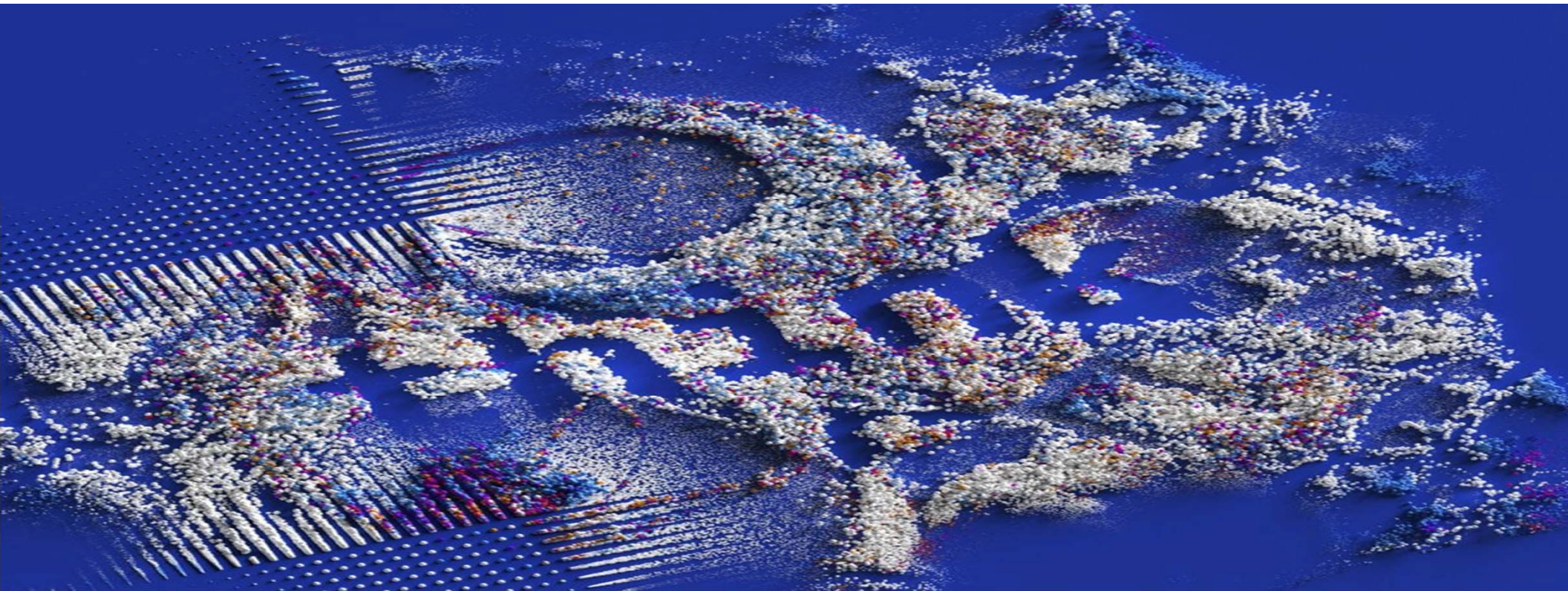


The IR4, Preparing For a Very Different Tomorrow



Samer Abdullatif
IBM

Bicsi[®]
EMEA REGION
bicsi.org/emea2020

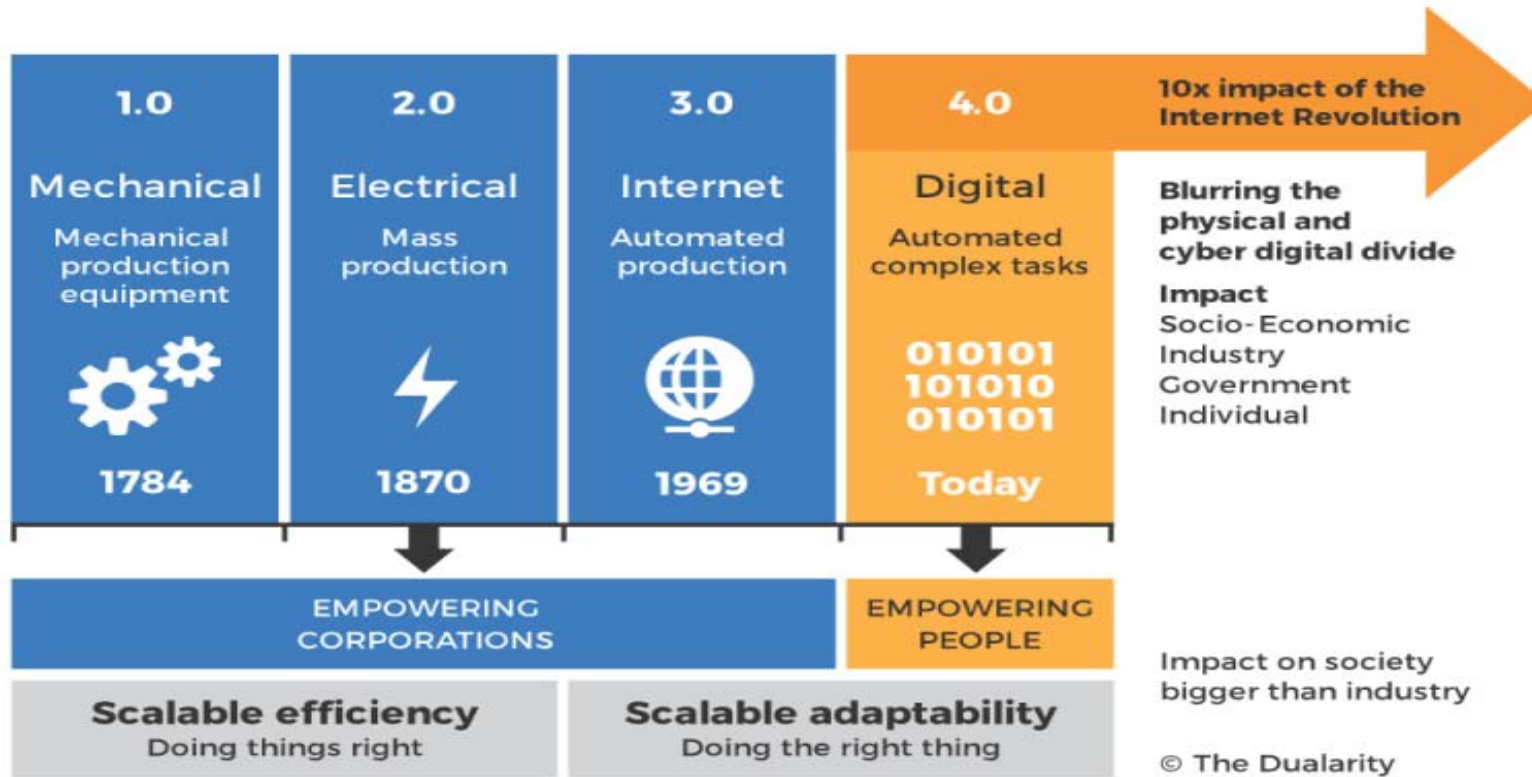
The Industry Revolution 4, The new Era



Bicsi[®]
EMEA REGION
bicsi.org/emea2020

Welcome to the Industrial Revolution 4.0

010101
101010
010101



© The Duality



“
**THE FOURTH
INDUSTRIAL REVOLUTION**
WILL AFFECT THE VERY
ESSENCE OF OUR
HUMAN EXPERIENCE.”

KLAUS SCHWAB

FOUNDER & EXECUTIVE CHAIRMAN,
WORLD ECONOMIC FORUM



SOURCE: WEF.ORG

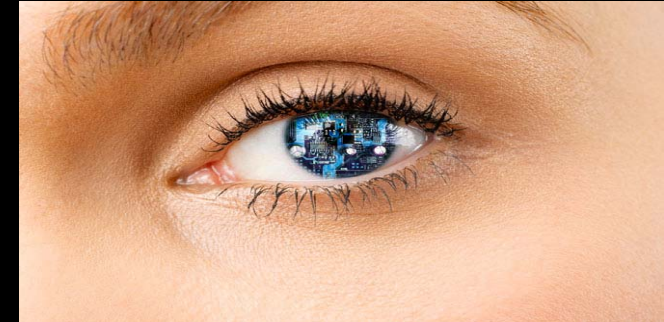


Bicsi[®]
EMEA REGION
bicsi.org/emea2020

Fusion of our physical, digital & biological worlds

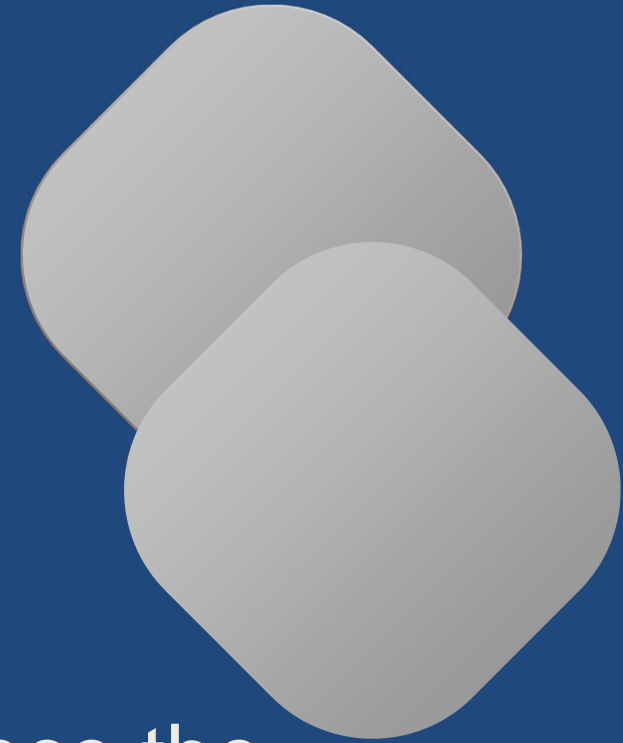


'Humans will be biologically interconnected with the future technology, developing an interdependency and reliance on its outcomes'



GAME CHANGER

Digital is changing how we experience the
physical world



The current reality:



**OVER
88%**

of Fortune 500 Firms in
1955 vs. 2020 are gone ¹



67%
of **CEOS**

who participated in the IBM CEO
study think that technological
disruption is making them
reassess strategic direction ²



Top 10 "unicorn" companies
valued at

\$1B
OR MORE

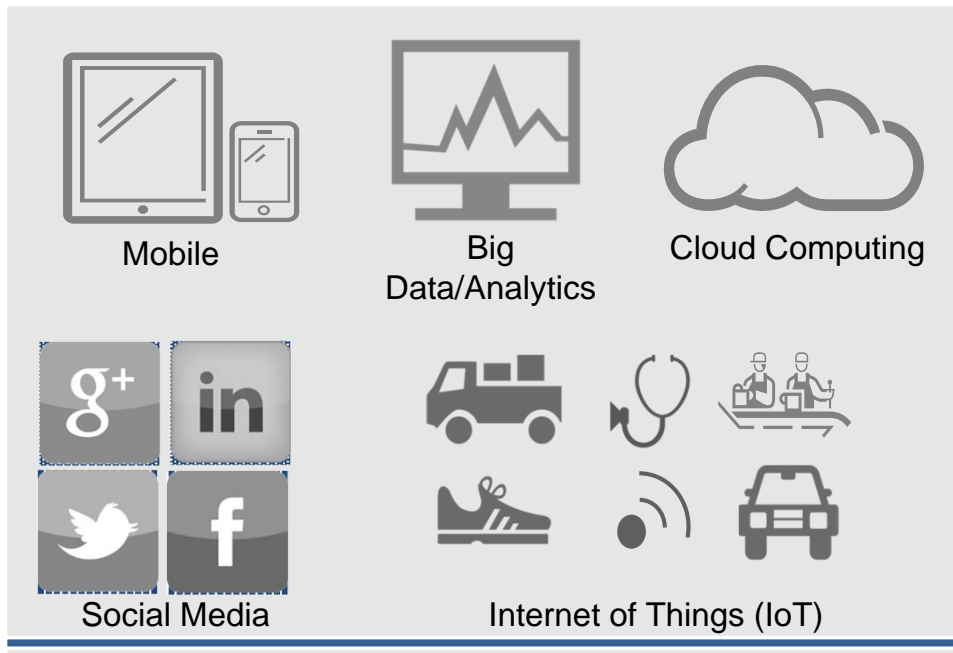
have reinvented the market:
Uber, Xiaomi, Airbnb, Palantir, Didi
Kuaidi, Snapchat, China Internet
Plus, Flipkart, SpaceX, Pinterest ³



87%
of **COMPANIES**

think that digital
transformation is a
competitive opportunity ⁴

Digital is the defining mega-trend of our time, but the explosive growth has barely begun



50bn
Internet connected “things” by 2020** including sensors, RFID chips...



1%
only 1% of what could be connected in the world actually is



35
Days for a new technology to reach a critical mass of 50m users

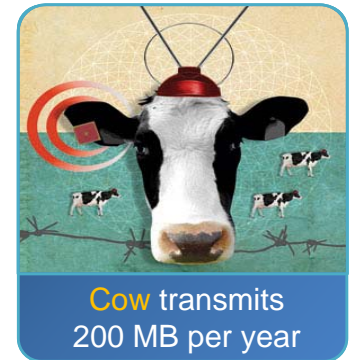
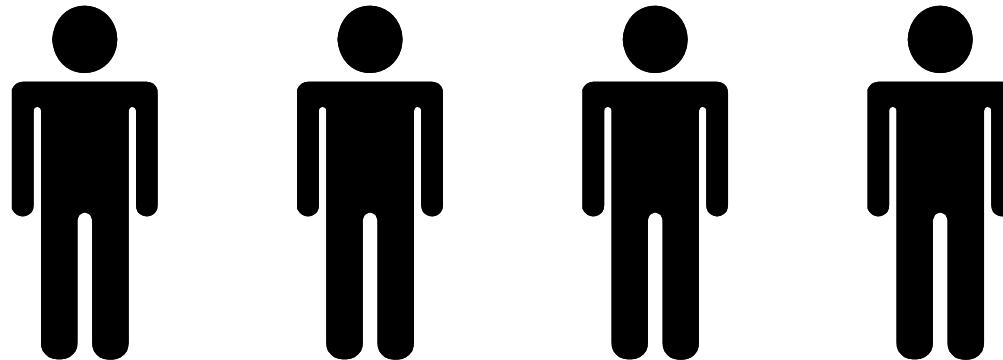
The Internet of Things (IoT) It's Already Here

7,478,012,172
8.5B by 2030
(Source: World Bank)

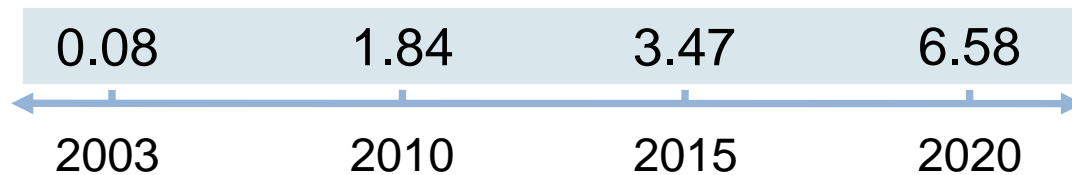
| | | | | |
|---------------------------|--------------------|---------------------|--------------------|--------------------|
| World Population: | 6.3 Billion | 6.8 Billion | 7.2 Billion | 7.8 Billion |
| Connected Devices: | 500 Million | 12.5 Billion | 25 Billion | 50 Billion |



More connected devices than people



Connected Devices Per Person



DATA IS THE NEW OIL

“As the world gets wired together through the Web and social networks, and as more and more sensors run machines that are talking to other machines across the Internet, we are witnessing the emergence of “Big Data.””

These are the mountains of data coming out of all these digital interactions, which can then be collected, sifted, mined and analyzed — like raw materials of old — to provide the raw material for new inventions in health care, education, manufacturing and retailing.”



The world is running on data

30 Billion

Connected IoT endpoints by 2020

160 Zetta bytes

By 2025

\$1.29 Trillion

in value added by the IoT to the global economy in 2021¹



Source: IDC: Worldwide Internet of Things Forecast Update, 2016-2020: December 2016



Bicsi[®]
EMEA REGION
bicsi.org/emea2020

No industry is immune from disruption

Let's take a look at three stages of disruption
caused by Digital transformation.



Bicsi[®]
EMEA REGION
bicsi.org/emea2020

Already disrupted

Newspapers

Magazines

Books

Music

Video

Retail

Travel

What has it meant for the newspaper industry?

Many long-standing daily newspapers have died, but the industry hasn't. It has, however, changed and will continue to change.



Currently being disrupted

Financial Service:

Telecommunications

Government

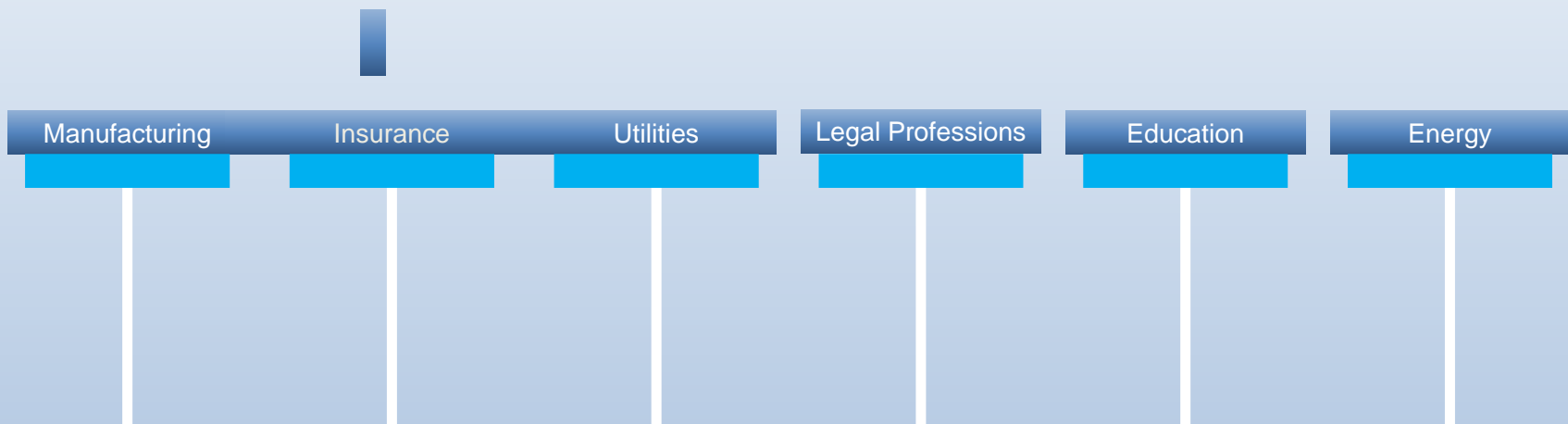
Transportation

Agriculture

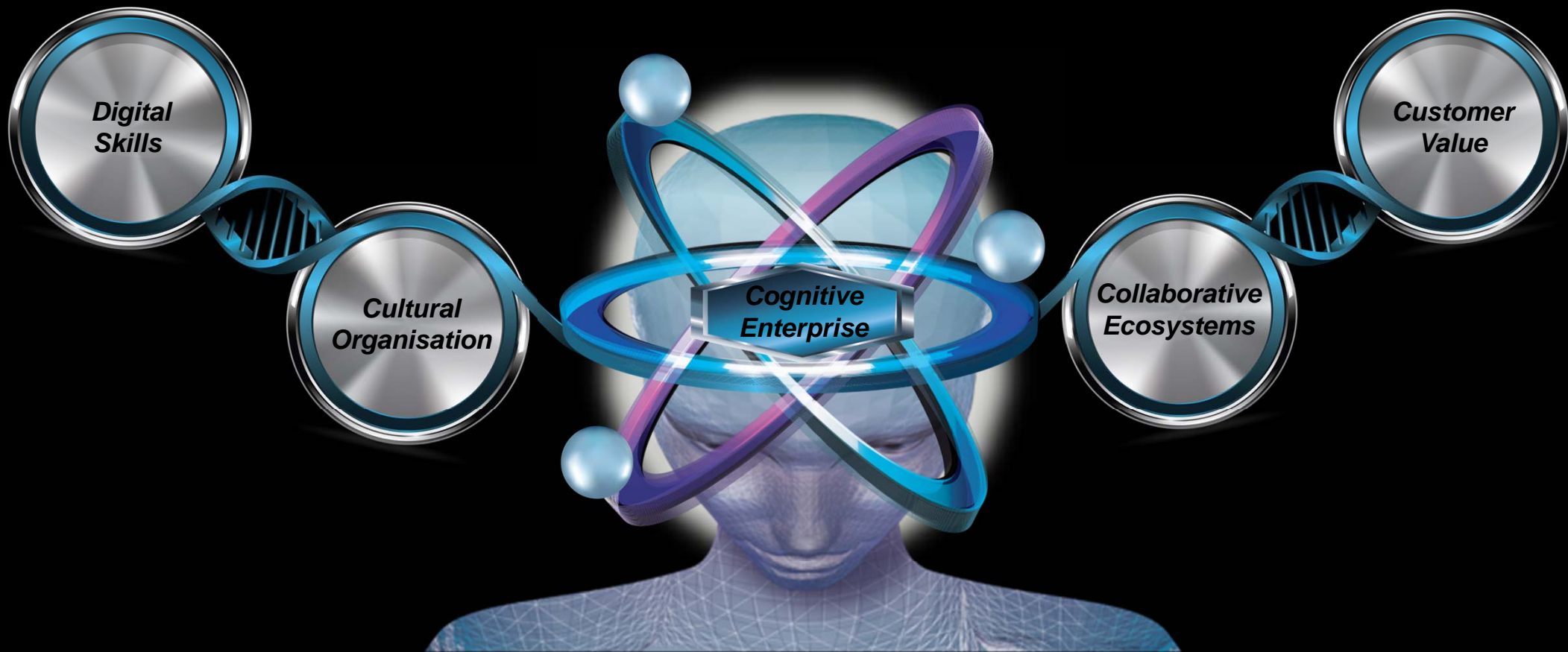
Healthcare

Building
Management

Next or beginning to be disrupted



Fourth industrial revolution has 5 clearly defined digital reinvention points that all CXO's must address.





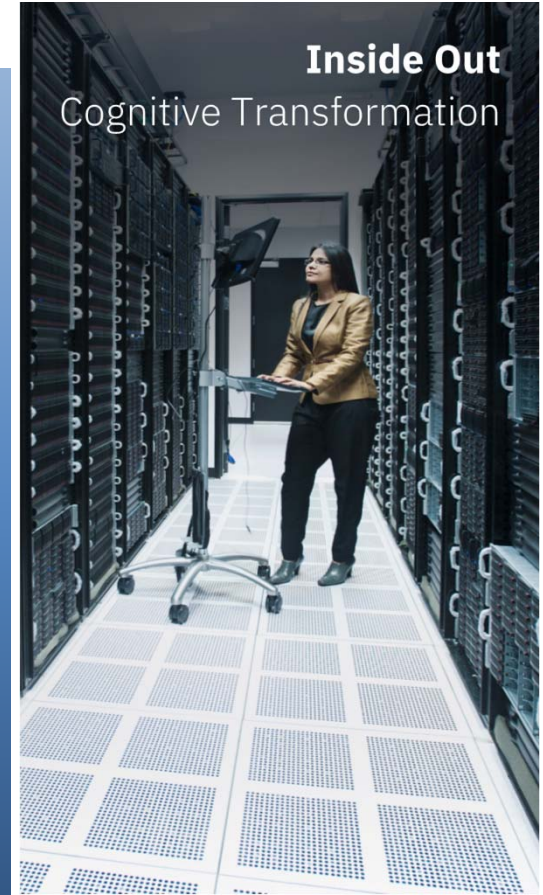


Cognitive Enterprise

Every Company is a
Technology Company

Every Company is a Platform
Company

Every Company is an
Experience



Key Components of the Cognitive Enterprise

1

Market-making **Business Platforms**

2

Intelligent **Workflows**

3

Enterprise **Experience and Humanity**



Bicsi[®]
EMEA REGION
bicsi.org/emea2020

Chapter 1.

Market-making Business Platforms



Bicsi[®]
EMEA REGION
bicsi.org/emea2020

IBM

Types of Market-Making Business Platforms

Enterprise
Strategic



Enterprise
Enabling



Client

Industry

TRADELENS

Cross-
Industry



Industry

- Creates new economies of scale to leverage skills, intelligent workflows, data
- Embeds differentiated workflows that define the next instantiation of competitive advantage
- Creates dramatically more cost effective and flexible front-, middle- and back-office processes

- Knocks down walls between organizations or industries, radically restructuring to achieve nonlinear growth
- Connects broad categories of complementary products and services in a way that makes experiences more holistic for customers

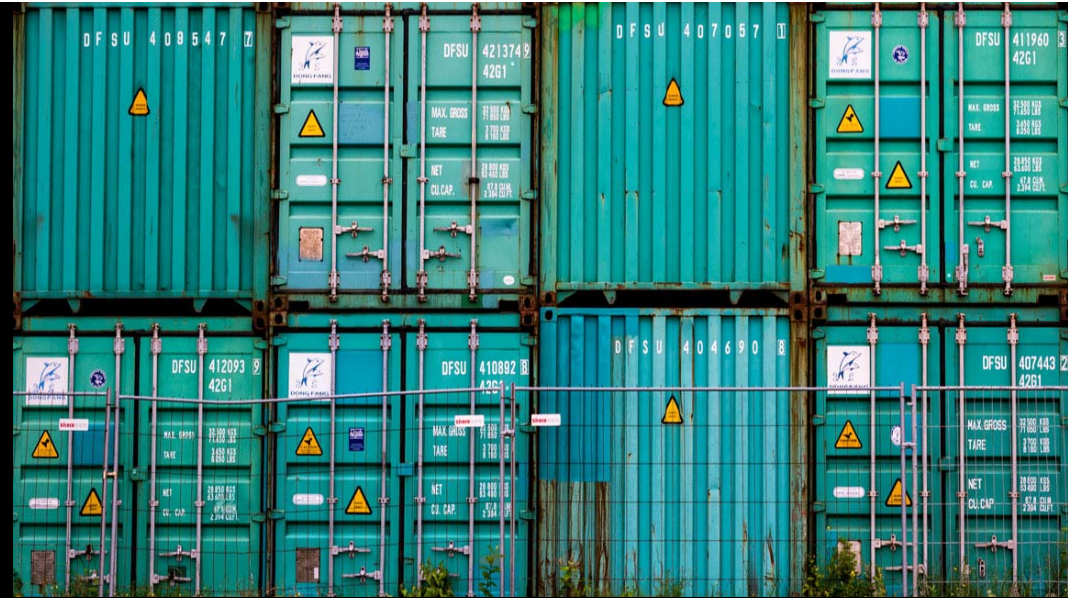
Tradelens

Tradelens, an open shipping platform developed by Maersk and IBM, established several big rules to govern how it will operate as well as how participants will interact and derive value.

Results

Comprises more than
100 different organizations
within
the platform

Established
3 guiding principles
to govern how platform
will operate



Tradelens set a few guiding principles to frame how it will allow participants to interact with and extract value from the platform. These big rules include the ability to immediately contribute or extract value from authorized participants, standardized data sharing and permission model, and open API environment to promote ongoing improvement and innovation.

All participants benefit from seamless, secure sharing of real-time, actionable information, empowering the participants to streamline their supply chains and mitigate problems through predictability and exception handling.

Chapter 2.

Intelligent workflows



Bicsi[®]
EMEA REGION
bicsi.org/emea2020

IBM

Intelligent workflows are enabled through exponential technologies



Warning automatically triggered: Storm near home



Water damage automatically detected by IoT sensors running on 5G



Claim completed and processed with AI and mobile support



Repair services automatically identified and scheduled

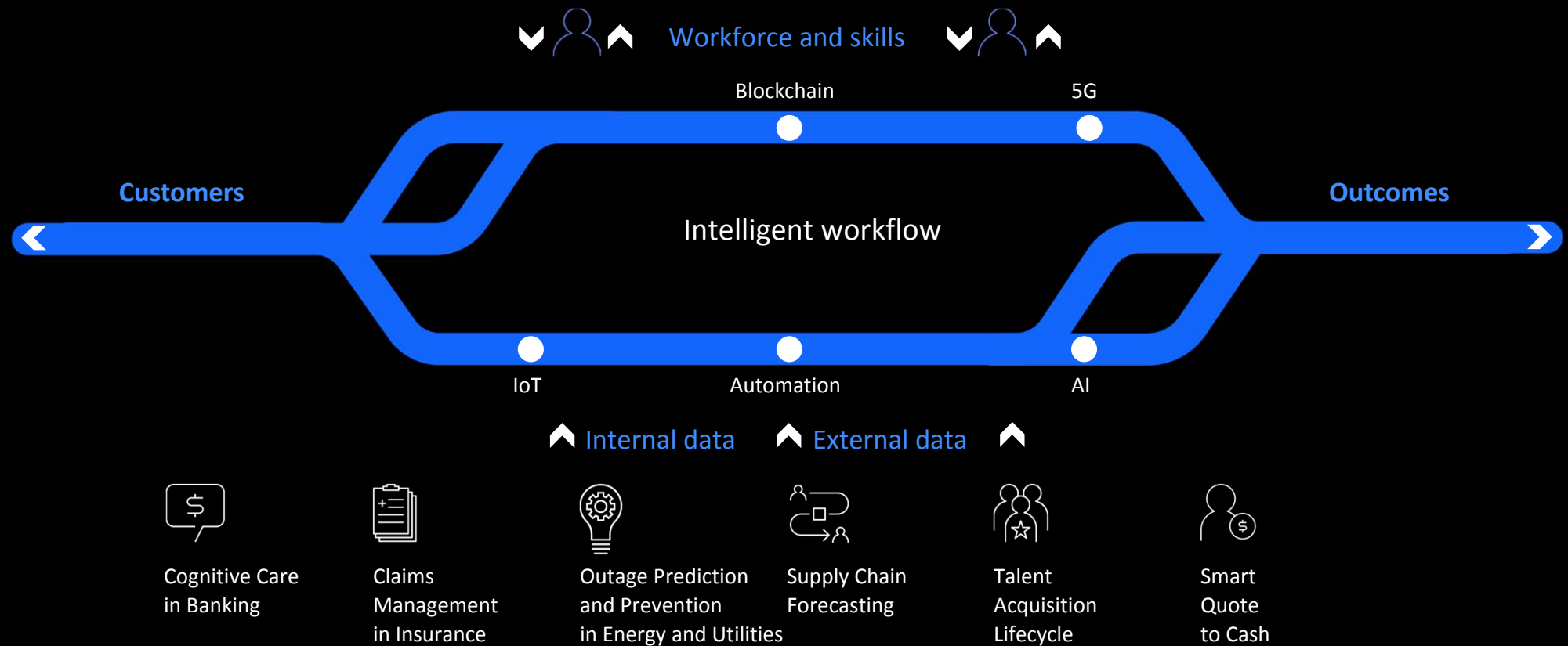


Blockchain for ecosystem payments



Litigation review leveraging cognitive solution

Intelligent Workflows affect all aspects of how business will be done



Chapter 3.

Enterprise Experience and Humanity



Bicsi[®]
EMEA REGION
bicsi.org/emea2020

IBM

Crédit Mutuel

Crédit Mutuel, one of France's leading banks, set a bold strategy to infuse AI across all lines of business, positioning itself as the benchmark for relational banking in a digital world.



Results

Launched **15** cognitive assistants across various lines of business

Aiming to expand cognitive solutions to **100%** of the business line of the company

A cognitive email solution allows the bank to reassign

200,000 working days annually toward training

Crédit Mutuel has over 5,000 branches that receive more than 350,000 online inquiries a day. To consolidate its position as number one in customer relations for the banking sector in France, it continued to reinvent the role of client advisor by empowering them with AI to free up time.

Crédit Mutuel launched several AI projects, including an email analyzer to manage high email volumes and a virtual assistant to decrease customer advisor response time. Crédit Mutuel also established a cognitive factory that provides a fertile environment for identifying, building, and deploying new AI solutions.

Enterprise Experience...

Customer

Emotional
Impact



Employee

Influencing
Behavior



Enterprise

Storytelling



Ecosystem

Radical
Collaboration



... and Humanity

Skills



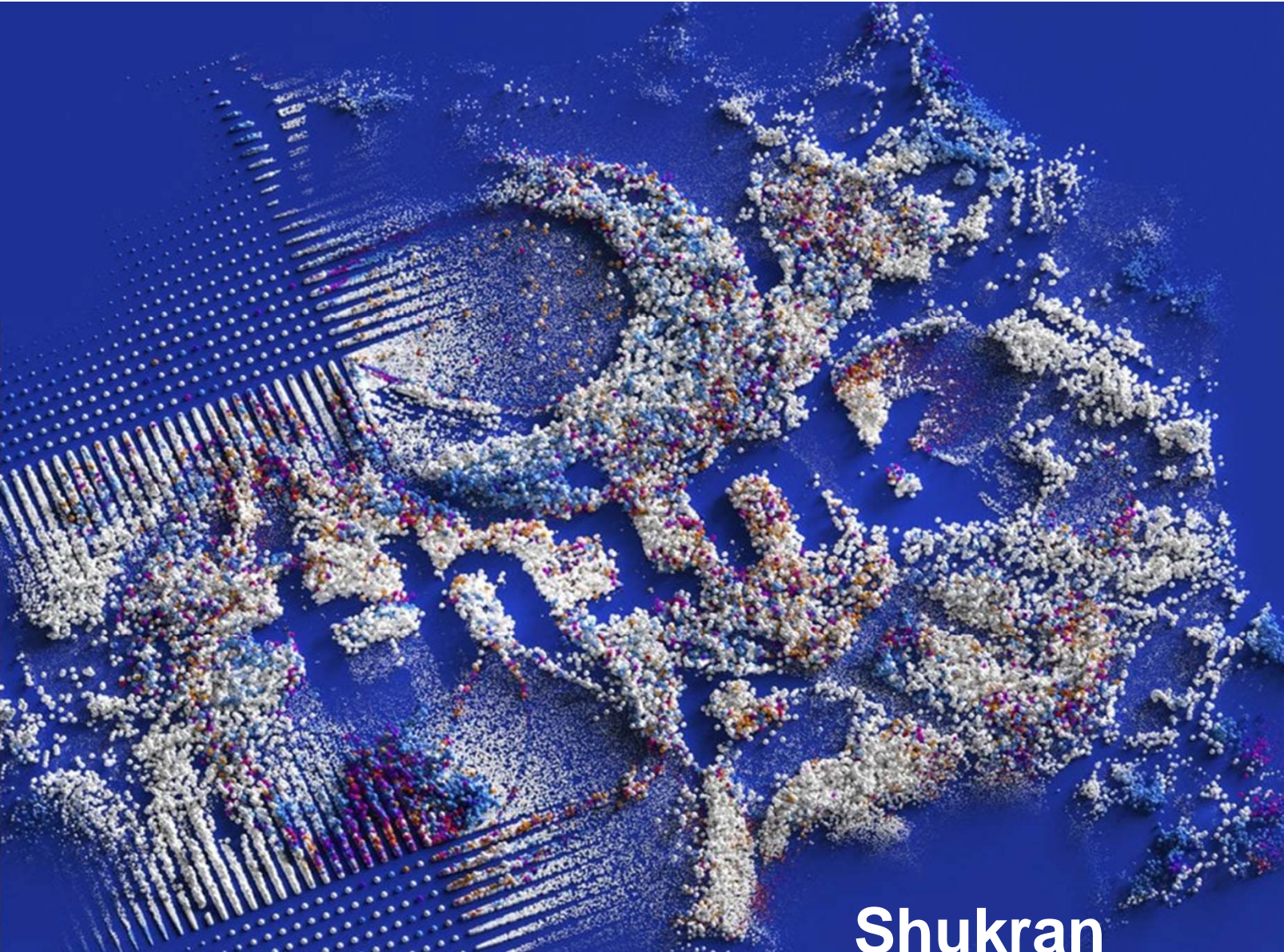
Leadership



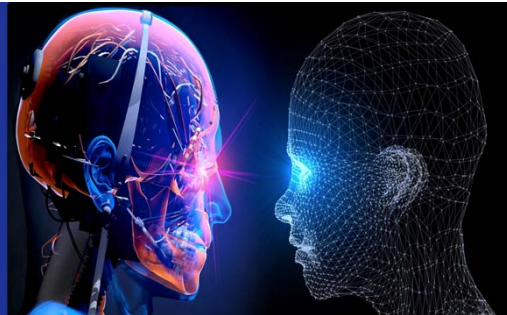
New Ways of Working



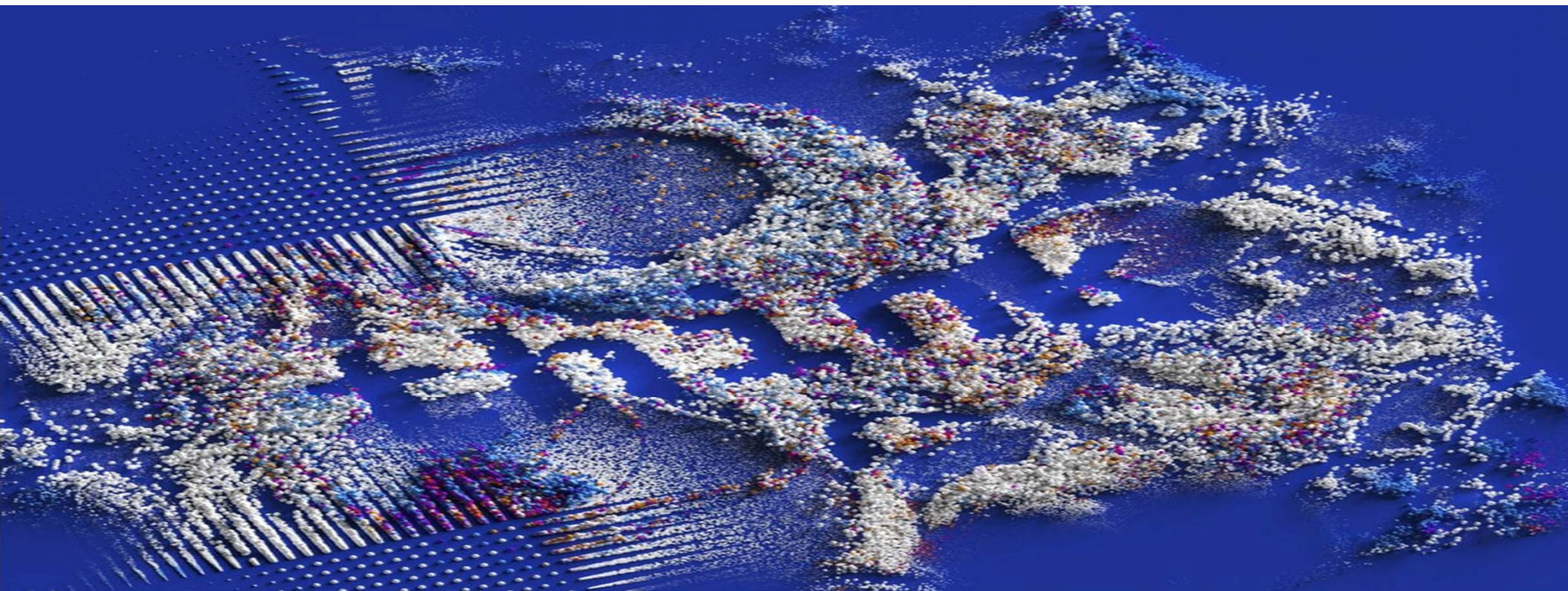




Shukran



The IR4, Preparing For a Very Different Tomorrow



Samer Abdullatif
IBM
Samer.a.latif@ae.ibm.com

Bicsi[®]
EMEA REGION
bicsi.org/emea2020