

### SDG 09: INDUSTRY





End extreme poverty. Fight inequality and injustice. Fix climate change. Whoa. The Global Goals are important, world-changing objectives that will require cooperation among governments, international organizations and world leaders. It seems impossible that the average person can make an impact. Should you just give up?

### No! Change starts with you!

On 1 January 2016, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development — adopted by world leaders in September 2015 at an historic UN Summit — officially came into force.



### Goal 09: Facts and figures

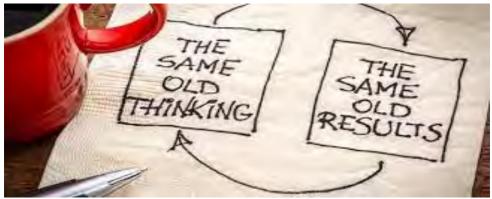
- Basic infrastructure like roads, information and communication technologies, sanitation, electrical power and water remains scarce in many developing countries;
- About 2.6 billion people in the developing world are facing difficulties in accessing electricity full time;
- 2.5 billion people worldwide lack access to basic sanitation and almost 800 million people lack access to water, many hundreds of millions of them in Sub Saharan Africa and South Asia;
- 1-1.5 billion people do not have access to reliable phone services;
- Quality infrastructure is positively related to the achievement of social, economic and political goals;
- Inadequate infrastructure leads to a lack of access to markets, jobs, information and training, creating a major barrier to doing business;
- Undeveloped infrastructures limits access to health care and education;
- For many African countries, particularly the lower-income countries, the existent constraints regarding infrastructure affect firm productivity by around 40 per cent;
- Manufacturing is an important employer, accounting for around 470 million jobs worldwide in 2009 – or around 16 per cent of the world's workforce of 2.9 billion. In 2013, it is estimated that there were more than half a billion jobs in manufacturing;
- Industrialization's job multiplication effect has a positive impact on society. Every one job in manufacturing creates 2.2 jobs in other sectors.

TO INDUSTRY, NOTHING IS IMPOSSIBLE.

- Latin Proverb

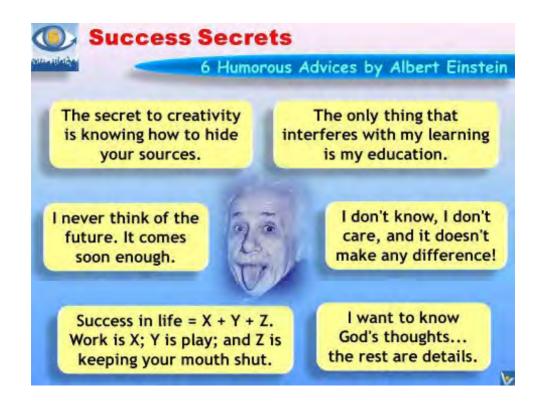
### **GOAL 09: Targets**

- Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all;
- Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries;
- Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets;
- By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities;
- Enhance scientific research, upgrade the technological capabilities
  of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers
  per 1 million people and public and private research and development spending;



### **GOAL 09: Targets**

- Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States;
- Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities, and
- Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

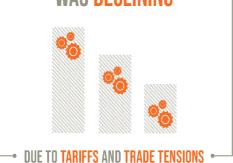




### BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

**BEFORE COVID-19** 

## MANUFACTURING GROWTH WAS DECLINING





#### COVID-19 IMPLICATIONS

THE AVIATION INDUSTRY HAS SUFFERED THE STEEPEST DECLINE IN HISTORY



AIR PASSENGER NUMBERS FELL BY 51%
From January 10 May 2020
(Compared to the same period in 2019)

### **FINANCING FOR**

### **SMALL-SCALE INDUSTRIES**

IS NEEDED FOR THEIR SURVIVAL THROUGH THE CRISIS



ONLY **35**%

HAVE ACCESS TO CREDIT IN DEVELOPING COUNTRIES (2006-2018)

### INVESTMENT IN R&D

IS GROWING BUT NEEDS To accelerate



\$1.4 TRILLION
[2010]
\$2.2 TRILLION
[2017]

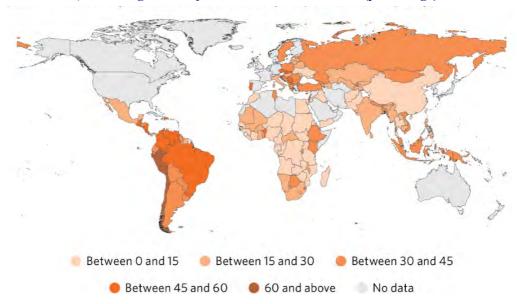
FEWER THAN 1 1 5 PEOPLE
USE THE INTERNET IN LDCs (2019)



Promoting inclusive and sustainable industries and continuing to invest in physical infrastructure, innovation and research are vital to long-term economic development. Investment in research and development (R&D) globally, and financing for economic infrastructure in developing countries has increased.

What's more, the intensity of global CO<sub>2</sub> emissions has declined, and impressive progress has been made in mobile connectivity. However, the growth of manufacturing has decelerated and industrialization in LDCs is still too slow.

Proportion of small-scale manufacturing enterprises with a loan or line of credit, according to surveys conducted in 2006–2018 (percentage)



The pandemic has dealt a severe blow to manufacturing and transport industries, causing disruptions in global value chains and the supply of products as well as job losses and declining work hours in these sectors.

In developing countries, manufacturing jobs are an essential source of income and are key to poverty reduction. The effects of COVID-19 have been so destabilizing that they threaten to halt or even reverse progress towards SDG 9 and other Goals.

# 

# ts Impact on the Development of Social Businesses



# We are babies.

Technology has little impact. It is a currosity.

1960s

The company is king, but a benevolent king. Good focus on customer statisfaction, but customers have lew options. Communications makes global business difficult so customers make. geographic-bassed decisions.



# We are still children

1970s
Technology is for academics
and has little impact.

Greater focus on margins and revenue. Customers become concerned about monopolies as customer satisfaction has ess importance.



# We are still children, Like teenagers, we but we can pout to now have some get what we want. control but don't kno what to do with it ye

Technology invades the home and starts to change behaviors.

Technology is now everywhere. A

1990s

great leap forward. It begins to

onnect us around the globe.

Customers become increasingly concerned about company practices and lack of customer satisfaction. Communications have improved to help customers make more informed decisions and to have better choices.



# now have some We are growing up, and control but don't know feeling pretty cool about it, what to do with it yet.

Technology enables more seemless communications across the globe. Growth is explosive, but like "explosions" is uncontrolled—all over the choose

Social Media allows customers to articulate their satisfaction with companies and make decisions based on the company's behavior, not just on price alone. Companies begin to react and change.

companies use the web to make

themselves more accessible but navent begun truly focusing on

ustomer relationships.

customers a greater - and more

e-Commerce helps give

nformed - range of decisions.



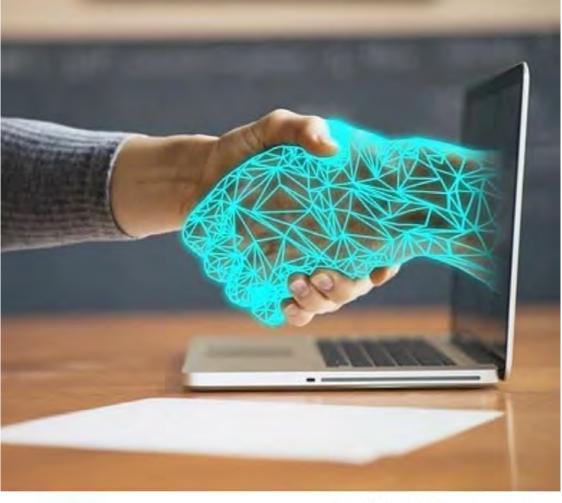
# Welcome to adulthood 2010s

Technology becomes fully intengrated into our daily lives. We live more fully in a district used of

Social Businesses are the evolution of companies now keenly aware that how they act and how they engage with customers can be more important than price, that the relationship is part of the yalue.

Companies allow greater transparency into all apsects of the company and use social.

Companies allow greater transparency into all apsects of the company and use social media channels to effectively engage with customers, but with a focus on WHAT the customer-wants and HOW best to deliver it to the customer.



About 2.6 billion people

# IN THE DEVELOPING WORLD ARE FACING DIFFICULTIES

in accessing electricity full time!

SDG 09: INNOVATION



Co-funded by the Erasmus+ Programme of the European Union



# Getting AROUND TODAY

1849 Date of the first documented air attack, when an Austrian hot air balloon dropped a 50 pound bomb on the island of Murano, near Venice.

7000 Average number of bags lost daily by the Of every 1000 bags handled, 5 are lost. Average number of bags lost daily by the airline industry,

### \$385 MILLION

Amount in airplane damages caused annually by bird strikes, according to the FAA

18,397

Number of buses in the world's largest fleet, owned by the Andre Pradesh State Road Transport Corporation in India.

### 6.1 MILLION

Somalia's camel population, the world's largest.

Somalia's human population

### **WORLD'S FASTEST TRAINS**

FRANCE JAPAN 277 MPH

GERMANY

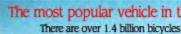
ITALY BELGIUM

### 4000 MILES

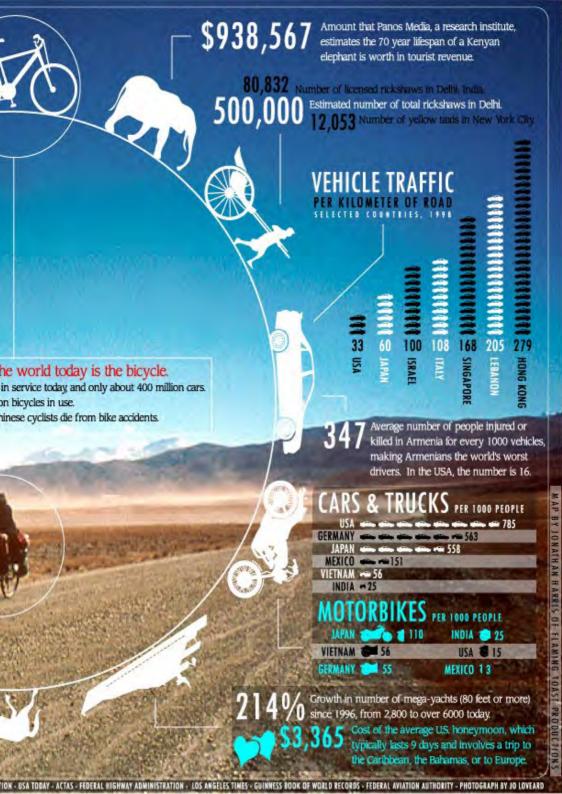
Distance from Ethiopia to South Africa, walked by the nomadic Bantu people in pursuit of fresh cattle pastures in the 1700s. Along the way, the Bantu "sowed their wild oats," spawning the Masai of Kenya, the Zulu of South Africa, the Maukua of Tanzania, the Yau of Mozambique the Tutsi/Hutu of Rwanda, and the Baganda of Uganda, to name a few.

8 YEARS Length of the longest horse - drawn journey, completed in 1998 by a British family who traveled 17,200 miles around the world in a trader.

INTERNATIONAL NETWORKS ARCHIVE



In China alone, there are over 500 million Every year more than 35,000 Cl



### **How To Prevent Innovation**



- 1 Don't communicate your firm's strategic intent to the employees
- Nurture the "I know it all" attitude among managers
- Establish a "30-minute rule": for the first 30 minutes after an idea is expressed only negative comments can be made
- 4 Don't establish cross-functional innovation teams
- 5 Prevent cross-pollination of ideas between departments
- Don't allow people to challenge assumptions and the status quo
- 7 Don't give your people freedom to fail
- 8 Ask for a detailed weekly report from every innovator
- 9 Don't let anyone to make business fun
- Don't create a corporate innovation system that makes commercialization of inventions much easier



If You Want Something New, You Have to Stop Doing Something Old.

99

### **FUN FACTS ABOUT LOGISTICS**



\$650 billion

of manufactured goods are transported by truck annually.

70% of freight is transported by truck.

3.5 million

truck drivers in the U.S.

6-7%

work in the trucking industry across the U.S.



\$1.5 trillion

spent in transit logistics in the U.S. each year.



300,000

new logistics jobs are created each year nationally.



9 million

people in the U.S. work in logistics.



Barcodes were first used to label train cars on the railroad.



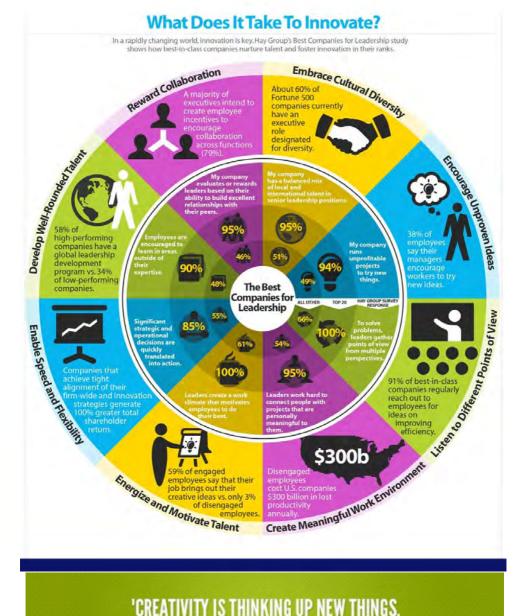
is spent on moving goods world wide.



The world's largest cargo ship could carry the







### 'CREATIVITY IS THINKING UP NEW THINGS.'

- THEODORE LEVITT





## INNOVATION IS NOT ABOUT SAYING YES TO EVERYTHING. IT'S ABOUT SAYING NO TO ALL BUT THE MOST CRUCIAL FFATURES.

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