

The future of Business Intelligence and Knowledge Management at the era of Big Data.

Kamoun-Chouk Souad

Ecole Supérieure de Commerce de Tunis-Université de la Manouba –Tunisia
Mail: souad.kamoun@esct.uma.tn

Guest Speaker—



Souad KAMOUN CHOUK is Assistant professor at the high School of commerce-University of Manouba (Tunisia) and coordinator of the research master in entrepreneurship and Management of Innovation (EMI).

She has been working within the CERAG in Pierre Mendes France university of Grenoble Laboratory from 2002 to 2006 to prepare her PHD in strategic scanning obtained in 2005.

She is interested in implementing strategic scanning practices within organizations, sensemaking of weak signals, Knowledge Management and innovation.

She also works on learning pedagogies such as flipped classroom, and the use of digital technologies to enhance deep learning.

In 2012 she was accepted as permanent member of the Tunisian Academy of Sciences Letter and Arts “Beit Al-Hikma” and elected as head of the Department of Natural Sciences and Mathematics until 2019. She organized two international conferences on critical thinking and inquiry based science education and the future of learning with digital technologies.

Souad Chouk is Licensee in information science; she obtained her first master’s in computer documentation in 1985 from the ULB (Brussels) and her second master’s in management project & information system engineering in 1997 from Toulouse 1 University (France).

She is also researcher affiliated to the Interdisciplinary Laboratory on Management in Universities and Enterprises (LIGUE)- University of Manouba and associate researcher to the multidisciplinary laboratory Sciences, Society Historicity, Education and Practices (S2HEP) Claude Bernard University -Lyon 1

KEYNOTE ABSTRACT

Data is considered the fuel of intelligence in the 21st century as Intelligence is the ability to transform data into useful information, information into knowledge and then assimilate that knowledge into practice. The emerging of Big Data (BD) in recent years as unusual sources of data (e.g. social media, sensors), advanced technologies (e.g., Hadoop architectures, visualisation, predictive analytics), and new requirements of skills (e.g., data scientists), has a major impact on the fundamentals of the traditional Business Intelligence (BI) and Knowledge Management (KM) processes.

KM is the continuum of BD as the main information deposit, and BI is a needed activity for the mobilization of the information resource. To convert data into actionable knowledge for strategic advantage relative to the various organizational environments, it is necessary to combine practices of competitive intelligence and BI for acquiring “less irrelevant information” and avoid noise (Ackoff, R. 1989).

Competitive Intelligence (CI) includes practices of benchmarking and Environmental Scanning (ES). Practices of ES, include several progressive stages resulting in knowledge that may assist management in planning the organization’s future course of action (Aguilar, 1967). To formalize the scanning function and make sure that the process is not left to the zeal of local personnel, Kamoun-Chouk (2014) recommended the implementation of a Computer Supported Cooperative Work (CSCW) platform. The idea behind is to insure a continuum between the different layers of Ackoff (1989) IDKW (Information, data, knowledge, wisdom) Pyramid.

Knowledge as the third stage of the pyramid is generated through Sensemaking process. Sensemaking allows moving from the data level to the information level. Experience sharing is needed to move from information level to knowledge level. The wisdom level is reached when an informed decision is made.

KM is used to retain “intangible” (explicit and tacit knowledge) assets develop new and innovative products and solutions. We propose that integrated BI and KM can increase efficiency, effectiveness and innovation. Data mining, SWOT analysis, balanced scorecards, dashboards and visualization software, used by CI as well as BI, make it possible to bring them together. This commonality encouraged Kamoun-Chouk et al. (2017) to design a BDBIKM model to unify the puzzle pieces. Combining BD BI KM, in such a way as to enhance

the output of each other, is supposed to be a critical a success factor for informed decision and wisdom.

ESCSCW and BDBIKM are presented for discussion and we conclude this talk by the following questions:

What is the future of Business Intelligence and Knowledge Management at the era of Big Data?

KEY WORDS:

Big Data, Competitive Intelligence, Environmental Scanning, Knowledge Management

References

Ackoff, R. L. (1989). From data to wisdom. *Journal of Applied Systems Analysis* 15: 3-9.

Aguilar, F. (1967). *Scanning the business environment*. New York: Macmillan.

Kamoun-Chouk, S., Hilary Berger, and Bing Hwie Sie (2017) , Towards integrated model of Big Data (BD), Business Intelligence (BI) and Knowledge Management (KM), 12th International Conference, KMO 2017, Beijing, China, August 21-24, Proceedings, © Springer International Publishing AG 2017, L. Uden et al. (Eds.): KMO 2017, CCIS 731, pp. 482–493, 2017. DOI: 10.1007/978-3-319-62698-7_40

Kamoun-Chouk S.(2014), Computer Supported Collaborative Environmental Scanning: Diagnostic Framework and Its Application for a Tunisian Case Study, *Journal of Information & Knowledge Management*, December 2014, Vol. 13, No. 04,