



Digital Transformation

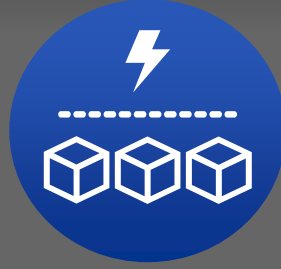
Nikos Botinis

Regional Sales Manager

The New Industrial Revolution



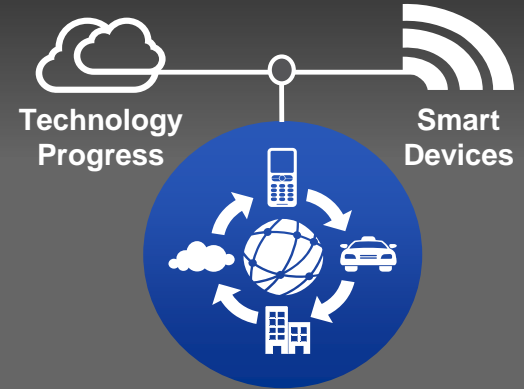
18th Century
Steam



20th Century
Mass Production



70's
Robots



Today
Digitization

277X

Data created by IoT devices v. end-user

30M

New devices connected every week

180B

Mobile apps downloaded in 2015

78%

Workloads processed in Cloud DCs by 2018

5TB+

of data per person by 2020

4.2B

Web filtering blocks per day

...signs of a Digital World



Digital Disruption & Transformation is...

.....*"The application of Information Technology (IT) to implement innovative business models, improved customer experience and/or operational improvements that have the potential to disrupt entire industry sectors."*



The ‘Digital Business’ Is Powered by IoE

The “Digital Business” Defined

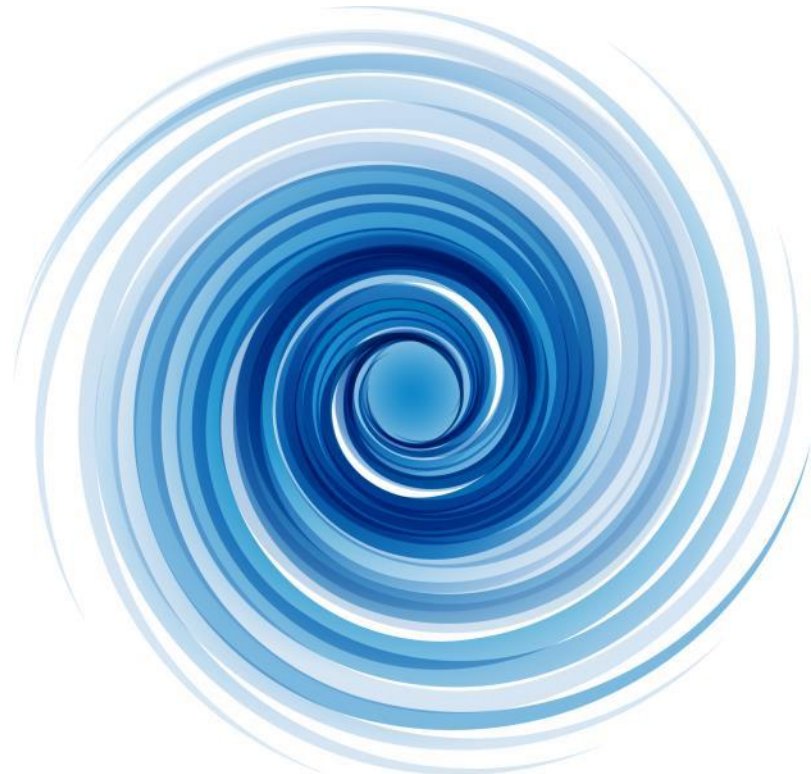
“Digital business is the creation of new business designs that not only connect people and business, but also connect people and business with things to drive revenue and efficiency.

“Digital business helps to eliminate barriers that now exist among industry segments while creating new value chains and opportunities that traditional businesses cannot offer.”

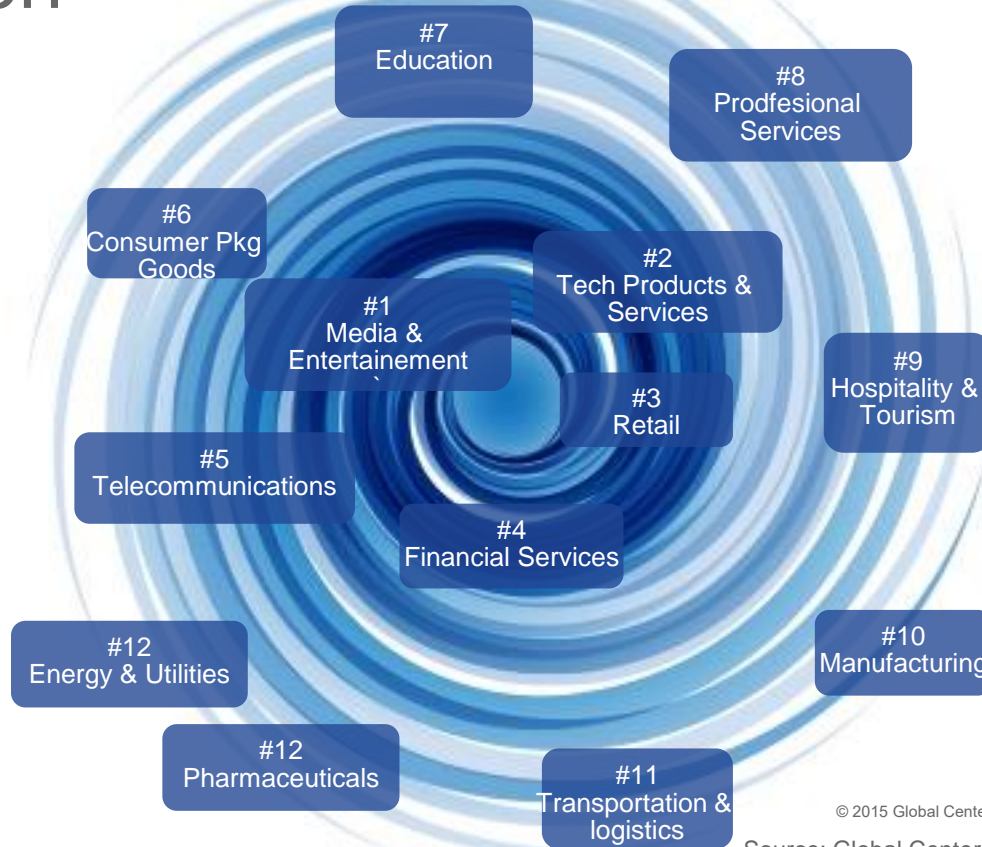
— Gartner, 2015

Digital Disruption Resembles a Vortex: A Relentless, Chaotic Force Pulling Industries Toward a Digital Center

- A vortex **pulls everything toward the center**
- **Chaotic**: objects drawn to the center with exponentially **increasing velocity**
- Objects may **break apart and recombine**
- The center is the “**new digital normal,**” and its constant change can be a threat or an opportunity



In the Digital Vortex, Technology, Media, and Retail Industries Are Most Vulnerable to Disruption



Across Industries

THE DIGITAL "TRILLION-DOLLAR CLUB"

71%

TOTAL PRIVATE SECTOR VALUE (2015-2024) WILL DERIVE FROM THESE SIX INDUSTRIES

MANUFACTURING

\$6.4
TRILLION

FINANCIAL SERVICES

\$3.1
TRILLION

RETAIL

\$2.8
TRILLION

SERVICE PROVIDERS

\$2.0
TRILLION

HEALTHCARE

\$1.4
TRILLION

OIL & GAS

\$1.1
TRILLION

Where to Begin Your Journey to Digital Value in the Private Sector
Economic Analysis
2015-2024



Who get's it .. And who don't (source HBR, OECD)

Figure 2. A widening labour productivity gap between global frontier firms and other firms

Labour productivity: value added per worker (2001-2013)

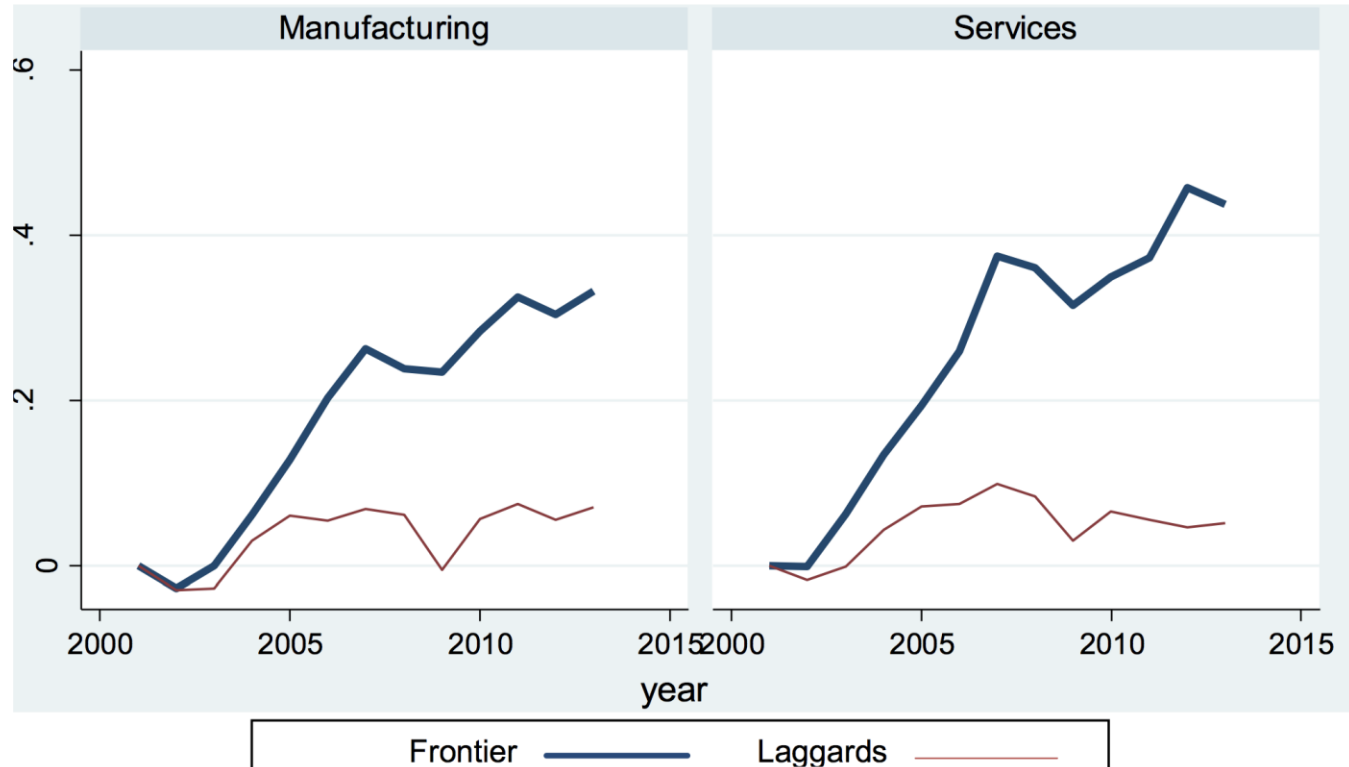


FIGURE 1: FOUR DRIVERS OF DIGITAL EVOLUTION



SUPPLY CONDITIONS

Access Infrastructure

Communications sophistication and coverage; security

Transaction Infrastructure

Access to financial institutions; electronic payment options

Fulfillment Infrastructure

Quality of transportation infrastructure; logistics performance



DEMAND CONDITIONS

Consumer Capacity to Engage

Consumer ability and willingness to spend; gender digital divide

Digital Payment Uptake

Degree of financial inclusion and use of digital money

Digital Uptake

Device prevalence and density; technology, internet, and mobile connection uptake; digital consumption



INSTITUTIONAL ENVIRONMENT

Institutions and the Business Environment

The legal environment including efficiency in settling disputes, IP and investor protections; and Bureaucracy

Institutions and the Digital Ecosystem

Government uptake and use of ICT and digital technology; telecom competition

Institutional Effectiveness and Trust

Transparency; rule of law; regulatory quality



INNOVATION AND CHANGE

Inputs

Financing options and opportunity; start-up capacity; ability to attract and retain talent

Process

Sophistication of business practices; R&D

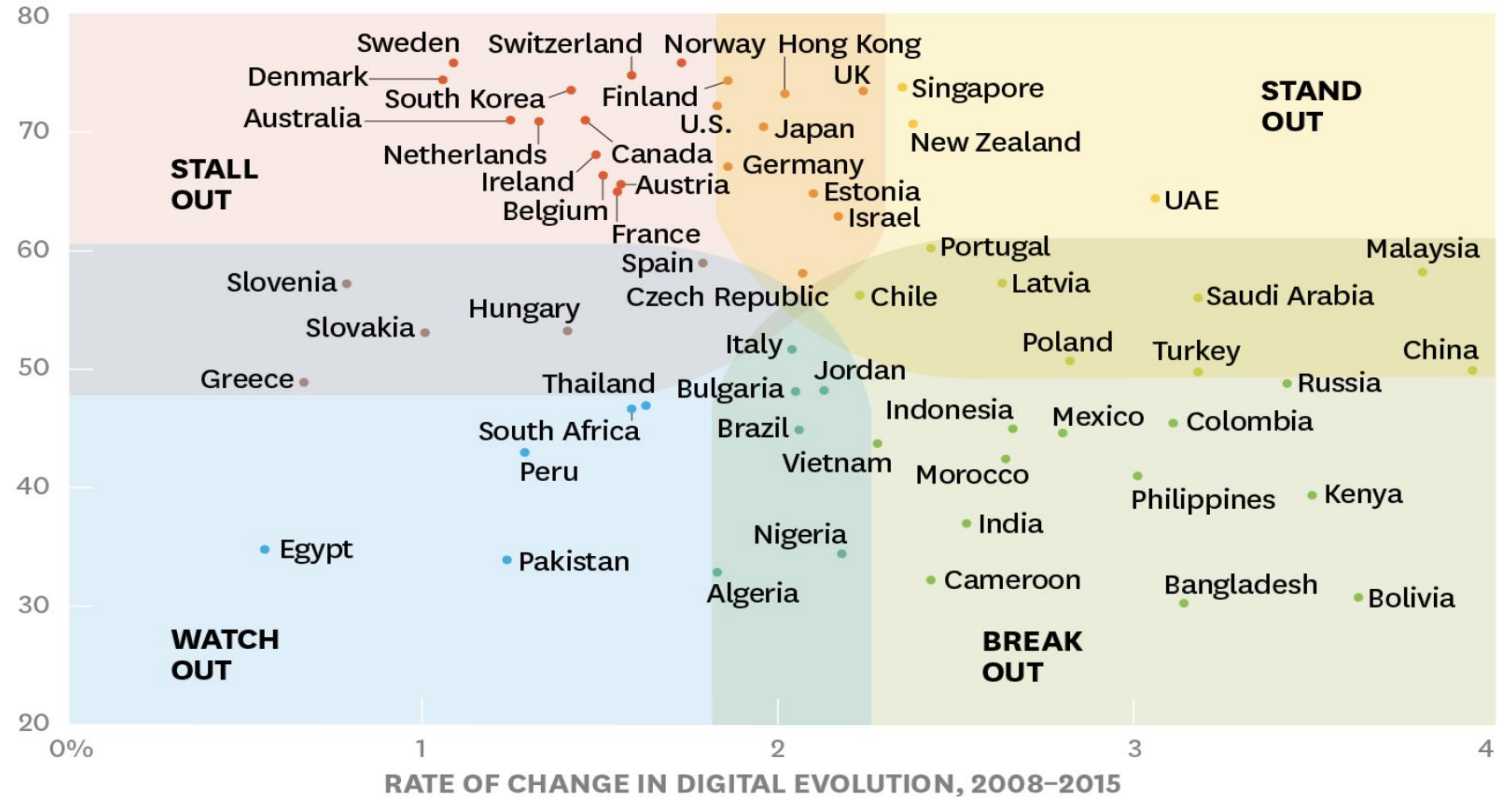
Output

Depth of mobile engagement; reach of innovation; use of social networks and digital entertainment

















Plotting the Digital Evolution Index, 2017

Where the digital economy is moving the fastest, and where it's in trouble.

HOW COUNTRIES SCORED ACROSS FOUR DRIVERS ON THE DIGITAL EVOLUTION INDEX (OUT OF 100)



SOURCE DIGITAL EVOLUTION INDEX 2017, THE FLETCHER SCHOOL AT TUFTS UNIVERSITY AND MASTERCARD

 World ▼		 Exports	 Investment	 Tourism	 Talent	 Prominence
1	+7  United Kingdom	6	6	4	3	1
2	-1  United States of America	1	3	15	2	6
3	-1  Japan	3	4	5	6	5
4	0  Germany	5	5	7	5	3
5	0  Canada	9	7	14	1	4
6	-3  Australia	13	8	8	4	2
7	+2  Spain	10	11	1	7	8
8	-1  France	12	9	3	10	7
9	-3  China	2	1	12	12	24
10	+2  Italy	8	15	2	11	10

As explained in the [methodology](#) section, these results are determined by the total amount of searches performed by all worldwide citizens towards any given Country internationally. Here you can find which Countries are most searched for on a global level and by Continent.

Explore more results in the links below and **measure the reputation of Countries**. You can also download the [Executive summary here](#).



















Related content

[Results by Dimension](#)

[Country Index details](#)

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 Europe ▼		 Exports	 Investment	 Tourism	 Talent	 Prominence
1	 United Kingdom	2	2	4	1	1
2	 Germany	1	1	5	2	2
3	 Spain	4	4	1	3	4
4	 France	5	3	3	4	3
5	 Italy	3	5	2	5	5
6	 Switzerland	7	7	13	8	7
7	 Ireland	14	9	8	6	8
8	 Turkey	8	8	6	19	20
9	 Russian Federation	6	6	19	12	19
10	 Portugal	11	12	9	11	11
11	 Sweden	12	11	18	10	6
12	 Greece	15	10	7	22	16

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Greece



General Position

World
25

Variation
since 2015
+5

Europe
12

Dimension Position - World

Exports
39

Investment
27

Tourism
13

Talent
44

Prominence
30

Dimension Search Volume

Exports

0%

Investment

6%

Tourism

64%

Talent

5%

Prominence

25%

After selecting a Country, hover over each Dimension to see what global citizens are searching for most in any given Country. This is an overview covering everything for the "brandtag family" level.

For a more in-depth analysis, please request a trial of the Digital Demand - D2© software.

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Dimension Search Volume

Searching for Exports - Share of results by "brandtag" family

Goods



Made In



Export from



Flagship companies



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The New Digital Business/City/Country



Transform Processes
and Business Models

Leads To:

Innovation

Faster Time to Market



Empower Workforce
Efficiency and Innovation

Leads To:

Increased Productivity

Better Retention



Personalize Customer /
Citizen Experience

Leads To:

Increased Loyalty

Greater Insight

Barriers to Digital Business

com·plex·i·ty

kəm'pleksədē/

The quality or state of not being simple



IT
Infrastructure



Security



Automation



Analytics



Interoperability



Value
Realization

Simple: Reduce Complexity To Lower Costs



1 Unify

Converge and optimize discrete IT domains (network, security, storage, compute) to manage as a “pool” of physical/virtual, mobile/fixed, on- and off-premise resources



2 Create Programmability

Enable open and programmable infrastructure, ready to respond intelligently to application requirements; accelerate provisioning of needed resources



3 Automate

Use abstraction and programmability of resources across domains to automate and orchestrate manual, error-prone, and labor-intensive IT tasks and workflows and to drive down costs

Smart: Capitalize on Intelligence for More Agile Operations



1 Drive Policy

Create centralized policy and management to streamline infrastructure changes, reduce errors, and drive repeatability



2 Tap Intelligence

Use infrastructure analytics to optimize operations end to end so the infrastructure can respond intelligently and automatically to changing application and security demands



3 Harness Data in Motion

Push compute and analytics capabilities to the network “edge”; correlate data in real time to respond to fast-moving changes

Secure: Defend Against Attacks Dynamically



1 Expand Security Perimeter

Protect against advanced malware and threats across all infrastructure and the entire security continuum; detect and quarantine cyberattacks



2 Improve Visibility

Through analytics, increase visibility around threats, users, behavior, and infrastructure



3 Respond Faster

Use identity- and context-based information and behavior to improve security response

Digitization by Cisco

Work Reimagined
Value Reimagined
Defined by Technology



Most Firms Will Attempt Digital Transformation, But Most Will Fail

By 2020...

75% of businesses will be digital or have digital business transformations underway

Only **30%** of those will be successful,

in part from lack of specialized talent and technical expertise

78% have not established the capability to manage and transform processes across different parts of the organization

Reimagine Digital Banking...

Cash-free Societies – Digital Cash

Human Free Branch – Virtual Teller ATMs

Blockchain for Transactions, Contracts and Compliance

Theme Based Investing

Universal Bank

95%

Retail sales in Sweden are cashless *

2030

Denmark eradicates cash *

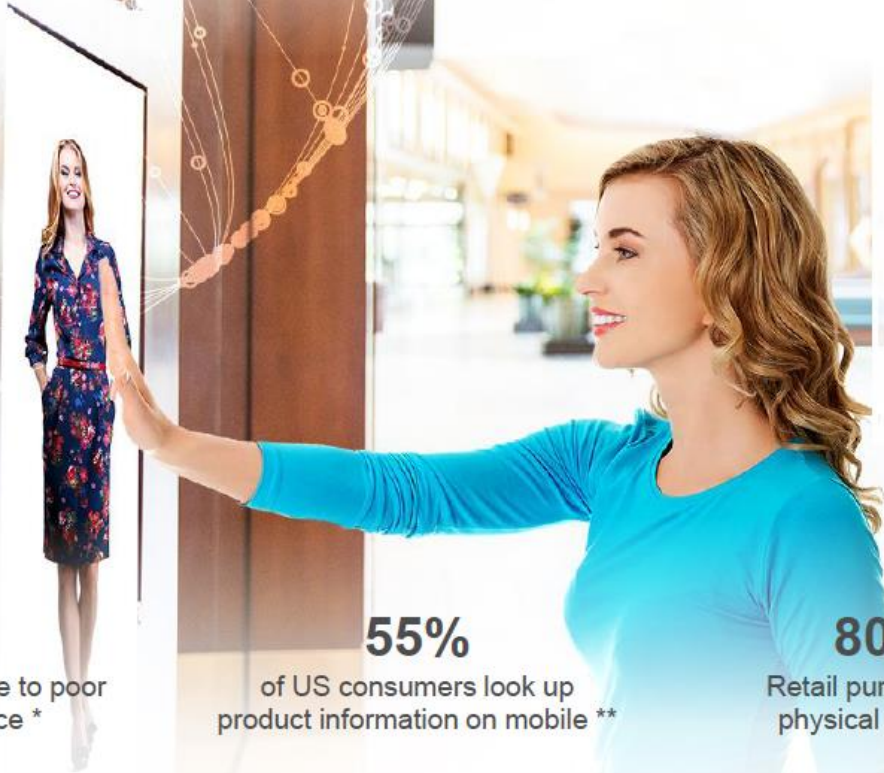
10%

Global GDP stored on blockchain by 2027 **

\$6.57T

Theme based investments ***

Reimagine Digital Retail...



3D Virtual Reality
Concierge Assistance

Store Experience at Home
Amazon Dash Button, Echo
HeloLens – Augmented Reality

Automated Retail Fulfillment
Real-Time Individualized
Manufacturing and Delivery

66%

Switched brands due to poor customer service *

55%

of US consumers look up product information on mobile **

80%

Retail purchases in physical stores ***

86%

will pay more for a better customer experience ****

Reimagine Digital Manufacturing...



50%
of Manufacturers
will use robotic
fulfillment by 2019 *



Consumer as Creators

Additive Manufacturing – From
Prototypes to Production

Robotics in Logistics

Human Less Factories

3D printer market
will grow at
103.1% CAGR
from 2015 to 2018 **

Case Study

DAIMLER

Streamlining production at Daimler trucks



Challenge

- Deliver leading-edge vehicles, faster
- Improve efficiency and uptime
- Reduce production costs; drive productivity

Solution

Connected factory network and factory wireless—with extended teams of IT& OT working together

Results

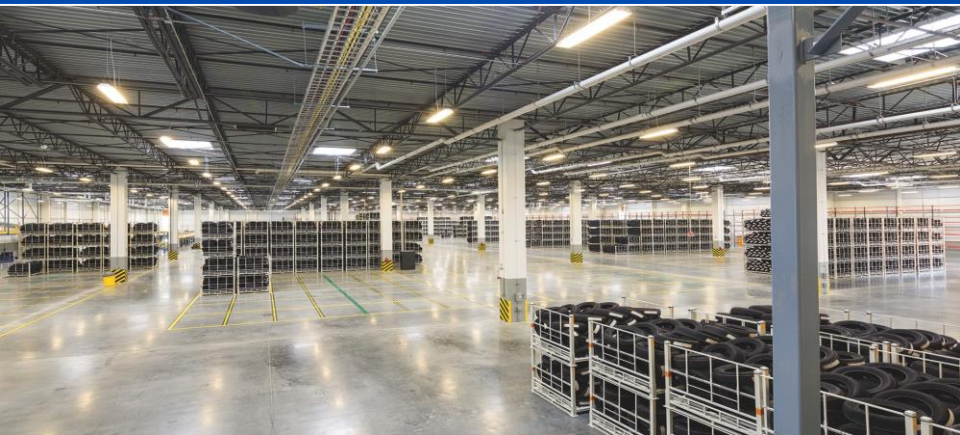
- Improved efficiency with asset and part tracking
- Better mobile communication to improve workflows
- Predict and respond to production or supply chain issues faster

Case Study



Factory Wireless at Continental Tire

Factory Wireless enables mobility initiatives at Continental



Challenge

- Long Tire Assembly Search Times by Operators Increased Cycle Times, Decreased Labor Optimization, and Noncompliance with Production Schedules
- High Scrap Rate Associated with Lost Carriers

Solution

- Implement LBS Solution to Track All Carriers in Real-time Using T2 Tags and Cisco Unified Wi-Fi network
- Allow Material Handlers/Truckers and Managers to Search for Component by ID, Tread Number, Material Code (FIFO)

Results

- Continuous Real-time Visibility Across Entire Plant
- 20% Reduction of Breaker Component Tire Loss
- Increase in tire machine utilization ensuring increased production and overall equipment efficiency (OEE)