EKNOW 2020, Valence, Spain, Special Track KMI 4.0 Chair: Dr Samia Aitouche Co-chair: Dr Karima Aksa

**EDITORIAL OF KMI 4.0** 

### **TOWARDS INDUSTRY 4.0 By KNOWLEDGE MANAGEMENT**



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University Batna 2, Batna, Algeria



**DUSTRY 4**.

**Industrial Engineering department** 







# Introduction

### **INDUSTRIAL REVOLUTIONS AND "INDUSTRY 4.0"**



### The four industrial revolutions

# **Definition of industry 4.0**

JDUSTRY

Purpose

The scientific term "Industry 4.0" was first introduced in Germany in 2011 at the Hanover fair.

Industry 4.0 includes business processes in industry that envision organizing global production networks based on new information and communication technologies and Internet technologies (Schwab 2017).

Personalization of production by the possibility of consumer intervention during the production of the product this by maximum connectivity of objects (IIOT)







# **Knowledge management Definition**

The capturing, organizing, and storing of knowledge and experiences of individual workers and groups within an organization and making this information available to others in the organization.

# Knowledge management components

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## **Knowledge management Process**







# Four participants to KMI 4.0

**Kerstin Felser and Martin Wynn** 

Digitalization" and IT backsourcing: towards a transformational model for the German automobile industry



### Samia Aitouche

A Scientometric Framework: Application for Knowledge Management (KM) in Industry Between 2014 and 2019 School of Business and Technology University of Gloucestershire Cheltenham, UK

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# 4. INDUSTRY

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## Kerstin Felser: Ph.D. Student

Digitalization" and IT backsourcing: towards a transformational model for the German automobile industry



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### Khaoula Sahraoui: Ph.D. Student

**Application of Data mining in logostics in the Transition Era** to Industry 4.0: Review



#### percentages of documents by subject area

- Computer Science
- Engineering
- Mathematics
- Energy
- Business, Management, Accounting
- Decision Sciences
- Earth and Planetary Sciences
- Environmental Science
- Medcine
- Physics and Astronomy
- Materials Science
- Social Sciences



### Fadhila Djouggane: Ph.D. Student

### Analysis of Human Skills in industry 4.0

CONCEPTUAL SKILLS		HUMAN SKILLS	TECHNICAL SKILLS		
TOP LEVEL MANAGEMENT	<ul> <li>envisioning</li> <li>scanning environment &amp; organization</li> </ul>	<ul> <li>human literacy</li> <li>communication</li> <li>motivating others</li> </ul>	<ul> <li>data literacy</li> <li>technology literacy</li> </ul>		
MIDDLE LEVEL MANAGEMENT	<ul> <li>formulate goals &amp; objectives</li> <li>build long term &amp; annual plan</li> </ul>	<ul> <li>negotiation</li> <li>resolving conflict</li> <li>supervision</li> <li>delegation of</li> </ul>	<ul> <li>technical expertise</li> <li>understand technology trends</li> <li>able to solve</li> </ul>		
LOWER LEVEL MANAGEMENT	<ul> <li>formulate program &amp; policy</li> <li>cultural agility</li> </ul>	<ul><li>authority</li><li>decision making</li><li>entrepreneurship</li></ul>	technical problems		



### Samia Aitouche: Senior Lecturer researcher

Scientometric Framework: Application for Knowledge Management (KM) in Industry Between 2014 and 2019

I nombre de	les listes	article par critère		itère	citation par critère		itère	indices scientométrique	
14.6 - 1	Keyw	vord	Nb	Key	word	Nb		Keyword	Nb
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N-index	Industry 4	4.0	3	Degree of flexibility		1	Logistics and supply chain management		
	Supply cl	hain	2	Digital technol	ogies	1	Market	t situation	1
H-index	Academic literature		1	Disrupti technol		1	Produc improv	ctivity rements	1
G-index	Big data		1	Effective management		1	Service innovation		1
	Big data analytics		1	Fundamental tools		1	Supply chain management		1
Pi−index	Business innovatio		1	Informa flows	tion	1	Supply chains		1
	Comparat advantag		1	Internet things	of	1	Techno	ological solution	1
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# WE HOPE THAT YOU WILL FIND THE CONTRIBUTION INTERESTING STAY SAFE

# Conclusion



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