

# *THE DIGITAL CONTEXT*

*Tech, Trends, and Truths*

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#BusinessMatters

Investec  
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“Netherlands introduces pavement traffic lights for smartphone addicts”





#Internet4all #DataMustFall





The fourth industrial revolution is upon us, and this means that we urgently need to develop our capabilities in the areas of science, technology and innovation.

- Cyril Ramaphosa, SONA2018



# DIGITAL TECH

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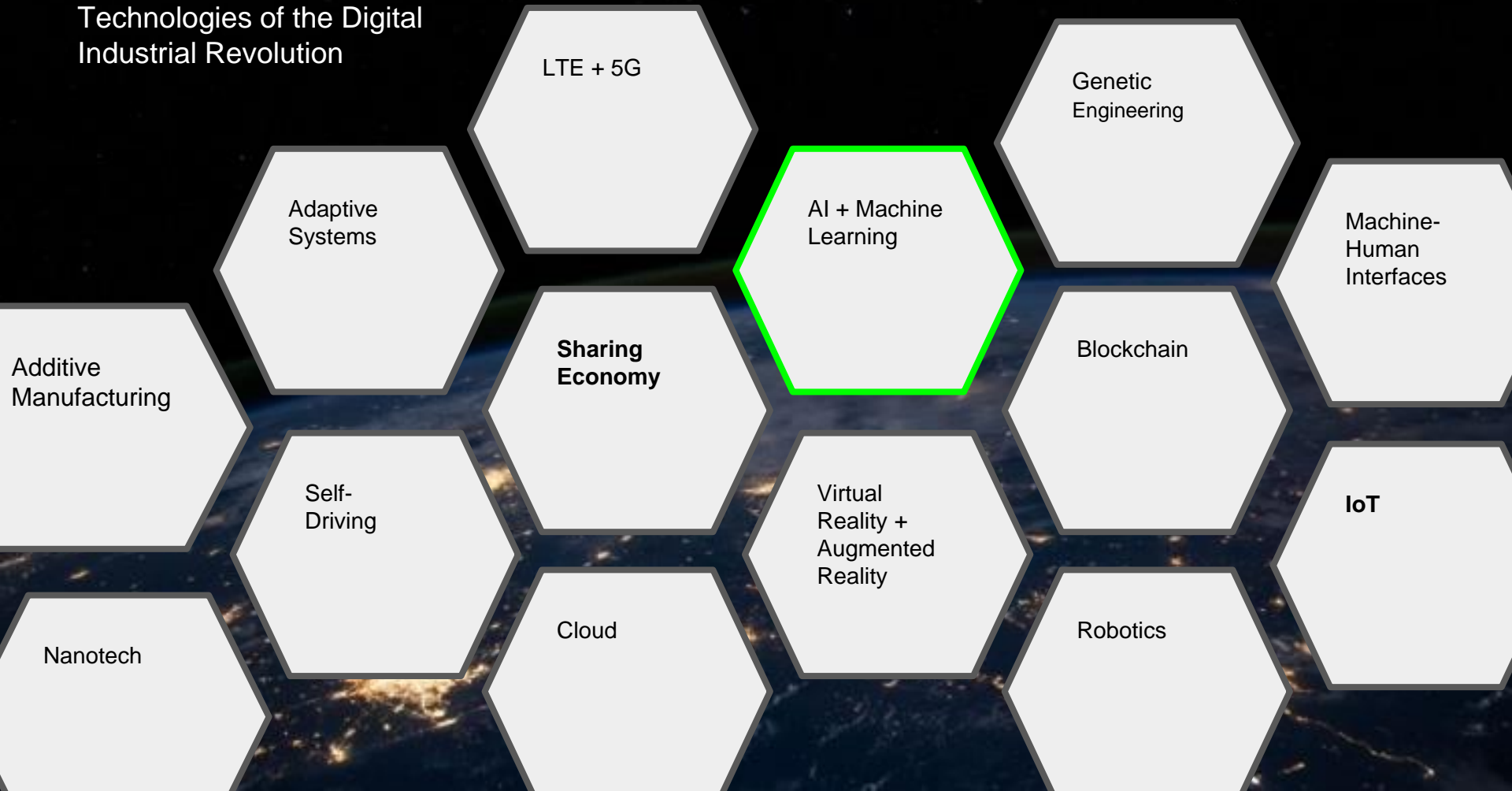
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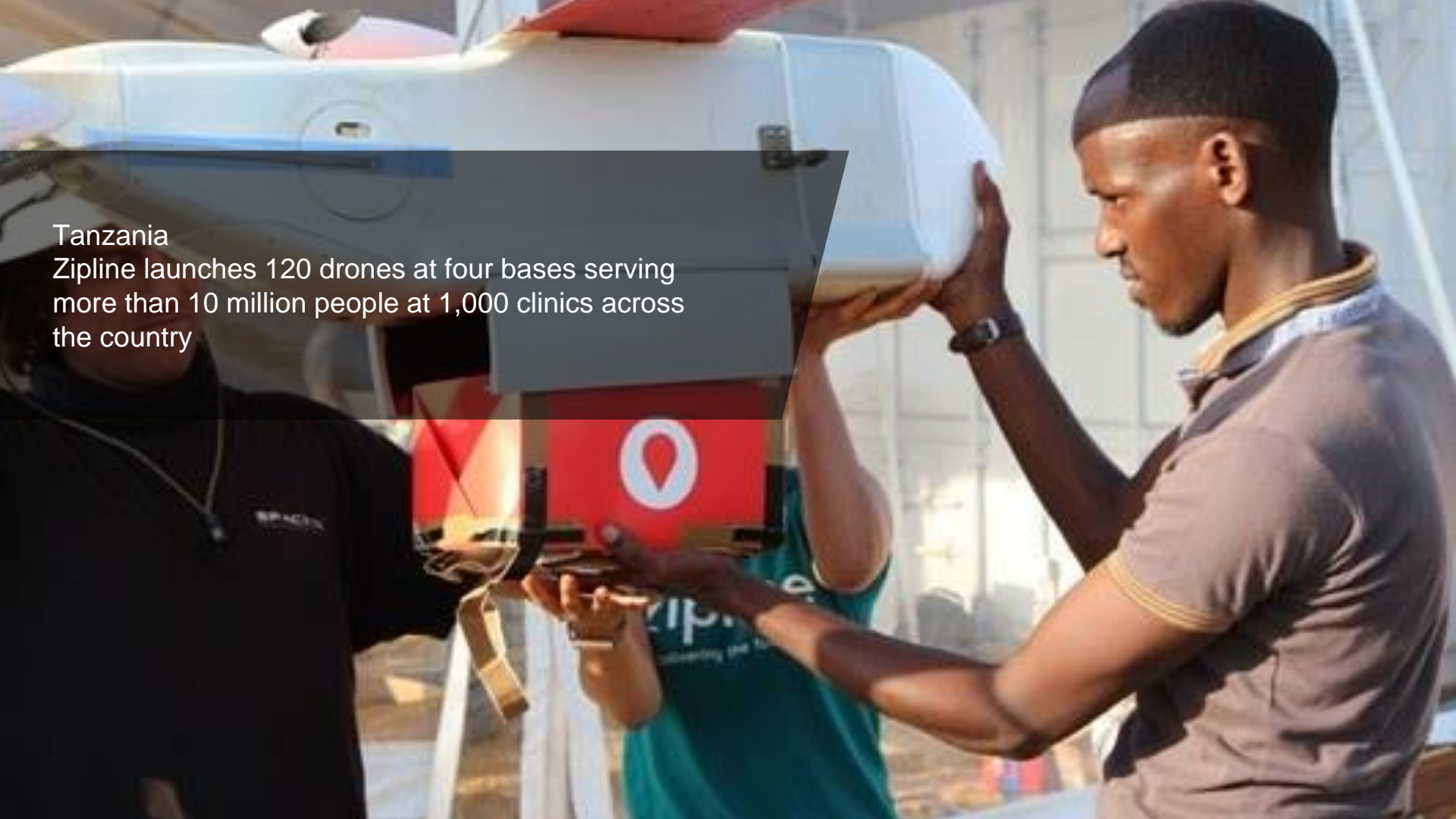
# Technologies of the Digital Industrial Revolution



A photograph of a hospital room. In the foreground, there is a white medical bed with a grey mattress and a white side table. In the background, another similar bed is visible. A green curtain hangs between the beds. On the wall, there are two medical monitors mounted on adjustable arms. To the right, there is a white cabinet with drawers. The room has a clean, clinical appearance with light-colored walls and a tiled floor.

A **machine-learning** algorithm created at Carnegie Mellon was able to predict heart attacks four hours in advance with 80% accuracy.

Source: "Of Prediction and Policy," The Economist

A man in a brown shirt and a woman in a green shirt are working on a white drone. The man is holding the top of the drone, while the woman is holding the bottom. The drone has a red Zipline logo on its side. The background is a bright, outdoor setting with some structures visible.

Tanzania  
Zipline launches 120 drones at four bases serving  
more than 10 million people at 1,000 clinics across  
the country

## Human Machine Interfaces

skype



Hola, hoy te enviaré la información de la organización.

Gracias. Qué bueno poder colaborar con ellos, desde hace mucho quería ayudar.



<https://www.skype.com/en/features/skype-translator/>



## Remote Control World

By 2020, the average person will have **more conversations with bots than with their spouse.**

Source: "Top Strategic Predictions for 2017 and Beyond: Surviving the Storm Winds of Digital Disruption," Gartner.



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10% - 10x



# Centaur

Human  $\times$  Computer  $>$  Human / Computer

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EMOTIV x Rodrigo Hubner Mendes



Seriously! Oh my!





You need to build a culture of experimentation. Ultimately, standing still equals death, and the only way to succeed is to be constantly experimenting and innovating

Peter Diamandis  
Singularity Hub, Feb 2017

#INVENT2SOLVE





LATEST TECH:  
HOW ARE YOU EXPERIMENTING?

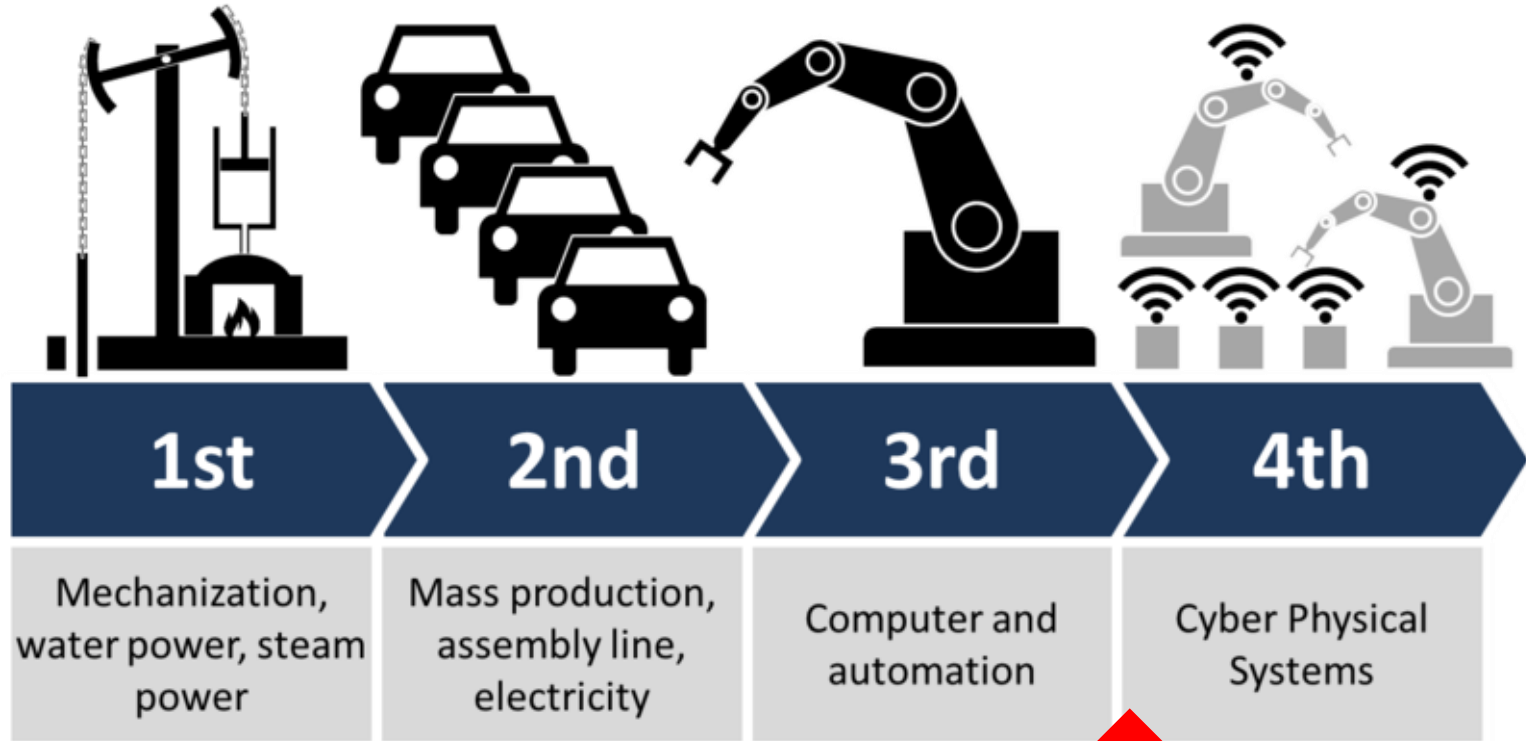
# DIGITAL TRANSFORMATION

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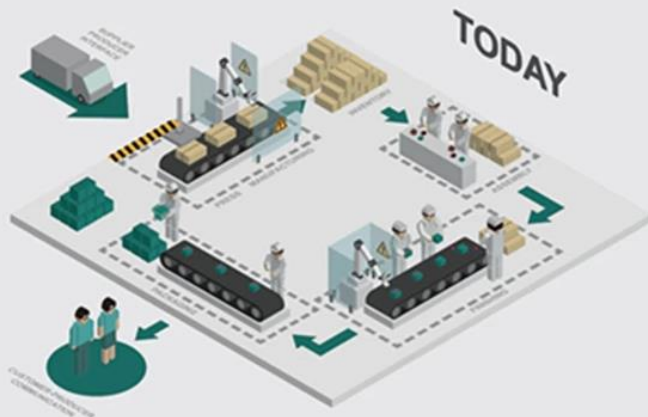
# The Four Industrial Revolutions





## Connectivity is Key

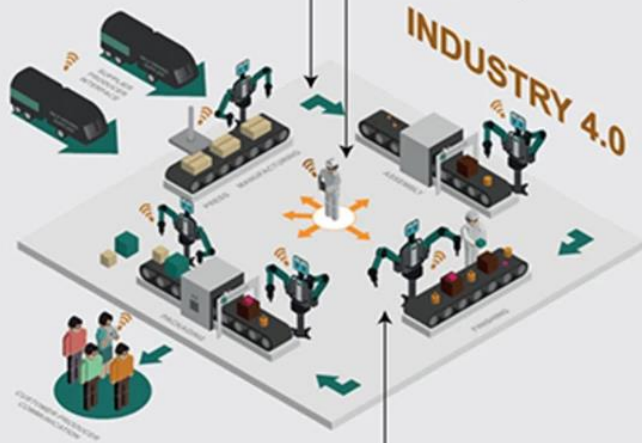
From isolated,  
optimized cells ...



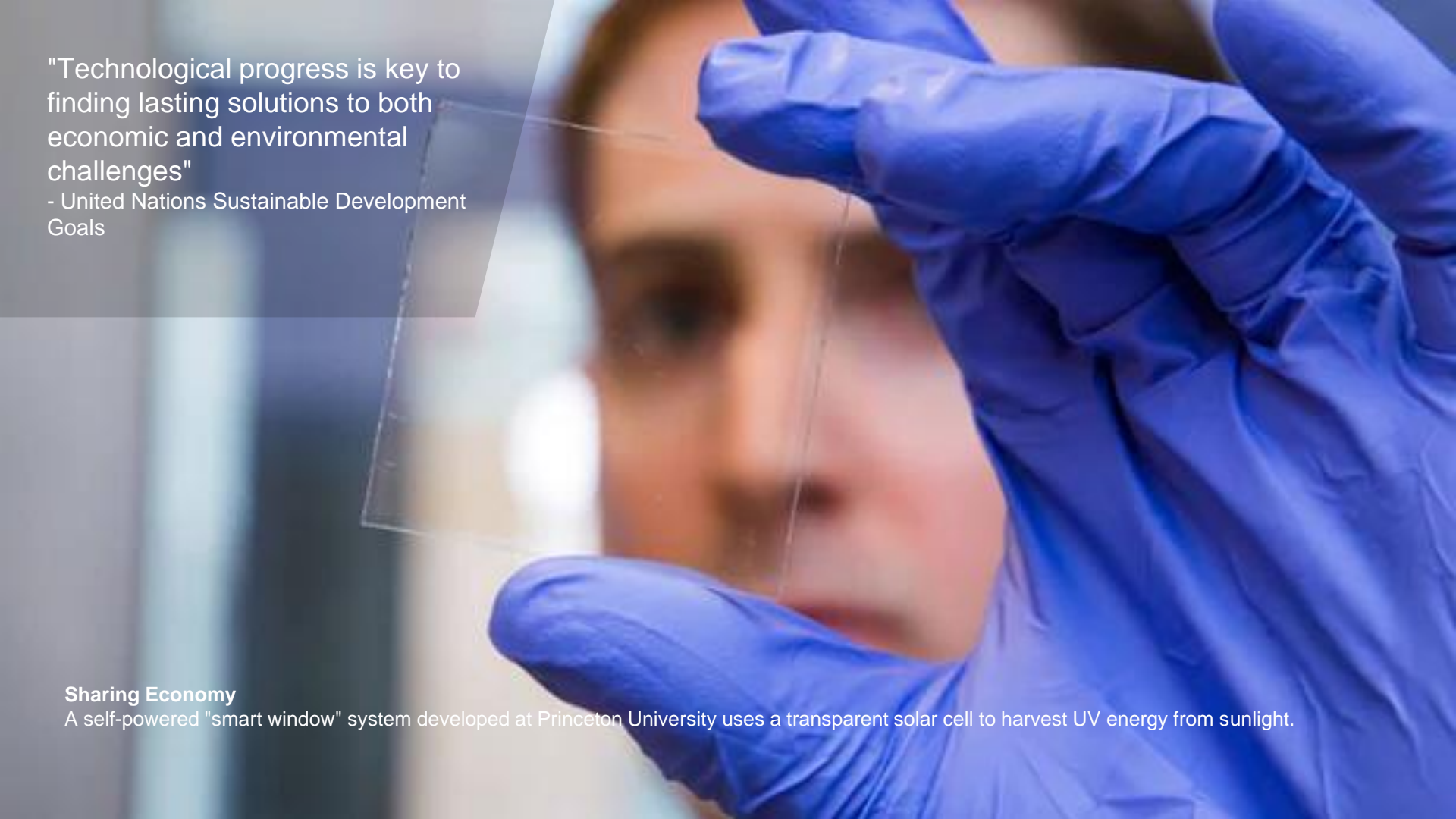
...to fully integrated data  
and product flows across borders

Integrated communication  
along the entire value  
chain reduces work-in-  
progress inventory

Greater automation will  
displace some of the least-  
skilled labor but will require  
higher-skilled labor for  
monitoring and managing  
the factory of the future



Machine-to-machine and machine-to-human  
interaction enables customization and small batches

A close-up photograph of a person's face, partially obscured by a transparent rectangular solar cell held between their blue-gloved hands. The person has dark hair and is looking towards the camera. The background is blurred, suggesting an indoor setting with windows.

"Technological progress is key to finding lasting solutions to both economic and environmental challenges"

- United Nations Sustainable Development Goals

### **Sharing Economy**

A self-powered "smart window" system developed at Princeton University uses a transparent solar cell to harvest UV energy from sunlight.

PEOPLE POWER

## Toyota is becoming more efficient by replacing robots with humans



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“We cannot simply depend on the machines that only repeat the same task over and over again,” project lead Mitsuru Kawai told Bloomberg. **“To be the master of the machine, you have to have the knowledge and the skills to teach the machine.”**

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A nighttime photograph of a city skyline, likely Toronto, featuring numerous illuminated skyscrapers and the CN Tower in the background. The text is overlaid on the upper portion of the image.

# TRANSFORMATIONAL TREND

What **capabilities** do you need to invest in for the coming 3 -5 years



# DIGITAL TRUTHS

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I very frequently get the question: “What’s going to change in the next 10 years”

I almost never get the question: “What’s **NOT** going to change in the next 10 years?”





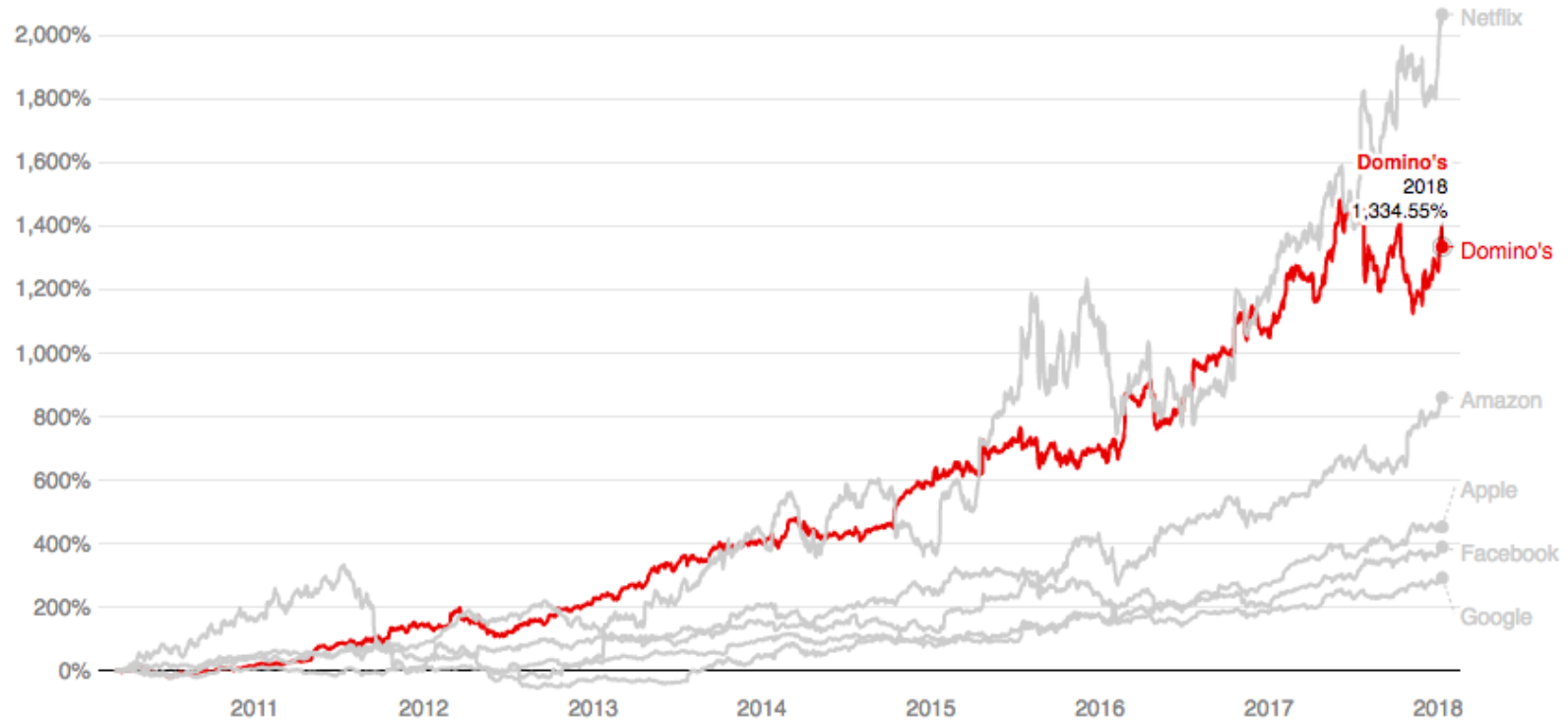
“As a business, you need to have **2 or 3 big ideas**. And execute well on these ideas.”

Amazon's big three are:

1. Low Prices, 2. Fast Delivery, 3. Huge Inventory.



## Digital Business: Domino's Pizza Shows What's Possible



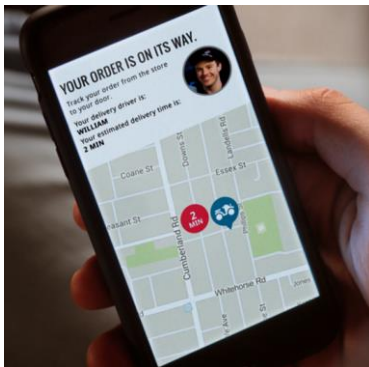
**Taste, Speed, Convenience**

**We are as much a tech company as we are a pizza company" - Patrick Doyle, CEO at Domino's**

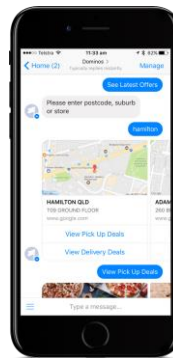
More than half of its 800 HQ employees work in software and analytics.



Modified vehicles



GPS order tracking



Facebook chatbot



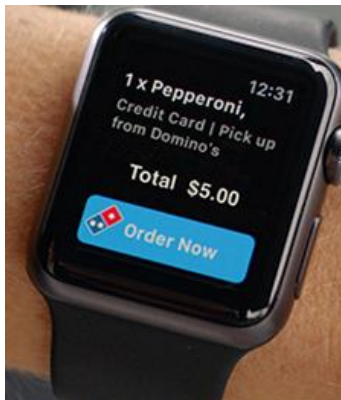
On Time Cooking



No Click Delivery



Drone Delivery



SMS Delivery



AI Pizza Quality Checker



# TIMELESS TRUTH: WHAT **WON'T** CHANGE

Stay focused on customer value





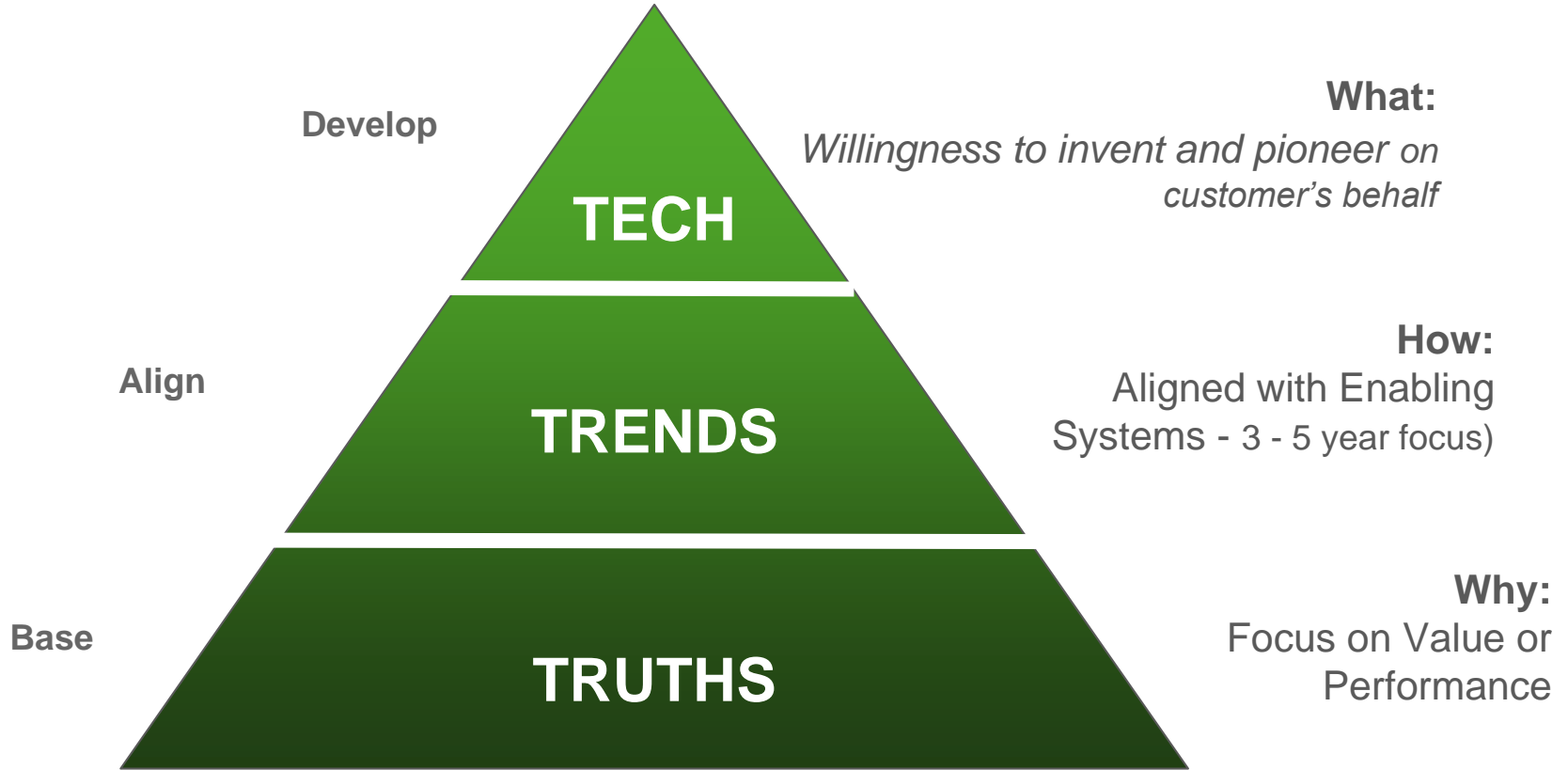
**In Conclusion...**

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# THANK YOU

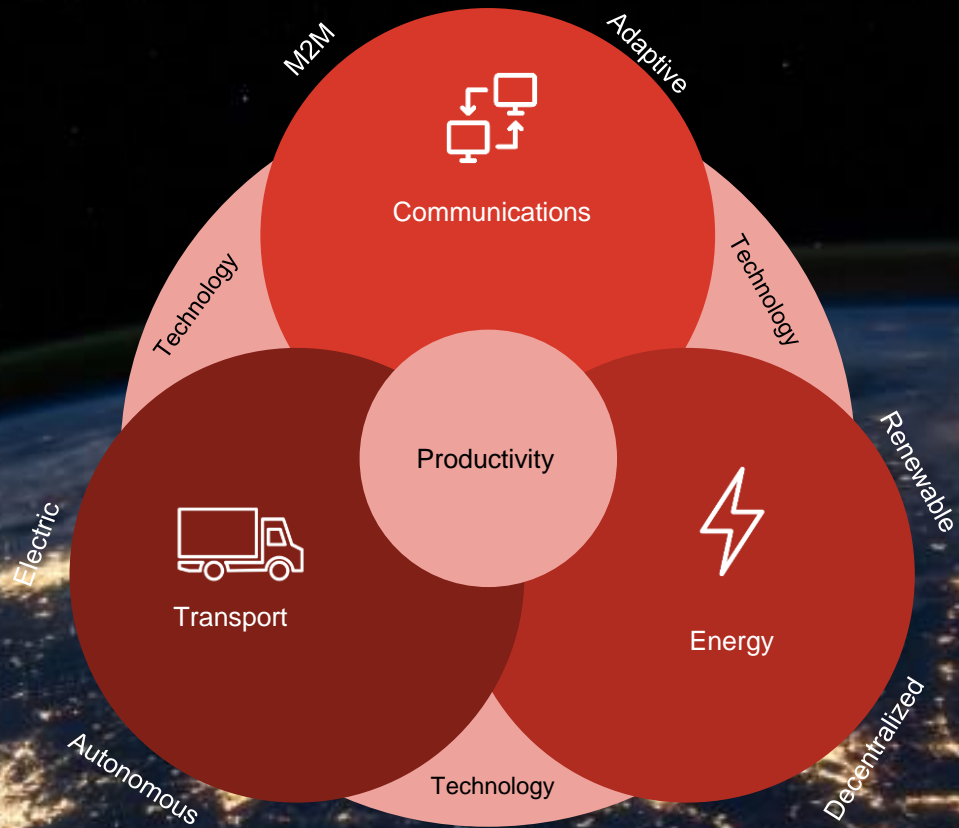
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Invest in Learning NB

## Netherlands: The Next Rembrandt



"It passes the creator's intention - intelligence, emotion, soul"  
- The New Yorker