



GROWING TOGETHER IN THE AMERICAS

DIGITAL TRANSFORMATION CHALLENGE FOR
INTERNATIONALIZATION



Agenda

1. **Important announcements**
2. **Emerging technologies**
3. **Use cases**
4. **Application in SMEs**
5. **Q&A**



Important announcements



The 'elevator pitch' **group challenge** deadline is approaching - 18th July



You can now find the **best challenges** from topic 1 and 2 in the ConnectAmericas Academy.



We opened a special session in the Academy where you can **share your videos**.



If you have any problems, please contact us at :
creciendojuntas@connectamericas.com



Remember that on the **ConnectAmericas Academy** in section Topic 6, class 1 this material is available in English, Spanish and Portuguese.



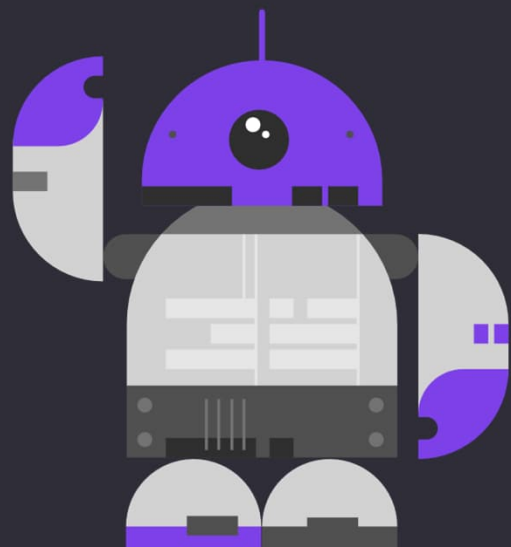
This is a learning environment, we come here to learn, to make mistakes, to reflect, to change our minds, **and it's all good!**

Today we start with a new topic:

Digital world and data


Objective: To understand the concepts involved in extracting, querying, cleaning and aggregating data for analysis.

Understand how to approach the development of digital channels for the business, aspects to consider, criteria and best practices for a digital campaign.



Classes:

- 1 **Levelling:** Emerging Technologies
- 2 **Innovation:** Business Analytics
- 3 **Tools:** Value Data Generator
- 4 **Transformation:** Digital marketing and E-commerce

 We are here –
Tuesday, 12 July

Agenda

1. Important announcements
2. Emerging technologies
3. Use cases
4. Application in SMEs
5. Q&A



Alejandra Robles

Alejandra is a Manager of Advisory with more than 6 years of experience in finance transformation projects, reduction and allocation of costs, and redesign and automation of processes.

She has participated in projects of RPA, such as Proof of Concept (PoC), Discovery and implementation of robots, process reengineering, strategic diagnostics, cost allocation and process centralization.



A hand is shown holding a small, glowing drone with blue and red lights. The background is a gradient of purple and blue, with a bright yellow and orange light source visible in the upper left. The drone is positioned in the center of the frame, and the hand is visible at the bottom. The overall scene is illuminated with a soft, ethereal glow.

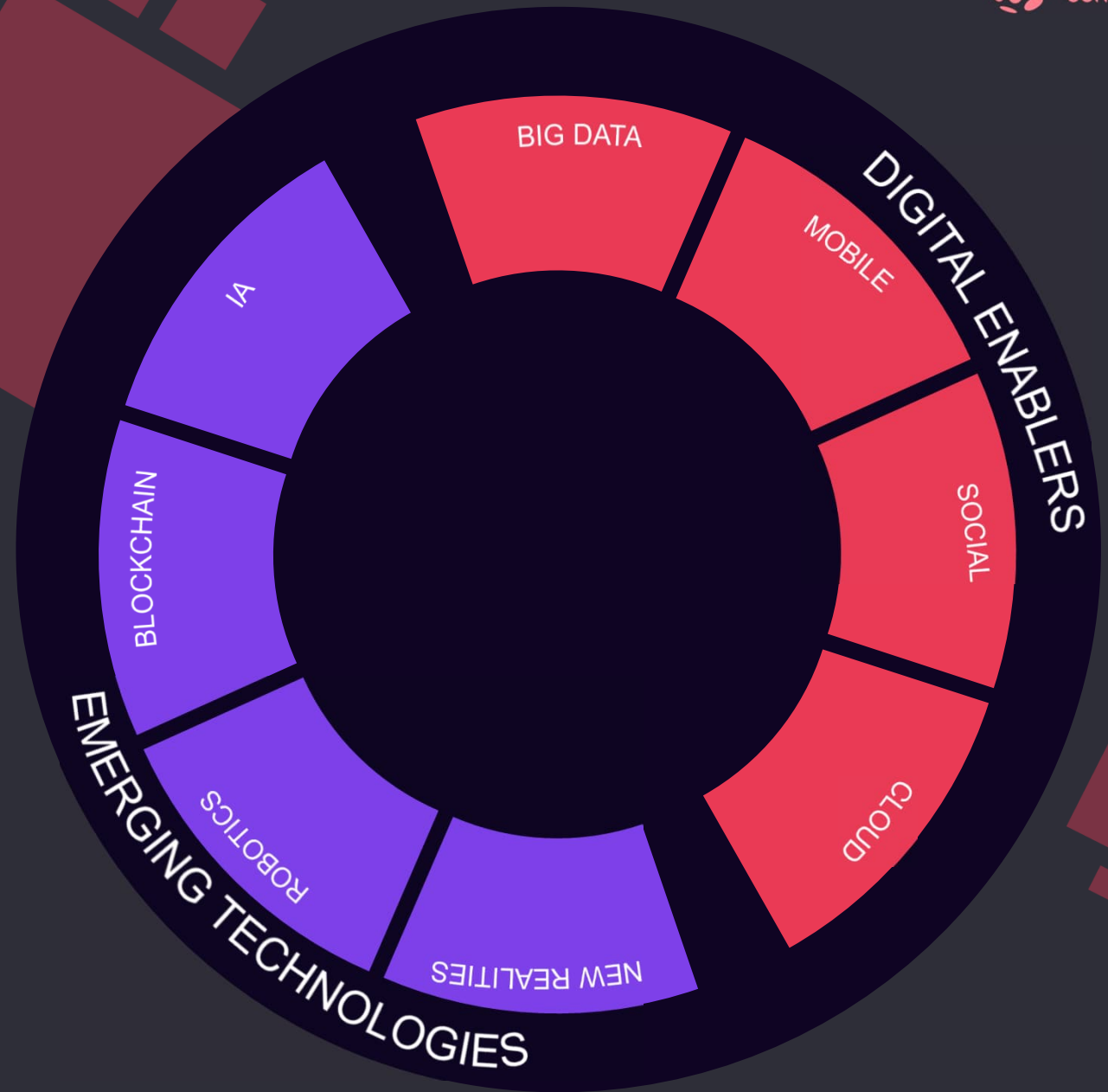
Let's think for a moment about how we live now



"We are now using machine learning and artificial intelligence to solve problems that were previously in the realm of science fiction. We're doing fantastic things with Alexa, Echo and Prime Drones that use machine learning, vision systems, natural language understanding and many other techniques. Still, a lot of the value we're getting from machine learning is generated below the surface. It consists of things like better search results, better recommendations for customers, better forecasts for inventory management. There are literally hundreds of things under the surface."

Jeff Bezos
Amazon

As technology evolves ever faster, there is indeed a unique opportunity for businesses to combine digital enablers with emerging technologies bringing value to their customers and society



Benefits of emerging technologies for SMEs

BOOSTS PRODUCTIVITY



Technology is a crucial element in improving business operational excellence.

ENABLES NEW BUSINESS MODELS



Technology fuels the development of new services and business models, generating new revenue streams

FACILITATES HIGHER CUSTOMER EXPERIENCE



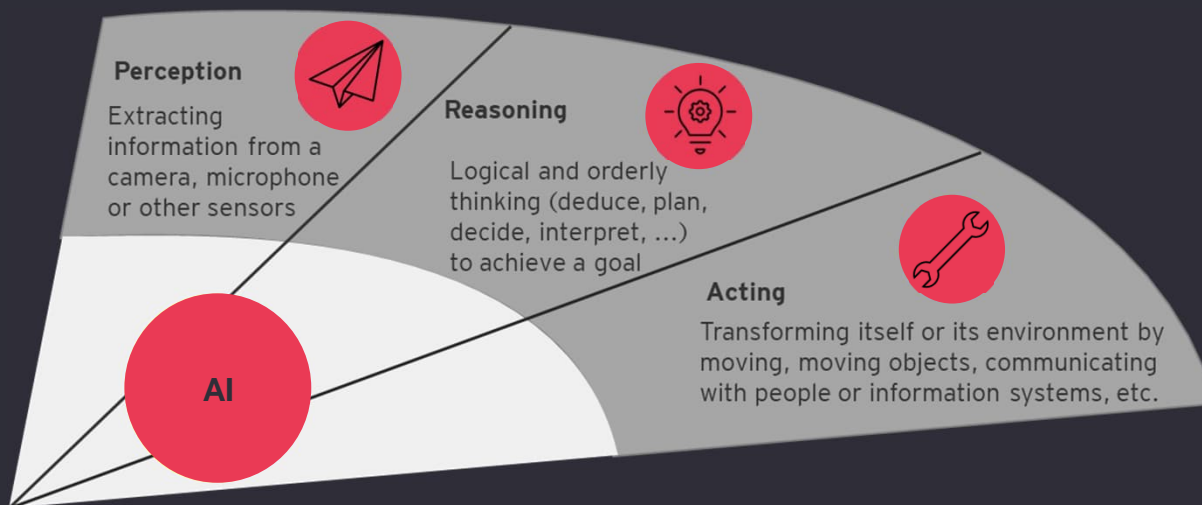
Technology for creating opportunities to enhance customer experience to the desired future levels

AI aims to build increasingly autonomous solutions with enhanced abilities to Perceive, Reason and Act

What is Artificial Intelligence?

AI aims to build increasingly autonomous systems which are able to:

- ▶ **Adapt** to an uncertain and complex environment
- ▶ **Interact** naturally with humans
- ▶ **Deal with** complex and heterogeneous data
- ▶ **Combine** several tasks in the most integrated and easy way possible



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The capability of a machine to perform cognitive functions, which are normally associated with humans.

Artificial intelligence

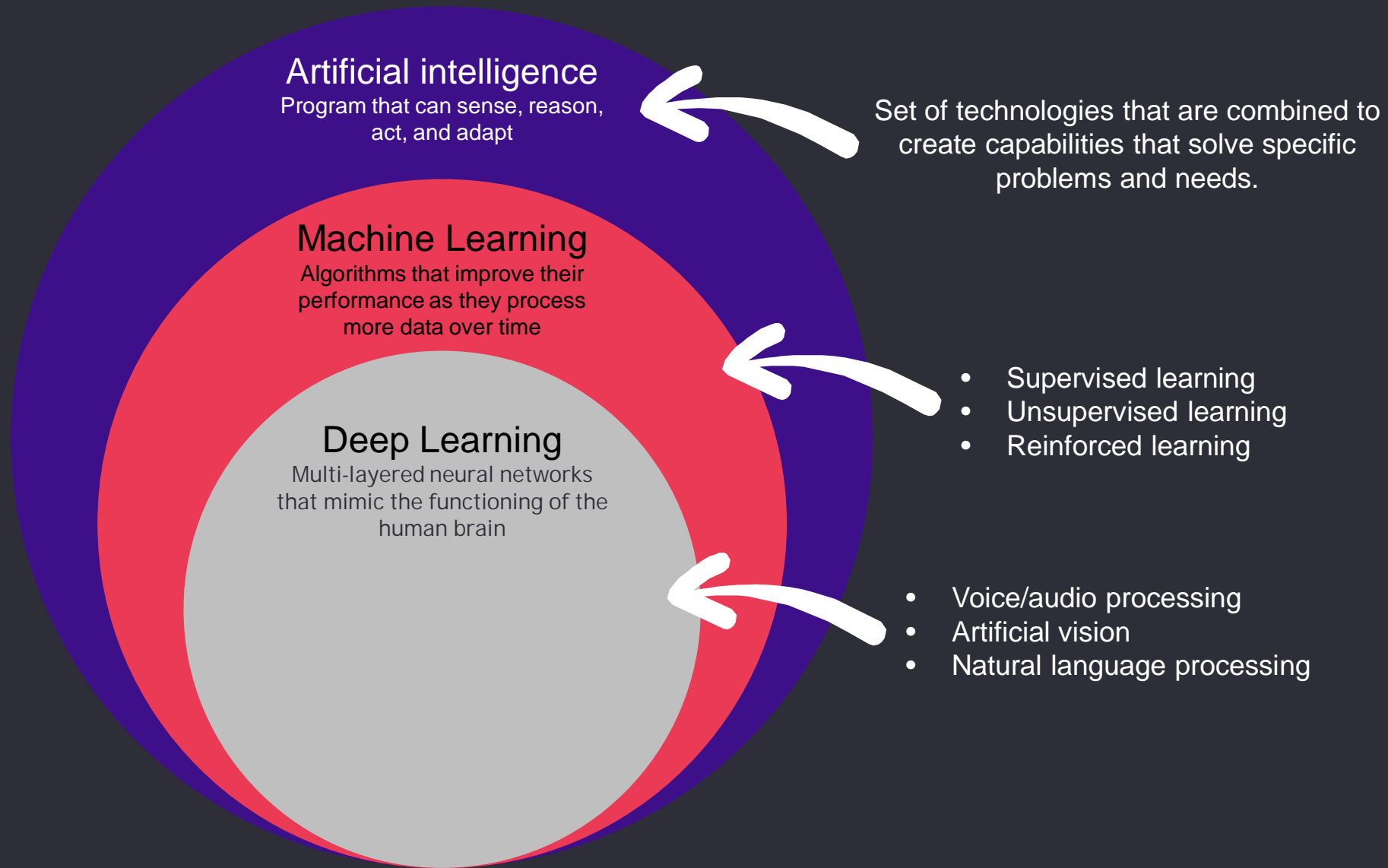


The application of artificial intelligence goes beyond "better" or "faster" processes. It inspires new ways of operating and growing a business.

Artificial intelligence (AI) is not a single technology, but a set of methods and tools with subdomains applied to countless situations. We like to say, "technology is implemented; robots are built, but AI is applied."

The value of AI does not come from "adding it," at least not yet, but it is maturing and becoming integrated into enterprise systems or becoming more accessible to non-technical users.

Artificial intelligence



Artificial intelligence: a three-step process

IA, ML, DL



Give machines a better understanding of:

- Knowledge of the real world
- Context and situational awareness
- The cause-effect impact of relationships

Learning



Learn to operate as human beings:

- Interpret inputs and environments.
- Iteratively improve by obtaining m
- Reason, solve problems and make decisions

Predictive intelligence



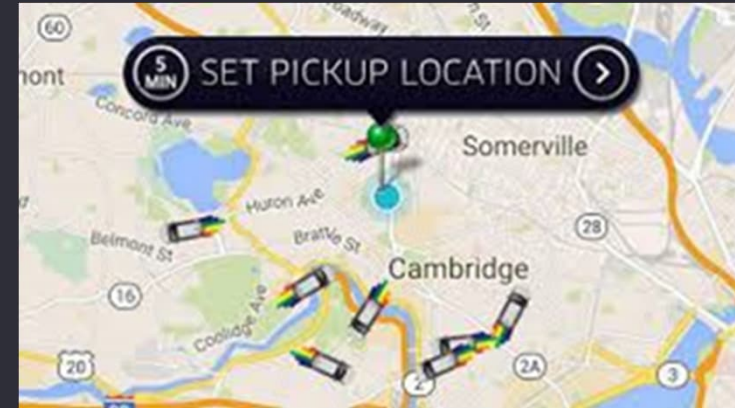
Delivering intelligent results, congruent with human cognitive abilities.

Some daily life examples include...

Self-Driving and Parking Vehicles



Apps like Uber



Robots



Digital Assistants



Sectors more at the forefront



Healthcare

doctor diagnosis, patient report, drug development, insurance, hospital care, clinical research, etc. The apps are also helping to save the costs as well as the time of both hospitals and patients.



IT services and security

building different conversational interfaces like text and voice assistants and protecting information systems from attackers, AI technology is widely utilized in this field.



Energy and Cost-saving

calculate the average power consumption rate for businesses on an hourly, weekly, or monthly basis. show the consumption rate through numbers or graphs by using color coding and add comments for future purposes.



Online recruiting Online recruitment includes online sources such as internet job boards, tracking applicants, online assessments, and candidate selections. The AI/ML apps combine all these technologies to streamline the recruitment process.



CHATBOTS

They can function as highly skilled customer service assistants. Through the use of AI and big data analytics, the chatbot will have a wealth of information to provide answers and provide support to your customer base. Since they can analyze and interpret all past interactions between the consumer and the customer base, they will be able to know your customers better than you do.

SOCIAL MEDIA

AI processing can be applied to your social media platforms to create highly sophisticated marketing strategies. An AI program can analyze interactions on social networks, in the news and blogs, to assess the most influential markers; which headlines work best, which keywords perform well, what times of day people interact and respond - all of this information can be captured.

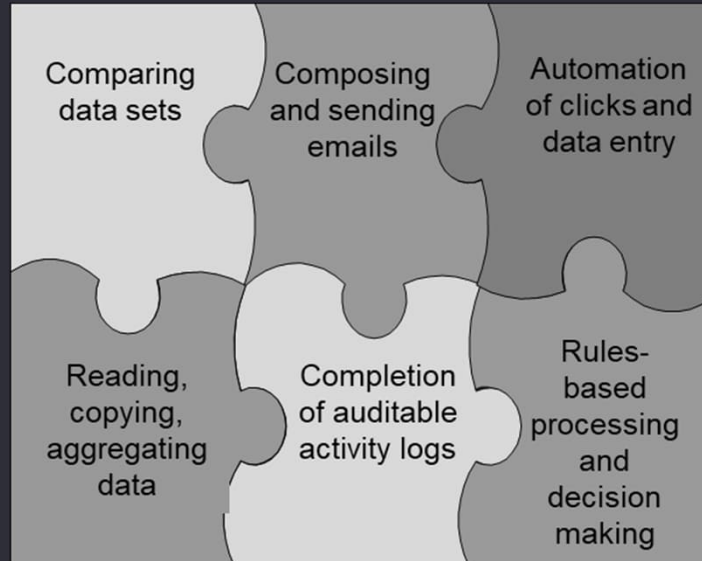
E-MAIL

Google has already applied AI to generate inbox responses, as well as back-office platforms that promise to consistently return your inbox to zero. These applications can reduce simple, time-consuming administrative tasks, allowing the freedom to develop deeper customer relationships.

Robotics provides solution to advance business processes, aimed at improving efficiency and reducing costs through intelligent automation

What is Robotics process automation (RPA) ?

- ▶ RPA signifies the development of a software program, replicating the actions of a human being interacting with the user interface of a computer system
- ▶ RPA provides advanced solutions to eliminate manual work – especially if used with other complementary technologies



Robots interact with existing technology



Mainframe

Central account management, transaction processing, accounting and reporting.



Business automation

Workflows and rules, imaging, digital channels, analysis/reporting, collaboration tools



Cloud

Third-party capabilities, industry utilities, internet/intranet capabilities, data storage



Desktop automation

Excel and Word documents, PDF's, e-mails, collaboration, analytical tools

Finance and accounting



- Sales order
- Order to cash
- Tax
- Incentive claim
- Record to report
- Vendor setup
- Trend tracking

Supply chain / S2P



- Master data management
- Work order management
- Demand and supply planning
- Quote, invoice and contract management
- Returns processing

HR



- Payroll
- Benefits administration
- Pay Slip management
- Time and attendance management
- Recruiting process
- Education and training

IT



- Installation
- File transfer protocol download, upload and backup
- Server application and monitoring
- File and email management

INVOICING

Automated software robots capable of efficiently processing invoices contribute to a considerable reduction in working time. Now, the question of format will be thoroughly addressed by the RPA. XLSX, DOCX and PDF file systems will no longer be a dilemma for companies.

PAYROLL

Robotic process automation will replace humans to perform tasks such as:

- Aggregating personal information
- Wage calculations
- Overtime statistics
- Income
- Other discounts

DATA

The robot can collect a large amount of data at any time of the day without any errors and save it in the corresponding business software.

It will help to find the bottlenecks that make the workflow less than perfect. Companies can be sure of the quality of the information provided by the RPA because the robot logically and accurately processes all data according to established rules.

CUSTOMERS

The bots will step-by-step validate data related to customer records and integrate the necessary data sets. At the same time, it will eliminate manual actions by employees when switching between applications and can be integrated with chatbots, to quickly handle customer requests and complaints and direct them to the right staff to resolve their complaints as quickly as possible.

Next realities – VR, AR, MR offer a number of ways to reform utility operations

What are New dimension technologies?

- ▶ New dimension refers to emerging technologies such as Virtual Reality (VR), Augmented Reality (AR), and Mixed Realities (MR):
 - ▶ VR is defined as the experiences that occlude your view to present a digital experience
 - ▶ AR can be concluded to be the superimposition of digital world onto the real
 - ▶ Whereas, MR is the result of blending the physical world with the digital world

VR device



AR device



MR device



New dimension technologies offer multiple applications for each stakeholder group



Customers: Recording customer feedbacks, developing easy prototypes to be tested by customers, etc.



Operations: Identifying technical issues with equipment, locating assets, capturing data, etc.



Enterprise: Improving collaboration between teams, working remotely, visualizing trends and data, etc.



Training: Functioning as a training tool for on-field workers and customers

What is happening in the industry?

Mental health coach

Connect healthcare providers and patients to deliver smarter workouts with guidance from virtual instructors.

Virtual recruitment

Virtual environments could replace assessment days and interviews themselves, saving on cost and time for both the employer and the potential employee

Nike

Nike announced its acquisition of digital design studio RTFKT that produces trainer shoes that can be worn across different online environments

Optima Classical Academy

A charter school in Florida has embraced the new technology and announced its intention to establish a virtual school

Warehouse management

User can virtually manage warehouse and collect the stock details.

Workforce training

Companies could set up virtual plants where trainees could learn to perform all essential operations from start-up to shutdown.

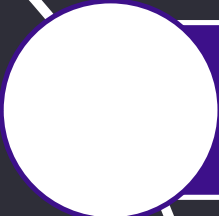
Epic games/Roblox/Sandbox/Disney

Experience live events such as concerts, film showings, sports, museums in 3D virtual worlds


Tourism – NH Nonghyup Bank

Dokdo-verse is a metaverse replica of Dokdo island. It plans to bring clients closer to the island, which is difficult to travel to in real life

New realities applications in SMEs

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AR-enhanced cards When you incorporate AR functionality into your business card, network contacts can scan and interact with it through added components. Additional digital features can be simple, such as a business video, or more complex, such as a mini-game or an interactive view of your entire product line.

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Sampling experiences through AR and VR Scott Kirsner, CEO and co-founder of Innovation Leader, foresees augmented and virtual reality becoming the new "try before you buy". Companies such as Google have already facilitated the creation of 360-degree VR tours, and the technology will only continue to advance in the future.

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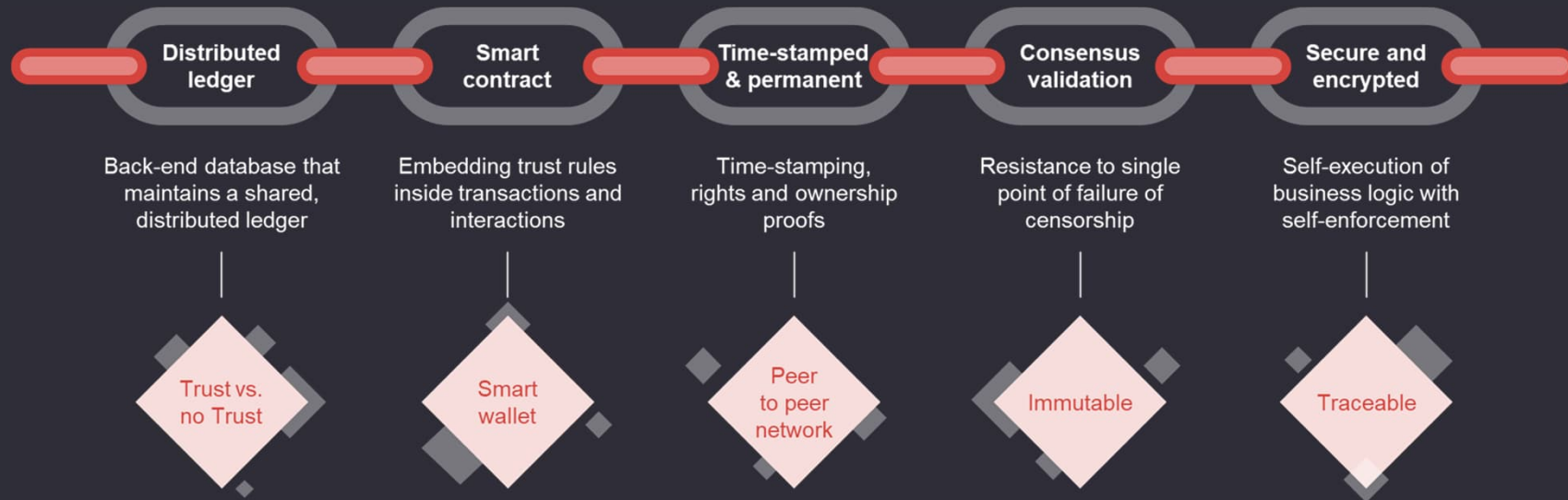
VR safety training Many companies have had success using VR for safety training. If employees use VR headsets, they can interact with a virtual copy of their work environment and get hands-on experience without any risk to their safety or equipment.

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VR for remote recruitment Through VR, recruiters can give candidates simulated tours of offices and facilities, giving them a first-hand view of the work environment and culture. The immersive experience allows these candidates to visualise themselves working in this environment and see their role within the company without having to be physically present.

What is Blockchain?

- ▶ Blockchain is a shared ledger enabling all stakeholders to work simultaneously in a trustworthy environment
- ▶ Further, Blockchain perform dual services – both as a network and a database - all transactions executed through blockchain are stored in virtual blocks connected together in a chain, creating a complete history of all transactions that have ever occurred within a particular network



TRANSFERS

Accept payments in currencies such as [Bitcoin](#)
Pay suppliers or employees remotely in a faster, safer and cheaper way than traditional methods. - Public blockchains; facilitate payments from other countries, where money transfers can take a long time.

CLOUD STORAGE

A company or an individual can rent out their unused hard disk space, with blockchain technology guaranteeing its security. Examples of solutions in this area include [Storj](#) and [Sia](#).

SMART CONTRACTS

[Blockchain](#) technology ensures that conditions are met before the contract can move to the next stage (e.g. release payment); conditions and penalties are executed automatically, without the involvement of an intermediary.

SUPPLY CHAIN

A blockchain-supported supply chain helps maintain efficiency and reliability by tracking the movement of products from origin to destination in real time. This methodology reduces the risks of threats and fraud and improves inventory management.

Q & A

Thanks!

See you next Tuesday



Por favor, accede al siguiente enlace y danos tu opinión sobre la clase de hoy:

<https://forms.office.com/r/Nt9iPQ4tDg>

Su opinión es muy importante para nosotros.