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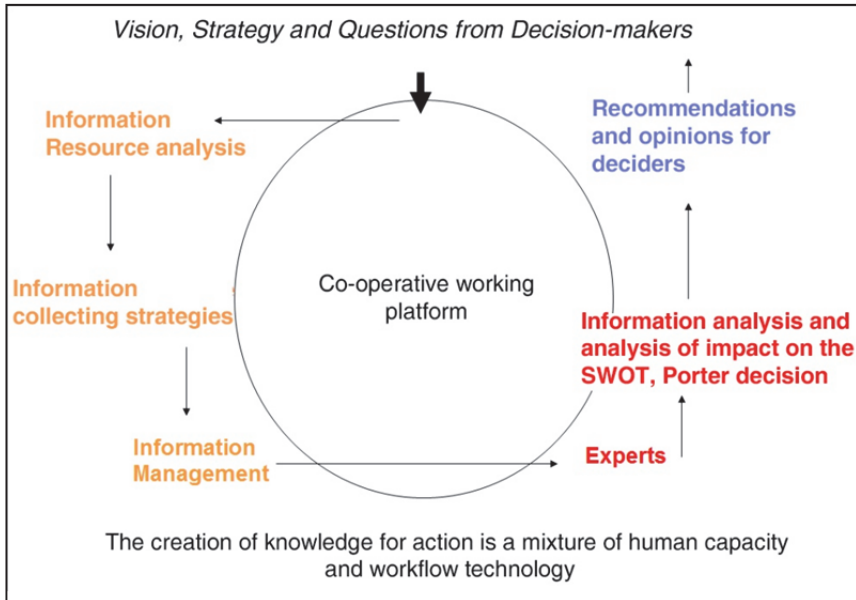
# **Strategic Intelligence for the Future 2**

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*A New Information Function Approach*

Henri Dou  
Alain Juillet  
Philippe Clerc

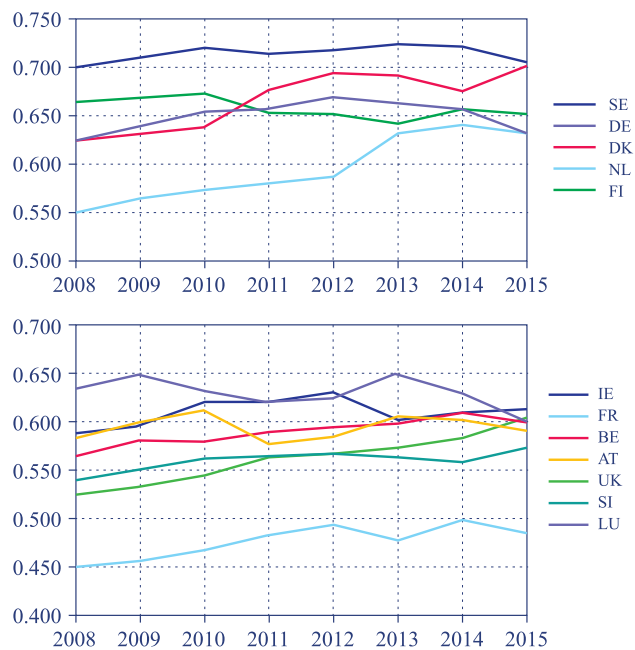
Color section



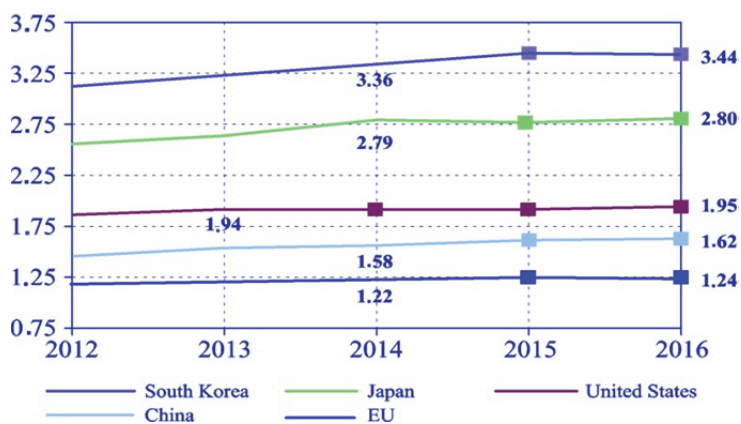
**Figure 2.1.** *The intelligence cycle, the camel (orange), the lion (red), the child (blue)*



**Figure 3.8.** *The level of innovation in the EU*



**Figure 3.9.** *Innovation index for the first two groups of countries*



**Figure 3.10.** *R&D expenses for businesses as a percentage of GDP.*

# 2017

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**Product Introduction**

**English Name:** China Academic Journals Full-text Database (CJFD)

**Brief Introduction:** The database is the largest and continuously updated Chinese journal database in the world, focuses on academy, technology, policy guidance, popular science and education journals and covers science, engineering technology, agriculture, philosophy, medicine, humanities and social sciences, etc. It has collected 10,156 China academic journals, and the full-text paper amount has reached to 58,130,372.

**Series and Subjects:** The product comprises 10 series, which are Science/Technology/Engineering A (Mathematics, Physics, Mechanics, Astronomy, Geology and biology), Science/Technology/Engineering B (Chemistry, Chemistry Industry, Metallurgy Industry, Environmental Science and Mining Engineering), Science/Technology/Engineering C (Mechanics, Aeronautics, Traffic, Hydraulic, Architecture and Energy), Agriculture, Medicine/Hygiene, Literature/History/Philosophy, Politics/Military/Law, Education/Social Science, Electronics/Information Technology, Economics and Management. The 10 series are further divided into 168 subjects of databases.

**Year Coverage:** 1951 onward, some journals date back to the first issue.

**Product Forms:** Web, mirror sites, DVD-ROMs and flow accounting.

**Publication Frequency:** 1. Daily update: CNKI central servers and overseas mirror sites are daily updated, except for the public holidays. 2. Monthly update: CNKI overseas mirror sites and DVD-ROMs are updated on the 10th of each month.

**Publisher:** China Academic Journals Electronic Publishing House Co., Ltd. [Copyright Statement](#)

Figure 4.6. Home page and description of CNKI



Figure 5.1. Map using the Web as a source of information. Subject, Moringa



**Figure 5.2.** Map using Pubmed as a source of information. Subject, Moringa



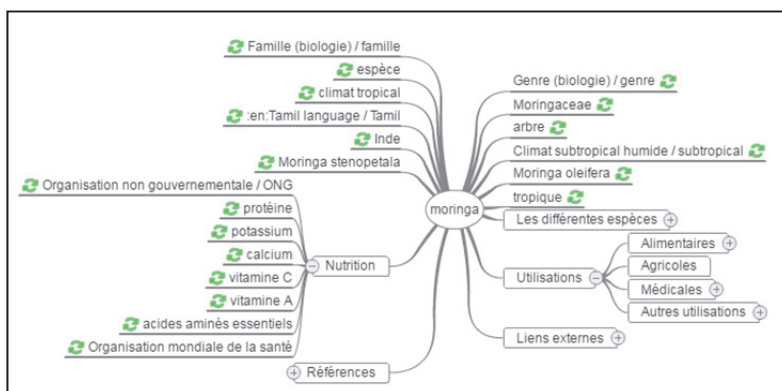


Figure 5.5. Data clustering obtained from the French Wiki using the term Moringa

Matrix: Group/Group 2

	PR=JP	PR=US	PR=CN	PR=KR	PR=DE
PN=DE	18	29	1	2	24
PN=US	94	120	2	4	16
PN=CN	106	48	85	7	9
PN=JP	381	33	2	2	7
PN=KR	41	22	2	272	2

Figure 5.23. Matrix created from priority countries (PR\*) and countries present in the patent number (PN\*)

RESSOMER

Service
Comment ça marche
PREMIUM
Contact
Connexion
Blog
FR

Involved in extracting knowledge on the criteria of its novelty or similarity in texts produced by humans for humans. In practice, it amounts to putting into algorithm form a simplified model of linguistic theories in computer learning systems and statistics. The disciplines involved are therefore computational linguistics, language engineering, artificial intelligence, text mining methods contribute to the process of economic intelligence: relationship mapping, detecting explicit relationships between actors (granting licenses, mergers/acquisitions, etc.). [Wik 18g]

Other methods have been developed for when the subject to be addressed is known and the source mainly addresses the subject. To visualize these kinds of processes, imagine that you are connected to a newswire, such as AFP for example. The language used is therefore French. In these dispatches, we will try to select the dispatches that interest the Foreign Minister. We can then develop a set of rules. Each dispatch will be analyzed based on this principle: the only problem is deciding how to select rules properly on the one hand, and changing them on the other hand, according to time and new events (a change of vocabulary) and of course, languages as over time and depending on events new words may appear in a foreign language, even when looking at dispatches from a French agency. A good description of this technology is provided by Coupet P. et al. (COU 05). The authors present, in detail, the economic intelligence skill cartridge and the competitive intelligence skill

form occurrence or co-occurrence matrices that will be used to show the text in the form of matrices, networks, etc. Many examples of such processing exist in literature. A good description of data mining is available on the French-language Wikipedia site: «Text mining or the extraction of knowledge from texts is a data mining specialization and forms part of the domain of artificial intelligence. It covers the IT processes involved in extracting knowledge on the criteria of its novelty or similarity in texts produced by humans for humans. In practice, it amounts to putting into algorithm form a simplified model of linguistic theories in computer learning systems and statistics. The disciplines involved are therefore computational linguistics, language engineering, artificial intelligence, statistics and IT. In the context of economic intelligence: text mining methods contribute to the process of economic intelligence: relationship mapping, detecting explicit relationships between actors »

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Figure 5.27. The most important parts of the text highlighted





























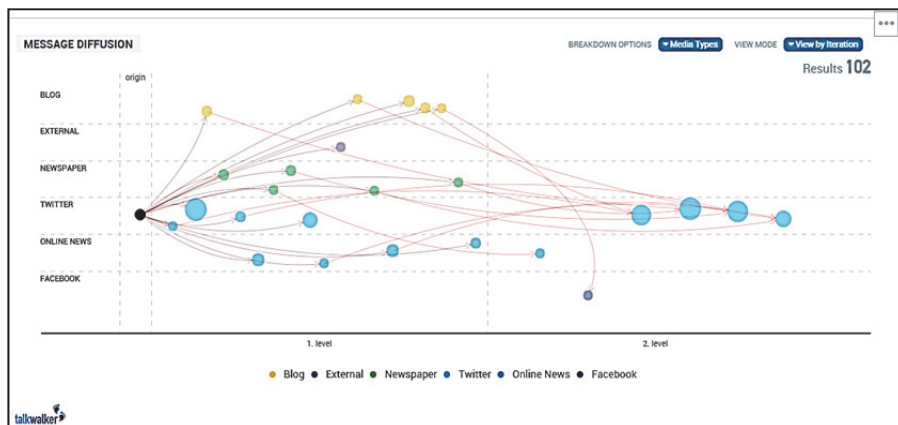
Rank	Name	Company	Active user accounts	Date launched	Country of origin	Date of active user stat.
1	Facebook	Facebook	2.27 billion <sup>[3]</sup>	February 2004	 United States	September 2018
2	YouTube	Google	1.9 billion <sup>[4]</sup>	February 2005	 United States	July 2018
3	WhatsApp	Facebook	1.5 billion <sup>[5]</sup>	February 2009	 United States	January 2018
4	Messenger	Facebook	1.3 billion <sup>[6]</sup>	August 2011	 United States	September 2017
5	Instagram	Facebook	1 billion <sup>[7]</sup>	October 2010	 United States	June 2018
6	iMessage	Apple	1 billion <sup>[8]</sup>	October 2011	 United States	February 2018
7	WeChat	Tencent	1 billion <sup>[9]</sup>	January 2011	 China	March 2018
8	QQ	Tencent	868 million <sup>[10]</sup>	February 1999	 China	December 2016
9	Ozone	Tencent	638 million <sup>[11]</sup>	May 2005	 China	December 2016
10	LinkedIn	Microsoft	590 million <sup>[12]</sup>	May 2003	 United States	January 2019
11	Tumblr	Verizon	550 million <sup>[13]</sup>	February 2007	 United States	January 2017
12	VK	Vkontakte	500 million <sup>[14]</sup>	October 2006	 Russia	August 2018
13	TikTok	ByteDance	500 million <sup>[14]</sup>	September 2016	 China	July 2018
14	Weibo	Sina	340 million <sup>[15]</sup>	August 2009	 China	March 2017
15	Twitter	Twitter	335 million <sup>[16]</sup>	March 2006	 United States	June 2018
16	Reddit	Reddit	330 million <sup>[17]</sup>	June 2005	 United States	April 2018
17	Snapchat	Snap Inc.	300 million <sup>[18]</sup>	September 2011	 United States	June 2017
18	Skype	Microsoft	300 million <sup>[19]</sup>	August 2003	 Estonia  Sweden  Denmark	March 2016
19	Tieba	Baidu	300 million <sup>[20]</sup>	December 2003	 China	August 2016
20	Viber	Rakuten	260 million <sup>[21]</sup>	December 2010	 Israel	February 2018
21	Google+	Google	212 million <sup>[22]</sup>	June 2011	 United States	April 2015
22	Telegram	Telegram	200 million <sup>[23]</sup>	August 2013	 Russia	March 2018
23	Pinterest	Pinterest	200 million <sup>[24]</sup>	March 2010	 United States	September 2017
24	imo	PageBites	200 million <sup>[25]</sup>	February 2010	 United States	July 2018
25	LINE	Naver	168 million <sup>[26]</sup>	June 2011	 Japan  South Korea	December 2017
26	BBM	BlackBerry	100 million <sup>[27]</sup>	February 2007	Canada	February 2015

Figure 6.1. List of virtual communities with more than 100 million users [WIK 19]



**Figure 6.5.** Representation of the way in which the initial tweet (on the left) has “travelled” on social media [RIC 16]

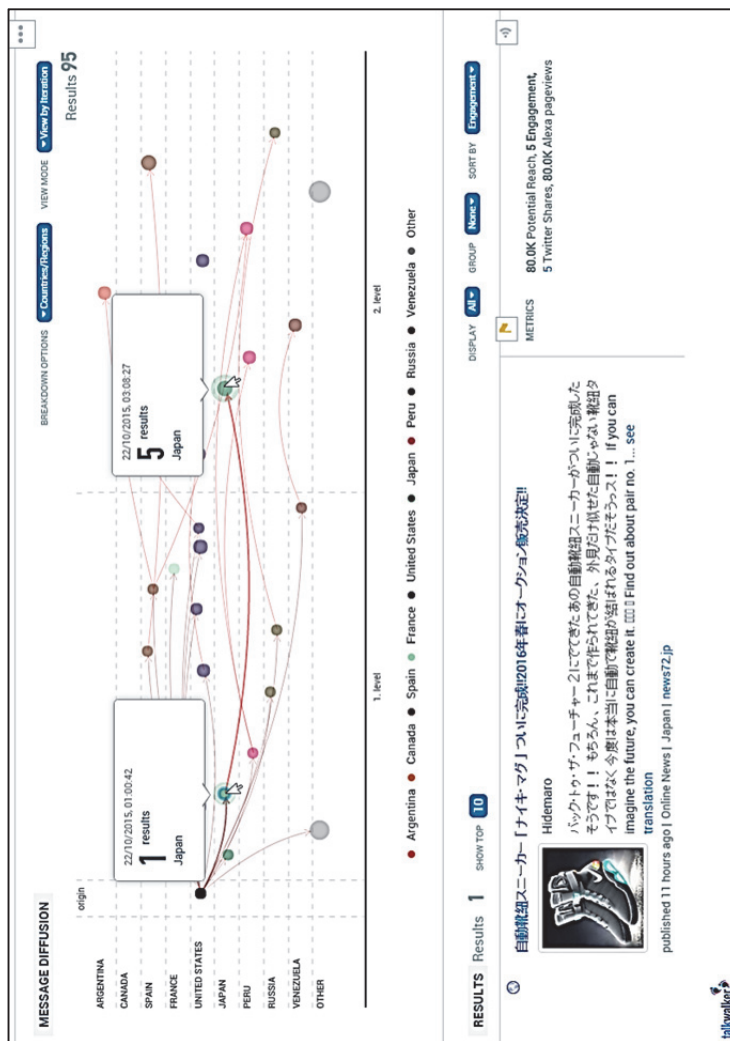


Figure 6.6. Information concerning the initial tweet and its redistribution [RIC 16]