for greater gains from the use of big data

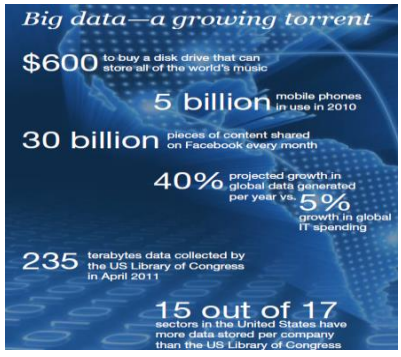
Historical productivity growth in the United States, 2000–08



1. See appendix for detailed definitions and metrics used for value potential index.
SOURCE: US Bureau of Labor Statistics; McKinsey Global Institute analysis

2. Big data: The next frontier for innovation, competition and productivity

Big data will become a key basis of competition, underpinning new waves of productivity growth, innovation, and consumer surplus—as long as the right policies and enablers are in place. The accompanying interactive examines the state of digital data and the value that can potentially be unlocked. Mckinsey 201X..2X



McKinsey Quarterly; Bigdata

5 Experimentation and big data

Could the enterprise become a full-time laboratory? What if you could analyze every transaction, capture insights from every customer interaction, and didn't have to wait for months to get data from the field? What if . . . ? Data are flooding in at rates never seen before—doubling every 18 months—as a result of greater access to customer data from public, proprietary, and purchased sources, as well as new information gathered from Web communities and newly deployed smart assets. These trends are broadly known as "big data." Technology for capturing and analyzing information is widely available at ever-lower price points. But many companies are taking data use to new levels, using IT to support rigorous, constant business experimentation that guides decisions and to test new products, business models, and innovations in customer experience. In some cases, the new approaches help companies make decisions in real time. This trend has the potential to drive a radical transformation in research, innovation, and marketing.

Web-based companies, such as Amazon.com, eBay, and Google, have been early leaders, testing factors that drive performance—from where to place buttons on a Web page to the sequence of content displayed—to determine what will increase sales and user engagement. Financial institutions are active experimenters as well. Capital One, which was early to the game, continues to refine its methods for segmenting credit card customers and for tailoring products to individual risk profiles. According to Nigel Morris, one of Capital One's cofounders, the company's multifunctional teams of financial analysts, IT specialists, and marketers conduct more than 65,000 tests each year, experimenting with combinations of market segments and new products.

Companies selling physical products are also using big data for rigorous experimentation. The ability to marshal customer data has kept Tesco, for example, in the ranks of leading UK grocers. This

Perturber l'évolution Technologique

McKinsey Global Institute

Disruptive technologies: Advances that will transform life, business, and the global economy

Exhibit E1

Twelve potentially economically disruptive technologies

Mobile internet	Increasingly inexpensive and capable mobile computing devices and internet connectivity
Automation of knowledge work	Intelligent software systems that can perform knowledge work tasks involving unstructured commands and subtle judgments
The internet of Things	Networks of low-cost sensors and actuators for data collection, monitoring, decision making, and process optimization
Cloud technology	Use of computer hardware and software resources delivered over a network or the internet, often as a service
Advanced robotics	Increasingly capable robots with enhanced senses, dexterity, and intelligence used to automate tasks or augment humans
Autonomous and near-autonomous vehicles	Vehicles that can navigate and operate with reduced or no human intervention
Next-generation genomics	Fast, low-cost gene sequencing, advanced big data analytics, and synthetic biology ("writing" DNA)
Energy storage	Devices or systems that store energy for later use, including batteries
3D printing	Additive manufacturing techniques to create objects by printing layers of material based on digital models
Advanced materials	Materials designed to have superior characteristics (e.g., strength, weight, conductivity) or functionality
Advanced oil and gas exploration and recovery	Exploration and recovery techniques that make extraction of unconventional oil and gas economical
Renewable energy	Generation of electricity from renewable sources with reduced harmful climate impact

SOURCE: McKinsey Global Institute analysis

Gartner; the Nexus forces; Top Strategic Technology Trends ;The Four Futures for IT

A Nexus of Forces

Gartner

The Changing Focus of IT Drives Four Dominant Futures

Gartner

Nous venons de faire de IA en se documentant sur un sujet pour mieux prendre des décisions dans le futur…..*Les meilleurs*

Exercice en classe no 1 (Individuel)

- Selon vous
  - Que signifie l'Intelligence d'affaires pour vous maintenant
  - Quel sont les principaux enjeux relié à la mise en place de l'Intelligence d'affaires

Atelier Enjeux (top 2); en équipe

- Avec CHATGPT
- 1-
- 2-
- Sans CHATGPT
- 1-
- 2-

ENJEU: Ce que l'on peut gagner ou perdre, une entreprise.
Selon CHATGPT: facteur critique de réusiste.

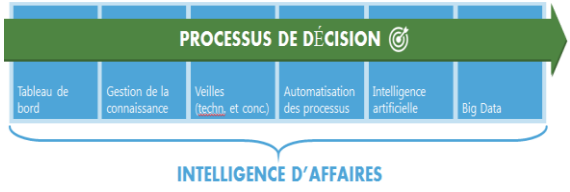
Atelier Défi BI (top 2); en équipe

- 1-
- 2-

Intelligence d'affaires

- L'analyse informationnelle (tableau de bord)
- La veille stratégique, technologique et concurrentiel
- La gestion de la connaissance
- Automatisation des processus (algorithme)
- + dernièrement le phénomème Big DATA
- + dernièrement l'Intelligence artificielle

CONCLUSION



Conclusion (suite)

- BI le plus important c'est d'acquérir les principes et les processus pour développer la pensée stratégique et l'intelligences d'affaires versus le contenu qui change vite…
- BI faut comprendre:

	Informations du Passé de l'entreprise	InformationsPrésent de l'entreprise	Informations futur de l'entreprise
BI	20 %	40%	40%
Stratégie	10 %	30 %	60%

- Base de la prise de décision:

Émotion (feeling) / Expérience / Fait / Analytic (modèle de statitisque avancé)

Le benchmark

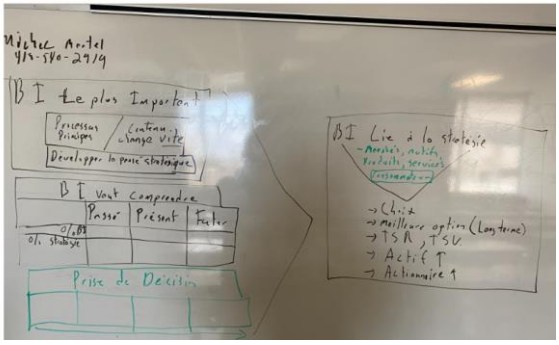
- Le benchmark en affaires est une démarche qui consiste à comparer les performances, les processus ou les pratiques d'une entreprise avec ceux d'autres entreprises ou organismes considérés comme des références dans un domaine particulier. L'objectif est d'identifier les écarts de performance, de comprendre les meilleures pratiques et de s'inspirer de ces dernières pour améliorer les résultats de l'entreprise.
- Le benchmark peut être utilisé dans plusieurs contextes, comme l'efficacité des processus, la satisfaction des clients, les coûts opérationnels ou l'innovation. Il peut être interne (comparaison entre différentes divisions ou filiales d'une même entreprise) ou externe (comparaison avec des concurrents directs ou des entreprises leaders dans d'autres secteurs).

Le benchmark; Exemple concret :

- Prenons l'exemple de Toyota dans le secteur automobile.
- Toyota est réputée pour avoir utilisé le benchmark pour perfectionner son système de production, connu sous le nom de "Toyota Production System" (TPS). L'entreprise a analysé les pratiques d'autres leaders industriels pour optimiser ses propres processus. Par exemple, elle s'est inspirée des supermarchés américains pour concevoir le système "Juste-à-temps" (JIT), où les matériaux et les pièces sont approvisionnés uniquement en fonction des besoins immédiats de la production. Cela a permis à Toyota de réduire les gaspillages, d'améliorer l'efficacité et de devenir un modèle pour d'autres entreprises.

Benchmark

KPI	Q1	Q2	Q3	Q4
Tonne/employé				
Energie/tonne Hr supp./emp.				
$ entretien/tonne				
$ approv./tonne				



LOIS

Question pour vous laquelle des lois suivantes a un lien direct avec le BI ?