# RPA:
# AN EXECUTIVE PRIMER

Aiming to convert your organization into a truly digital business? Automation is the foundation of all digital transformation initiatives. This executive primer explains why Robotic Process Automation (RPA) is globally gaining ground, how it works, and how you can get value from it.

# AUTOMATION:
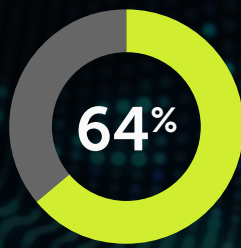## THE GATEWAY TO DIGITAL TRANSFORMATION

Automation is at the top of CEOs minds these days. They see it delivering real benefits such as reduced errors, improved employee productivity, and cost savings. More importantly, they know it is essential for digital transformation.

In fact, in a recent research project on priorities in process and performance management, business research institute APQC found that 69% of the surveyed enterprises listed RPA as the foundation for their digital strategies. It's no wonder that by 2022, the market for RPA software and services will top $4.3 billion[1].
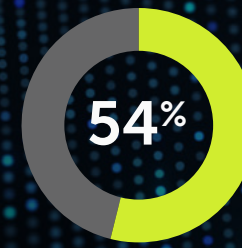
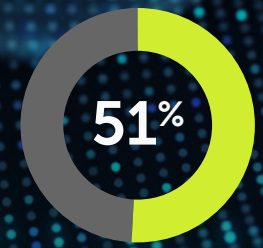## TOP BENEFITS
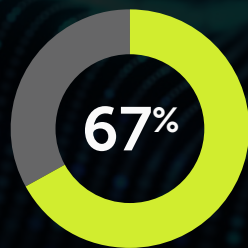
**67%**
Higher Accuracy and/or Error Reduction

**64%**
Improved Employee Productivity

**60%**
Cost Savings
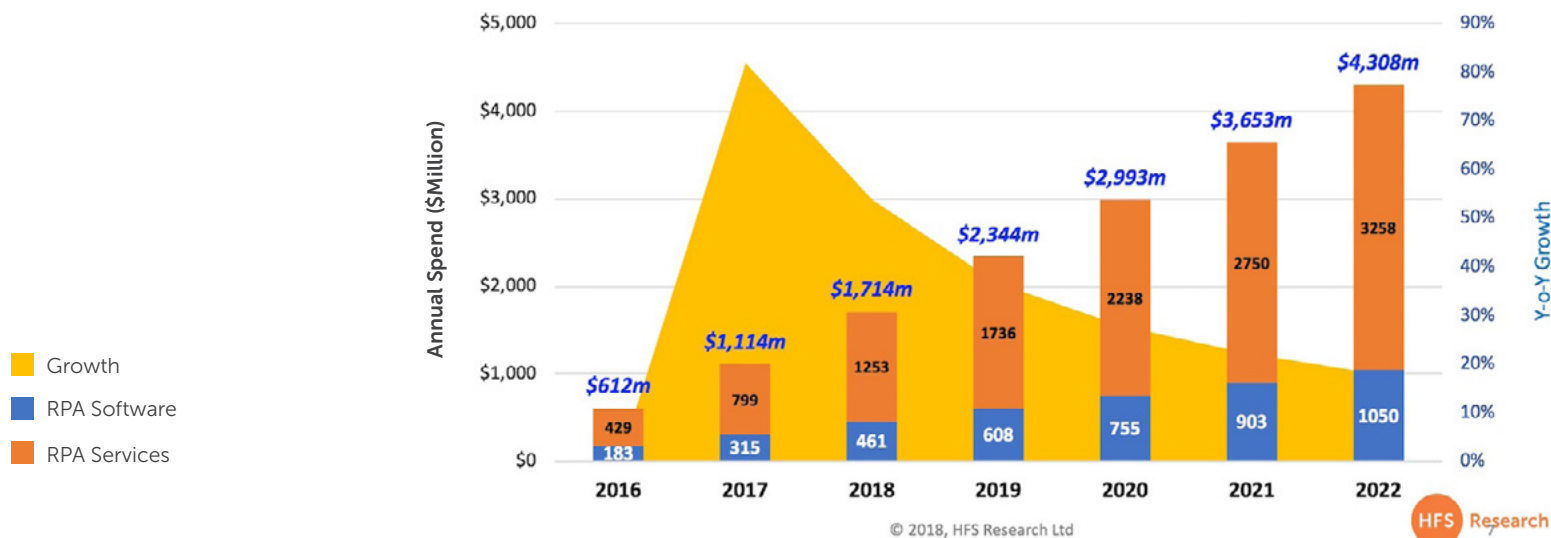
**54%**
Reduced Operational Risk

**51%**
Freeing Up Staff for Higher Value Tasks

The top benefits of deploying technology to automate business tasks are increased accuracy, employee productivity, cost savings, and operational risk.

Source: IDC & Document Strategy, December 2018

Source: https://documentmedia.com/article-2886-2019-Automation-Survey-The-Path-to-DigitalTransformation.html

## RPA SERVICES AND SOFTWARE MARKET 2016–2022

However, executives have a lot of basic questions before they invest in automation.

- How does it work?
- Why do I need it?
- How do I get started?

- Is it difficult to use?
- Is it safe for my business?

This eBook explains the fundamental elements of automation using Robotic Process Automation (RPA), and the tremendous value it offers to organizations like yours.

# WHAT RPA CAN DO FOR YOUR ORGANIZATION

**Copy. Paste. Repeat. Do this 10,000 times.**

The digital age has brought us many beautiful things, but it has also brought digital drudgery. Where we once filled out forms in triplicate, we now copy and paste the information with hundreds or thousands of mind-numbing, repetitive keystrokes.

You probably are aware that physical robots are doing many of the repetitive and often dangerous physical jobs that humans previously performed. Industrial welding, deep-sea exploration, and disaster response are all areas where these physical robots are increasingly useful.

Now, there's an equivalent in the digital world. It's called RPA.

RPA is a way of automating processes so that repetitive and manual digital work is done by software robots, or "bots."

Say you have employees who work in your customer service organization. As part of their job, they must create reports on any issues customers experienced in the 24 hours. Previously, they would tediously copy data from the CRM system, paste it into the correct fields in a Word-based report template, convert it to a PDF, and then email it to their boss.

## NUMBER OF INVOICES PROCESSED ANNUALLY PER FTE

**1** Copy data from the CRM system

**2** Paste it into the correct field in a template in Word

**3** Convert to a PDF

**4** Email it to the boss
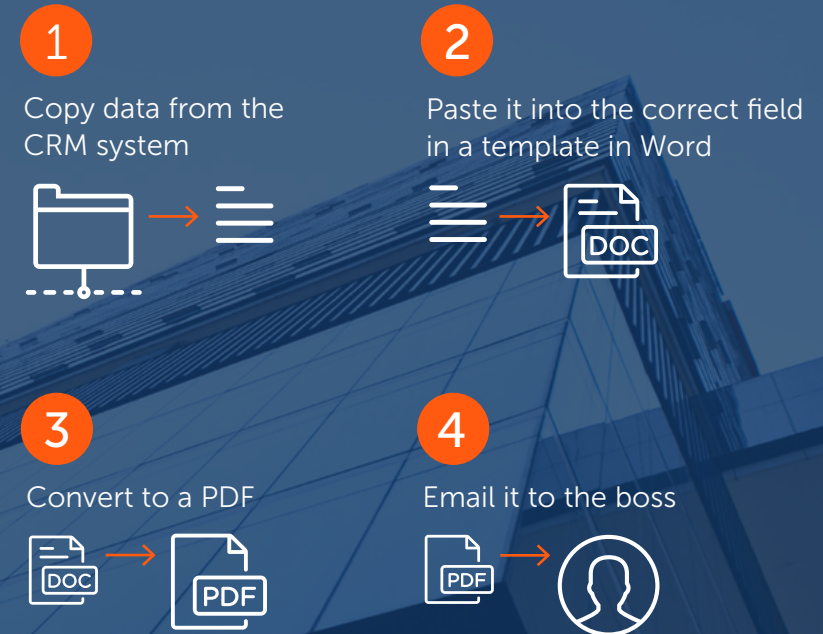
Such a mindless task could eat up hours of valuable time every week. With RPA, it could be completely automated, freeing the employees up to do higher-value work—such as providing better, more personal assistance to customers.

Moreover, the beauty of RPA is that once the bots are programmed correctly, they will never make mistakes. They are 100% accurate 100% of the time, never take sick days, and can work around the clock.

# THE FUTURE IS HERE

RPA is already revolutionizing the modern workplace. According to Deloitte, 53% of businesses have started their RPA journeys. The number will rise to 72% within the next 24 months. If this trend continues, RPA will reach near-universal acceptance within five years.

The benefits of RPA adoption are significant, according to the Deloitte study. Payback was reported at less than 12 months, with an average 20% of full-time equivalent (FTE) capacity provided by robots.

**RPA CONTINUES TO MEET AND EXCEED EXPECTATIONS**

92% Improved Compliance

90% Improved Quality/Accuracy

86% Improved Productivity

59% Cost Reduction

Source: https://www2.deloitte.com/bg/en/pages/technology/articles/deloitte-global-rpa-survey-2018.html

Not surprisingly, **78%** of those who have already implemented RPA expect to increase investment in RPA over the next three years significantly.

But RPA benefits your employees, too, by making their work "more human." What does this mean? With RPA, they now have more time to apply their human talents and capabilities to more interesting and higher value jobs. By creating a workforce that is both human and digital—with the bots doing the rote, repetitive work, and humans responsible for the work that requires creativity, intuition, and judgment—workers are happier, more productive, and more likely to stick with their organizations, according to a University of London study.

## TABLE 7: EMPLOYEES AT ORGANIZATIONS SUPPORTING EXPERIMENTATION AND AUTOMATION

|  | ALL | UK | USA | JAPAN | INDIA |
|---|---|---|---|---|---|
| I feel supported by my organization to take risks in my work | 58% | 46% | 70% | 36% | 83% |
| I am encouraged by my organization to explore new ideas at work | 62% | 53% | 75% | 37% | 85% |
| At my organization unsuccessful projects are considered learning experience | 57% | 49% | 71% | 32% | 78% |

Source: "Making Work Human: 5 Challenges." 2019. Automation Anywhere.
https://www.automationanywhere.com/makeworkhuman

# WHAT CAN I AUTOMATE?

Virtually any repetitive, technology-based task or process can be automated. From simple copy-and-paste commands to complex tasks—such as sensing when a customer is upset and escalating the issue to a human worker—many of your front- and back-office processes can be automated.

Basic commands, such as opening an application, signing in (inputting a username and password), cutting and pasting, calculating, and saving and closing a document can be automated. So can processes that currently require humans to interact with applications such as CRM, accounting, ERP, and supply chain systems as well as databases.

| FUNCTION/INDUSTRY | AUTOMATION OPPORTUNITIES |
|---|---|
| ACCOUNTING | • Move data between back-office systems and to front-office apps like Excel<br>• Perform regulatory compliance |
| HUMAN RESOURCES | • Recruit new employees<br>• Hire talent<br>• Onboard employees<br>• Separate them when they leave the company |
| LIFE SCIENCES, HEALTHCARE | • Document customer complaints for HIPAA and other compliance mandates |
| CALL CENTER | • Automate contact management<br>• Transfer data from CRM systems to back-office systems |
| BANKING AND FINANCE | • Automate loan approvals<br>• Identify exception cases |
| INSURANCE | • Automatically check entitlements<br>• Validate claims<br>• Upgrade customer support |

# RPA AT THE SPEED OF THE WORLD

RPA is especially useful for compliance. Regulations such as HIPAA, ASC 606, and GDPR exact stiff penalties for non-compliance with government mandates. RPA ensures that compliance reporting is done correctly, 100% of the time.

## A Finance Example

Let's look at an example. A new regulation named ASC 606 dictates how businesses must recognize revenue when they enter into contracts. In the scenario below, information from a new sales deal is automatically updated from the company Salesforce.com CRM into the NetSuite financial application, making sure it will be reported correctly for compliance reasons.

And by automating the process with RPA, you're not only ensuring regulatory compliance, but you're also saving time and money versus making humans do this tedious work.

# A PRODUCT SAFETY EXAMPLE

**The traditional way of dealing with customer product complaints in regulated industries, such as pharmaceuticals or medical devices, involves four steps if done manually:**

1. A customer calls about a product issue.

2. A customer service rep records the details (highlighted in yellow below) into the company's CRM system.

3. The complaint information, including the rep's name and product details, must be captured in a specific format in a particular way—for example, by putting it into an electronic quality-management system (called an eQMS).

4. Doing this involves manually copying and pasting the data from the CRM system to the eQMS form. This process is not only labor-intensive but prone to error. And errors aren't taken lightly in highly regulated industries like pharmaceuticals.

This process is euphemistically referred to as a "swivel-chair interface," referring to the fact that office workers previously copied information from one system using a keyboard on one desktop computer, then swiveled their chairs to another keyboard on another desktop computer to paste the data into a different system. Today, of course, two systems can typically be accessed within the same screen on a single desktop computer. However, it's still time-consuming and fraught with errors.

When this process is automated, all the copying and pasting is done behind the scenes by a bot. This happens very quickly and—more importantly—accurately.

## HOW AUTOMATION WORKS



Issue information is copied from source automatically

Data is placed into the Complaint Form

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# A HUMAN/BOT PARTNERSHIP

At its most fundamental level, automating a process with RPA means that you "record" the way a human works. Thus when you create a bot, you are programming it to imitate all the keystrokes someone makes in the course of completing a particular task.

Although automation can massively improve the efficiency and accuracy of a company's processes, it cannot do everything. There are times when bots need humans to make critical decisions. For example, when a chatbot detects an unhappy customer, or in a borderline mortgage application case, human intervention is warranted. Attended bots can do this. **Attended bots** automate processes but from time to time require human attention to complete a process.

**The diagram below outlines the three key types of automation that enterprises can use to improve their processes. Stitched together, they form what we call a "hybrid" RPA workplace model.**

| Attended Automation | Unattended Automation | Cognitive Automation |
| --- | --- | --- |



| Front Office Automation | Back Office Automation | Unstructured data |
| --- | --- | --- |
| Configure bot to work together with the human | Fully automate by teaching the robot how to do it | Make sense of all data formats |

# EXCEPTION HANDLING FOR BETTER BOT RESILIENCY

Exception handling is a simple form of attended automation. When a bot hits an issue it cannot solve with its existing resources, the bot notifies the user prompting them for help on what to do next.

For example, take document verification before making final approval for an insurance claim. In industries like insurance, thousands of claims must be processed quickly and accurately to ensure internal compliance, keep costs in line, and maintain customer satisfaction at the highest possible levels. RPA is the perfect solution for processing these claims, as most of them are very similar.

However, at times additional input or approval is needed by an employee to complete a process. This might be a disputed claim, an upset customer, or possible fraud. Attended bots can be programmed to identify these instances and refer them to a human, to ensure proper processing.

# Here are some other examples:

- Document verification during the mortgage loan processing
- Conditional processing of insurance orders that are above specific approval criteria
- Insurance claims which require human intervention for processing exceptions

The diagram below outlines how the exception process works, as invoked by an insurance processing agent.

STAFF

Triggers a bot via **keystroke**

Employee looks at exceptions

Starts a task

System update

**END TASK**

BOT

Fetches information from various sources about a claim

Auto approve claims that fall within pre-set guidelines
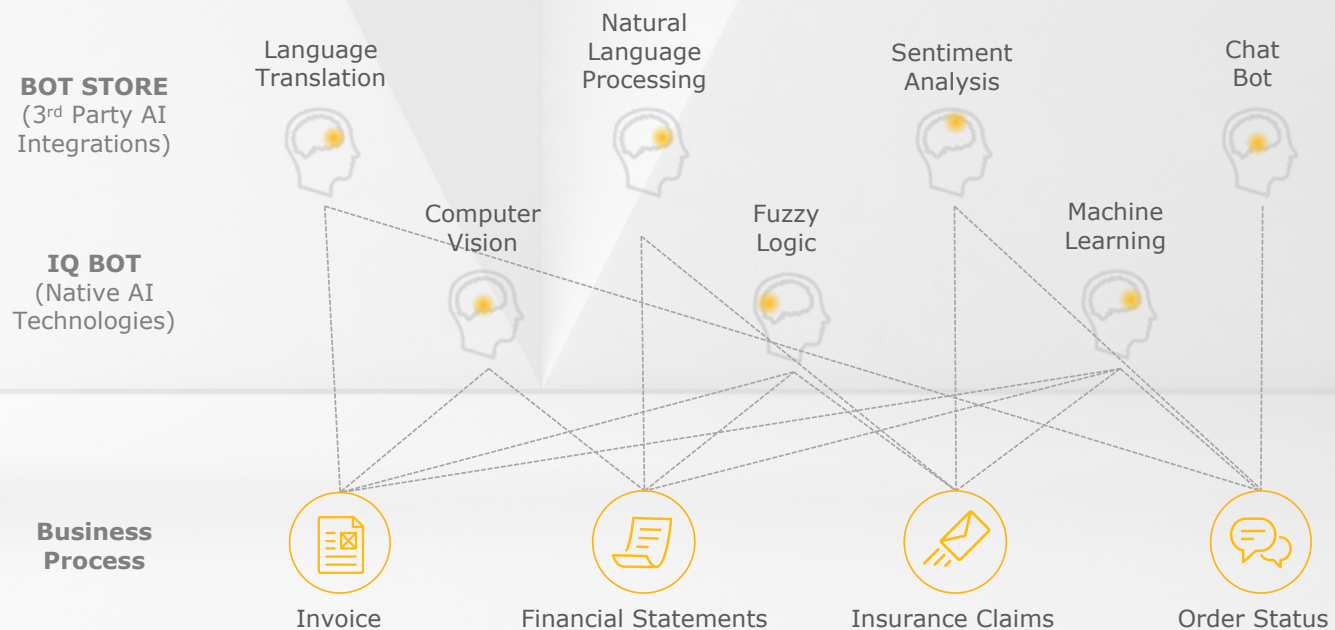
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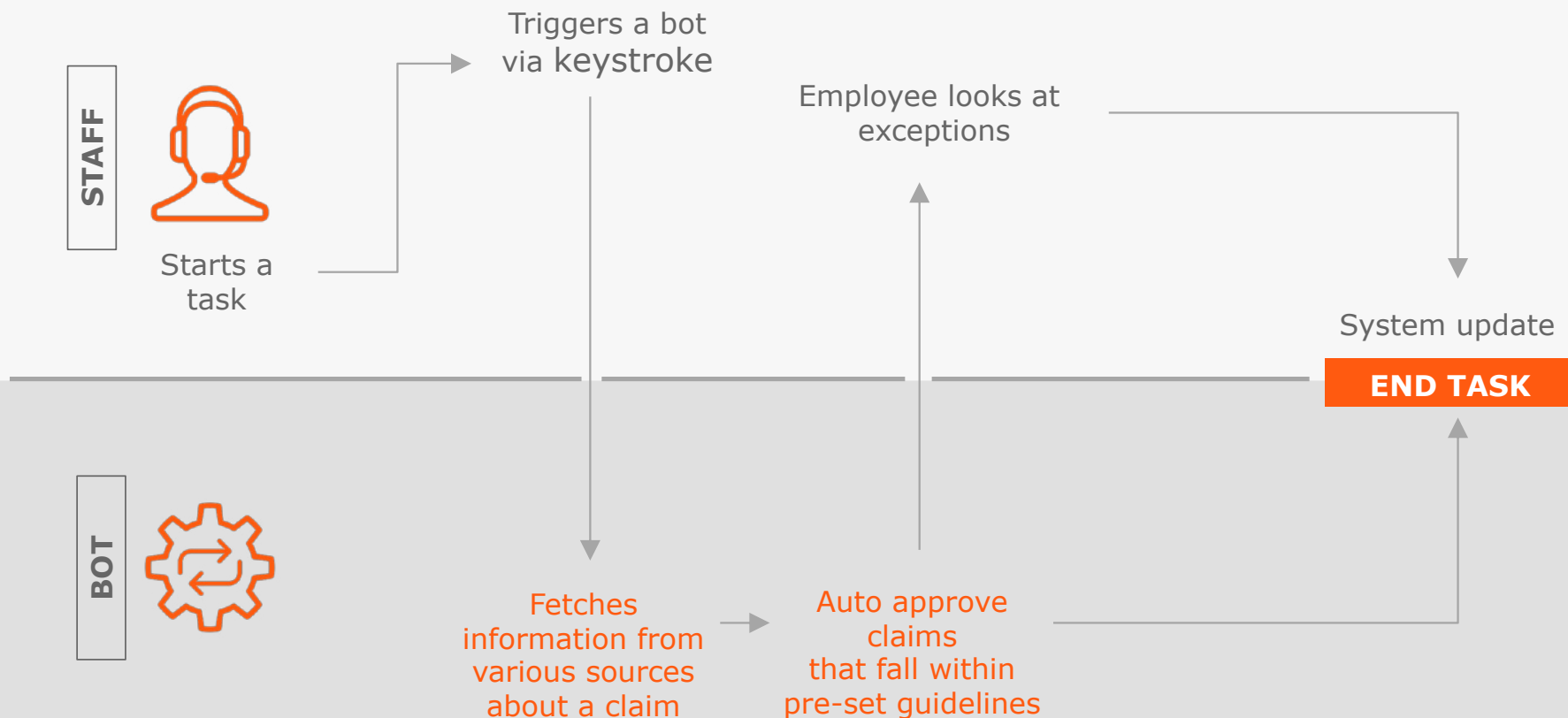
# A SMARTER WAY TO AUTOMATE

When RPA meets Artificial Intelligence (AI) new automation capabilities are created. Cognitive automation leverage bots capable of processing unstructured data thanks to AI and machine learning (ML).

What does this mean? Most of the data in the world is unstructured—it doesn't come in standard, cookie-cut forms like a database with its orderly defined fields or a spreadsheet with its neat rows and columns. An employee is exposed to e-mails, chats, website content, Word sheets, and other data formats. How is a bot supposed to make sense of the various information and filter out the relevant data?

Ordinary bots are limited—they can only process structured data by repeating keystrokes that have been shown to them. Ask a standard bot to respond to a customer service email, and it will not know how to proceed. However, AI-powered bots can do much, much more.

For example, a cognitive bot would be able to look at a utility bill and extract the relevant information out of it so it could be paid, because it knows how to recognize patterns in data that previously only humans could understand.

## AI & ML APPLIED TO SEMI-STRUCTURED/ UNSTRUCTURED DATA

**BOT STORE**
(3rd Party AI Integrations)

**IQ BOT**
(Native AI Technologies)

**Business Process**

Language Translation

Computer Vision

Natural Language Processing

Fuzzy Logic

Sentiment Analysis

Machine Learning

Chat Bot

Invoice

Financial Statements

Insurance Claims

Order Status

# IN SUMMARY

Just as in the Industrial Revolution of the late nineteenth century and the computing revolution of the mid-twentieth century, RPA is the revolution for the twenty-first century. All these revolutions drove business innovation and made our lives better and easier. And, not incidentally, we became more prosperous as well.

RPA bots take over repetitive, mundane tasks to free up knowledge workers to do more value-added work. A recent University of London study showed that workers in workplaces who had been augmented—not replaced—by bots scored 33% higher on rating their workplace as "human" than their non-bot-augmented counterparts.

Automating your workplace is easier than ever. Today, you don't have to be a professional developer to create bots to perform simple tasks. Automation Anywhere RPA products are designed to easily create, deploy, and manage your RPA.

Learn how to get started with Automation Anywhere RPA here.



### INDUSTRY 1.0
Mechanization, steam power, weaving loom

### INDUSTRY 2.0
Mass productuion, assembly line, electrical energy

### INDUSTRY 3.0
Automation, computers and electronics

### INDUSTRY 4.0
Cyber Physical Systems, internet of things, networks, Digital Workforce

1760      1840      1969      TODAY-2020