DIGITAL RISK MANAGEMENT

FOR
RHICS TECHNOLOGY

FACILITATED BY
CHRISTIAN JUNIOR

WHAT WE COVER

7TH SEPT. 2021	9TH SEPT. 2021	14TH SEPT. 2021
Introduction to Emerging Technologies & Cyber Security	The Risks of Digitisation: Understanding & Mitigating Cyber Threats Data & Information Security	Risk Management Regime: Framework, policies & procedures
16TH SEPT. 2021	**21TH SEPT. 2021**	**23TH SEPT. 2021**
Artificial Intelligence, Privacy & Ethics	A Framework for Regulatory Compliance Core Banking, FinTech & Payments Platforms	Cyber Security Economics The CISO

CYBER SECURITY IS THE BODY OF TECHNOLOGIES, PROCESSES AND PRACTICES DESIGNED TO PROTECT NETWORKS, COMPUTERS, PROGRAMS AND DATA FROM ATTACK, DAMAGE OR UNAUTHORIZED ACCESS.

The main advantage of cyber security is ease of mind.
Can you afford to lose all your data and information? While you can never be 100% protected even taking out the most basic cyber security measures gives you benefits. If you're in working or managing a business, it allows you to work with the ease of mind that your data, on the whole, is safe and protected.

INTRODUCTION

- In today's data-driven, highly distributed world, companies now use the internet to undertake the very basic of business tasks, to advertise and sell, find new markets, customers and staff, communicate with customers and suppliers, process financial transactions, amongst others.

- The Internet brings huge business opportunities and benefits; it also brings some security risks. It is increasingly important to manage these risks to take advantage of the internet whilst protecting your business.

- Every day there are attacks on the IT systems of Nigerian companies like yours, attempting to steal information and money, or disrupt business activities. More customers are now demanding that their suppliers are secure, making cyber security a business necessity for companies.

- **CYBER ATTACKS HAVE BECOME MUCH MORE SOPHISTICATED & DANGEROUS OVER THE YEARS**

THREATMAP.CHECKPOINT.COM

2021 CYBER THREATS

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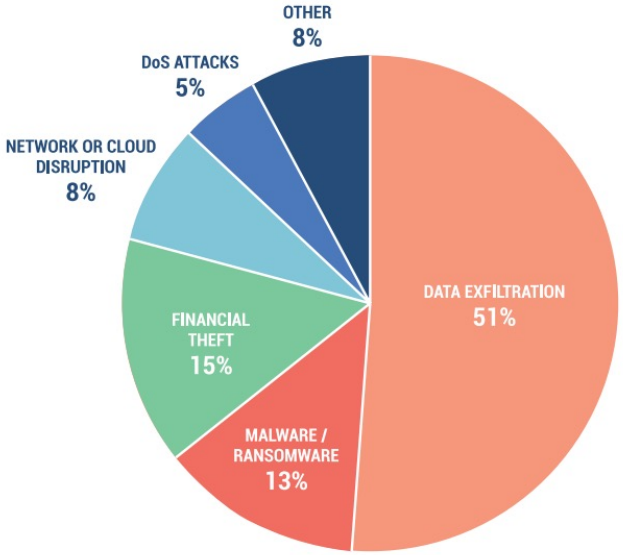
- Ransomware gangs will continue develop new tactics to pressurize victims
- Attackers will begin to find ways to further exploit working from home
- Close co-operation of cyber crime gangs

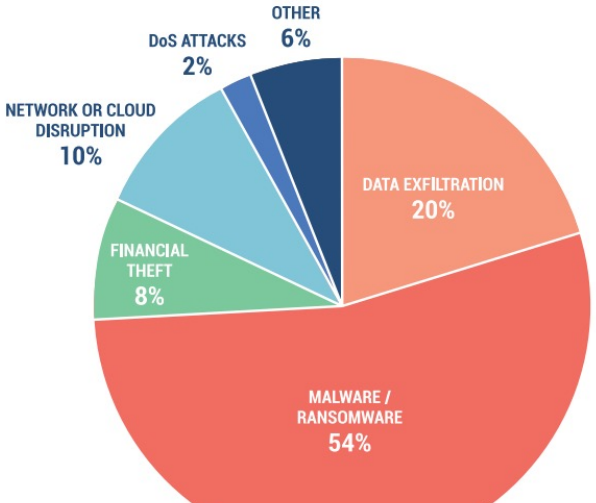
Tactic	Extortion	Demand	Victims	Ransomware group
Encrypt	**Single**	Request payment for the encryption key	Colonial Pipeline (energy)	Darkside
			Düsseldorf University Hospital	To be determined
Exfiltrate	**Double**	Threaten public exposure of the data	Westech International (defense contractor)	Maze
			Blackbaud (cloud provider)	To be determined
	Triple	Threaten end customers / patients to avoid public exposure of the data	Vastaamo Clinic	To be determined

2021 CYBER THREATS

2014 - 2019



2020



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CASE STUDY: TATIL INSURANCE

- THE CARIBBEAN'S biggest conglomerate, Ansa McAl, is the victim of ransomware hackers holding some of the company's IT systems hostage.

- Newsday understands that work at Tatil, the country's biggest insurer, has been effectively stalled for about two weeks as the IT department works to find and expel the ransomware from the company's servers. If not, the company may have to pay the hackers' ransom in order to free its data. In a statement late Tuesday evening, Ansa McAl said businesses were once again operational following a "security incident."

- It is unclear exactly what data and systems were compromised, but Newsday was told whatever was attacked is "very important (mission-critical) data that is crucial to Ansa's operations." Clients' personal data was not compromised, Newsday was told.

CASE STUDY: TATIL INSURANCE

- The group says it has “numerous financial documentation, agreements, invoices, reports.” A screenshot of the hacked haul reveals a count of 17,000 documents. The group threatened, in the post that confirmed the hack, to release the confidential documents to a public server.

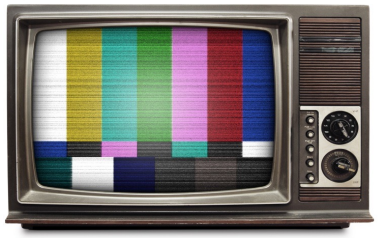
- The attack apparently began at Ansa’s operations in Barbados, specifically, the automotive sector. Berger Barbados was also affected. Newsday was told a ransom was paid in some of the Barbados instances, but was not told how much.

- In a release on Saturday, Ansa McAl Barbados said it can confirm that some of its IT systems in Barbados “were down due to a security incident.

- “As a precautionary measure, some of our services to customers and clients are unavailable.

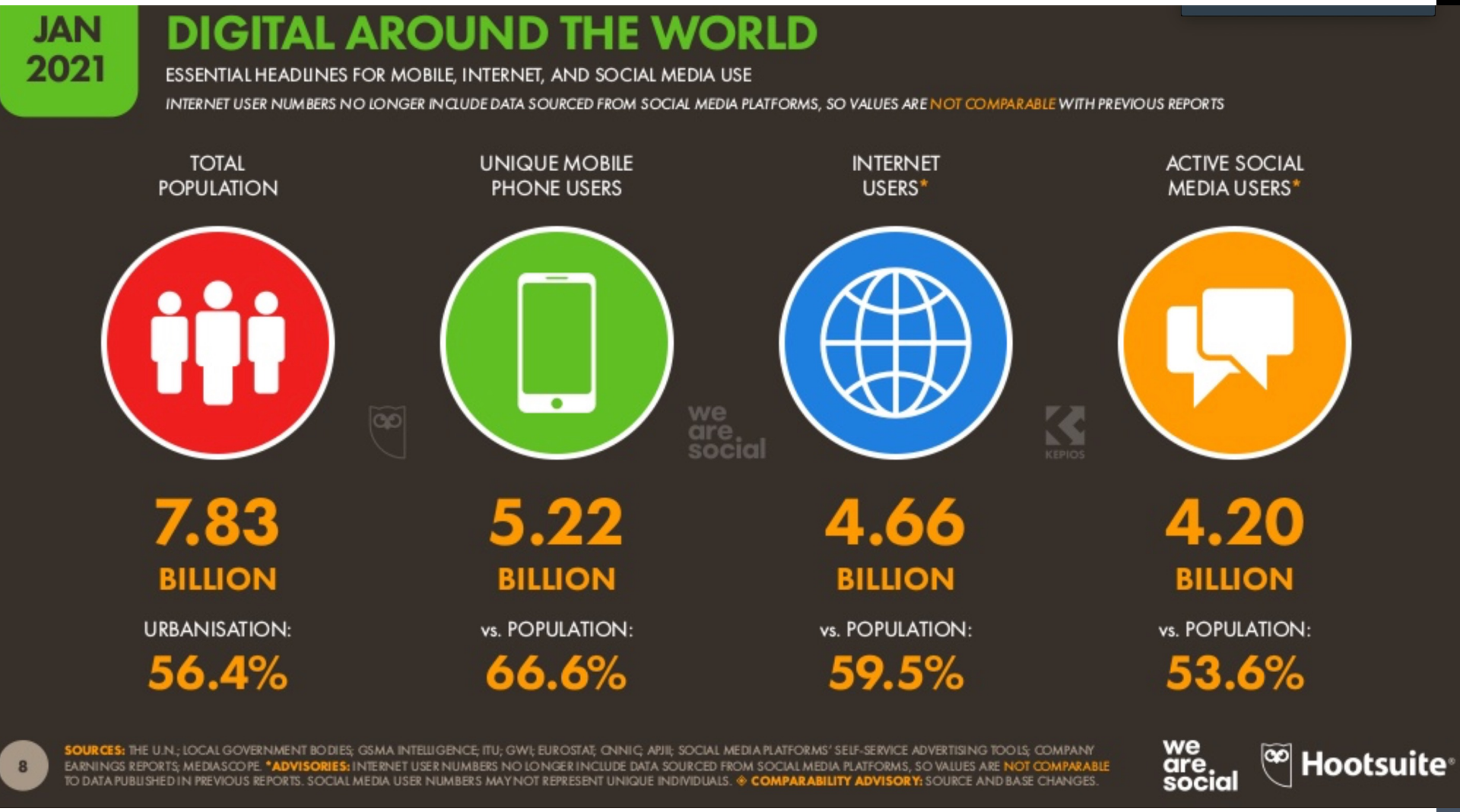
https://newsday.co.tt/2020/10/21/hack-attack-2/

REALITY CHECK



GLOBAL STATISTICS

https://datareportal.com/reports/tag/Caribbean


JAN 2021
DIGITAL AROUND THE WORLD
ESSENTIAL HEADLINES FOR MOBILE, INTERNET, AND SOCIAL MEDIA USE
INTERNET USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS, SO VALUES ARE NOT COMPARABLE WITH PREVIOUS REPORTS
TOTAL POPULATION
UNIQUE MOBILE PHONE USERS
INTERNET USERS*
ACTIVE SOCIAL MEDIA USERS*
we are social
KEPIOS
7.83 BILLION
5.22 BILLION
4.66 BILLION
4.20 BILLION
URBANISATION:
56.4%
vs. POPULATION:
66.6%
vs. POPULATION:
59.5%
vs. POPULATION:
53.6%
8
SOURCES: THE U.N.; LOCAL GOVERNMENT BODIES; GSMA INTELLIGENCE; ITU; GWI; EUROSTAT; CNNIC; APJII; SOCIAL MEDIA PLATFORMS' SELF-SERVICE ADVERTISING TOOLS; COMPANY EARNINGS REPORTS; MEDIASCOPE. *ADVISORIES: INTERNET USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS, SO VALUES ARE NOT COMPARABLE TO DATA PUBLISHED IN PREVIOUS REPORTS. SOCIAL MEDIA USER NUMBERS MAY NOT REPRESENT UNIQUE INDIVIDUALS. ◈ COMPARABILITY ADVISORY: SOURCE AND BASE CHANGES.
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JAN 2021

GLOBAL DIGITAL GROWTH

THE YEAR-ON-YEAR CHANGE IN DIGITAL ADOPTION

INTERNET USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS, SO VALUES ARE NOT COMPARABLE WITH PREVIOUS REPORTS

TOTAL POPULATION	UNIQUE MOBILE PHONE USERS	INTERNET USERS*	ACTIVE SOCIAL MEDIA USERS*
+1.0%	**+1.8%**	**+7.3%**	**+13.2%**
JAN 2021 vs. JAN 2020	JAN 2021 vs. JAN 2020	JAN 2021 vs. JAN 2020	JAN 2021 vs. JAN 2020
+81 MILLION	**+93 MILLION**	**+316 MILLION**	**+490 MILLION**

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KEPIOS

SOURCES: THE U.N.; LOCAL GOVERNMENT BODIES; GSMA INTELLIGENCE; ITU; GWI; EUROSTAT; CNNIC; APJII; SOCIAL MEDIA PLATFORMS' SELF-SERVICE ADVERTISING TOOLS; COMPANY EARNINGS REPORTS; MEDIASCOPE. ***ADVISORIES:** INTERNET USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS, SO VALUES ARE NOT COMPARABLE TO DATA PUBLISHED IN PREVIOUS REPORTS. SOCIAL MEDIA USER NUMBERS MAY NOT REPRESENT UNIQUE INDIVIDUALS. ◈ **COMPARABILITY ADVISORY:** SOURCE AND BASE CHANGES.

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JAN 2021

DEVICE OWNERSHIP

PERCENTAGE OF INTERNET USERS AGED 16 TO 64 WHO OWN EACH KIND OF DEVICE

MOBILE PHONE (ANY TYPE)

97.1%

SMART PHONE

96.6%

GWI.

NON-SMARTPHONE MOBILE PHONE

9.0%

LAPTOP OR DESKTOP COMPUTER

64.4%

GWI.

TABLET DEVICE

34.3%

TV STREAMING STICK OR DEVICE

14.4%

GWI.

GAMES CONSOLE

21.4%

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SMART HOME DEVICE

12.3%

GWI.

SMART WATCH OR WRISTBAND

23.3%

KEPIOS

VIRTUAL REALITY DEVICE

4.4%

SOURCE: GWI (Q3 2020). FIGURES REPRESENT THE FINDINGS OF A BROAD GLOBAL SURVEY OF INTERNET USERS AGED 16 TO 64. SEE GLOBALWEBINDEX.COM FOR MORE DETAILS.

JAN 2021

OVERVIEW OF GLOBAL INTERNET USE

A SNAPSHOT OF INTERNET USE AROUND THE WORLD

⚠ *INTERNET USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS, SO VALUES ARE NOT COMPARABLE WITH PREVIOUS REPORTS*

TOTAL NUMBER OF GLOBAL INTERNET USERS	INTERNET USERS AS A PERCENTAGE OF TOTAL GLOBAL POPULATION	ANNUAL CHANGE IN THE NUMBER OF GLOBAL INTERNET USERS	AVERAGE DAILY TIME SPENT USING THE INTERNET BY EACH INTERNET USER	PERCENTAGE OF USERS ACCESSING THE INTERNET VIA MOBILE DEVICES
4.66	**59.5%**	**+7.3%**	**6H 54M**	**92.6%**
BILLION		**+316 MILLION**		

SOURCES: KEPIOS (JAN 2021) BASED ON EXTRAPOLATIONS OF DATA PUBLISHED BY: THE ITU; LOCAL GOVERNMENT BODIES; GWI; GSMA INTELLIGENCE; EUROSTAT; APJII; CNNIC; THE UNITED NATIONS. DATA FOR TIME SPENT AND MOBILE INTERNET SHARE FROM GWI (Q3 2020). SEE GLOBALWEBINDEX.COM FOR MORE DETAILS. ◈ **COMPARABILITY ADVISORY:** SOURCE AND BASE CHANGES. INTERNET USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS. FIGURES ARE NOT COMPARABLE WITH DATA PUBLISHED IN PREVIOUS REPORTS.

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https://datareportal.com/reports/tag/Caribbean

BUSINESS EMAIL COMPROMISE

BUSINESS EMAIL COMPROMISE

THE DANGERS OF HYPER-CONNECTIVITY

UNDERSTANDING THE MODERN CONSUMER BEHAVIOURS

Characteristics of the modern consumer
Some characteristics of the modern, hyperconnected consumer include the following:

Always connected: The modern consumer is connected via mobile devices such as smartphones, tablets, home computers, and wearable devices. They are connected to multiple platforms across these different devices.

Informed: The modern consumer demands a good customer experience. They control their experience by using digital means to research, explore, review, and share products.

Desires personal interactions: Personalisation and the human touch remain critical to the modern consumer's expectation of customer experience.

Constantly compares products: The modern consumer tends to conduct a thorough comparison of products they're interested in across multiple channels and devices before making a purchase decision.

Favours word of mouth over brand statements: The modern consumer favours and trusts online recommendations and reviews more than brand statements and is wary of traditional advertising.

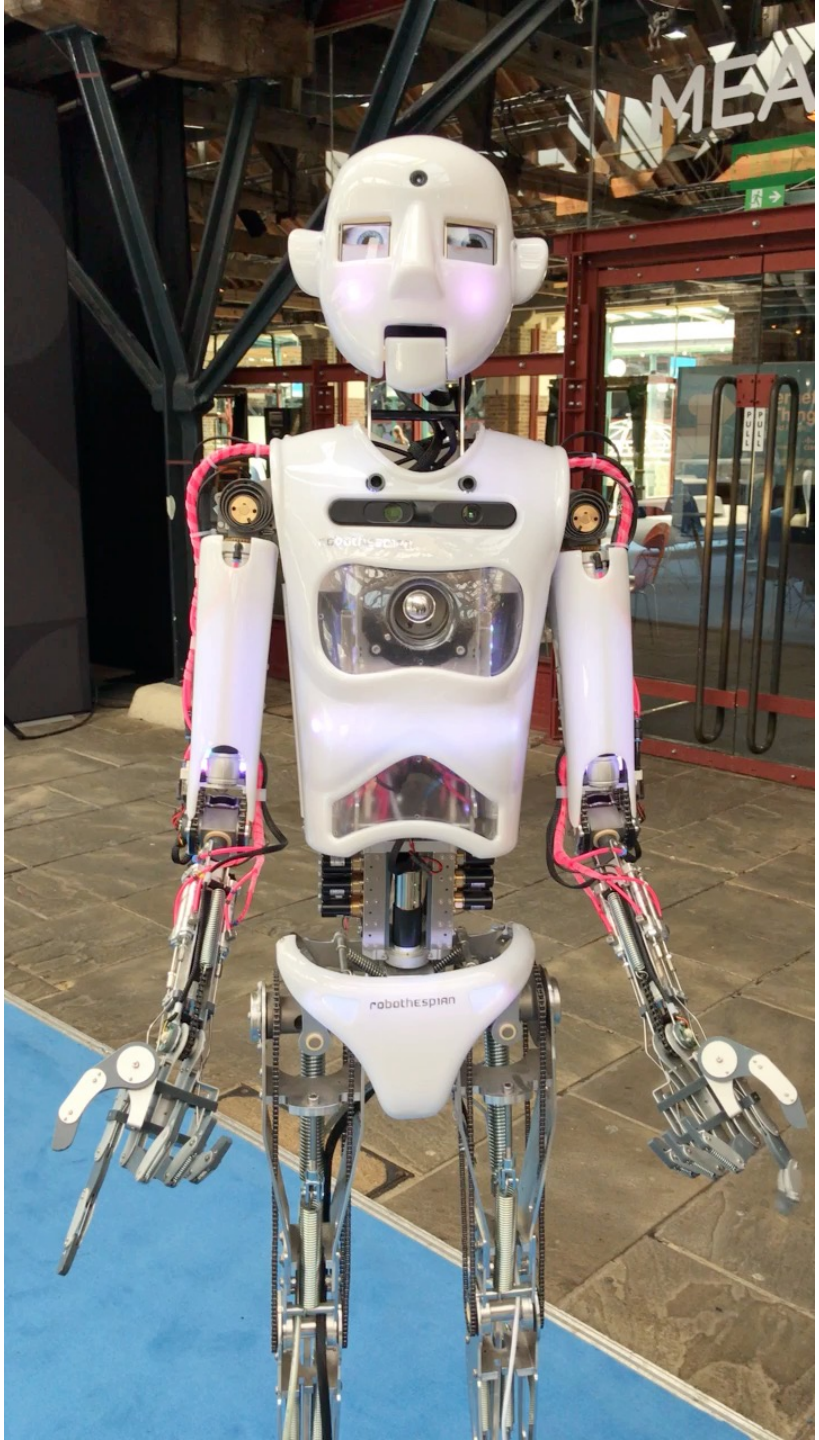
Instantly gratified: They expect to be able to get what they want immediately with real-time service.

Opinionated and vocal: The modern consumer wants to voice their opinions about good and bad customer experiences, and digital platforms make it easy for them to do so through review functionality.

LATEST INNOVATION TRENDS

- **Internet of Things – IoT** *(e.g Smart homes, smart cars, Robotics)*
- **Artificial Intelligence – AI** *(e.g Chatbots, Intelligent Cognitive Assistants)*
- **Blockchain** - *(Crypto currency, digital wallets, smart contracts)*
- **Virtual Reality – VR** *(e.g. Real Estate Virtual tours)*
- **Augmented Reality – AR** *(Snapchat filters, Halograms)*
- *Voice Technology*

Augmented reality (**AR**) adds digital elements to a live view often by using the camera on a smartphone. Examples of augmented reality experiences include Snapchat lenses and the game Pokemon Go. **Virtual reality** (**VR**) implies a complete immersion experience that shuts out the physical world.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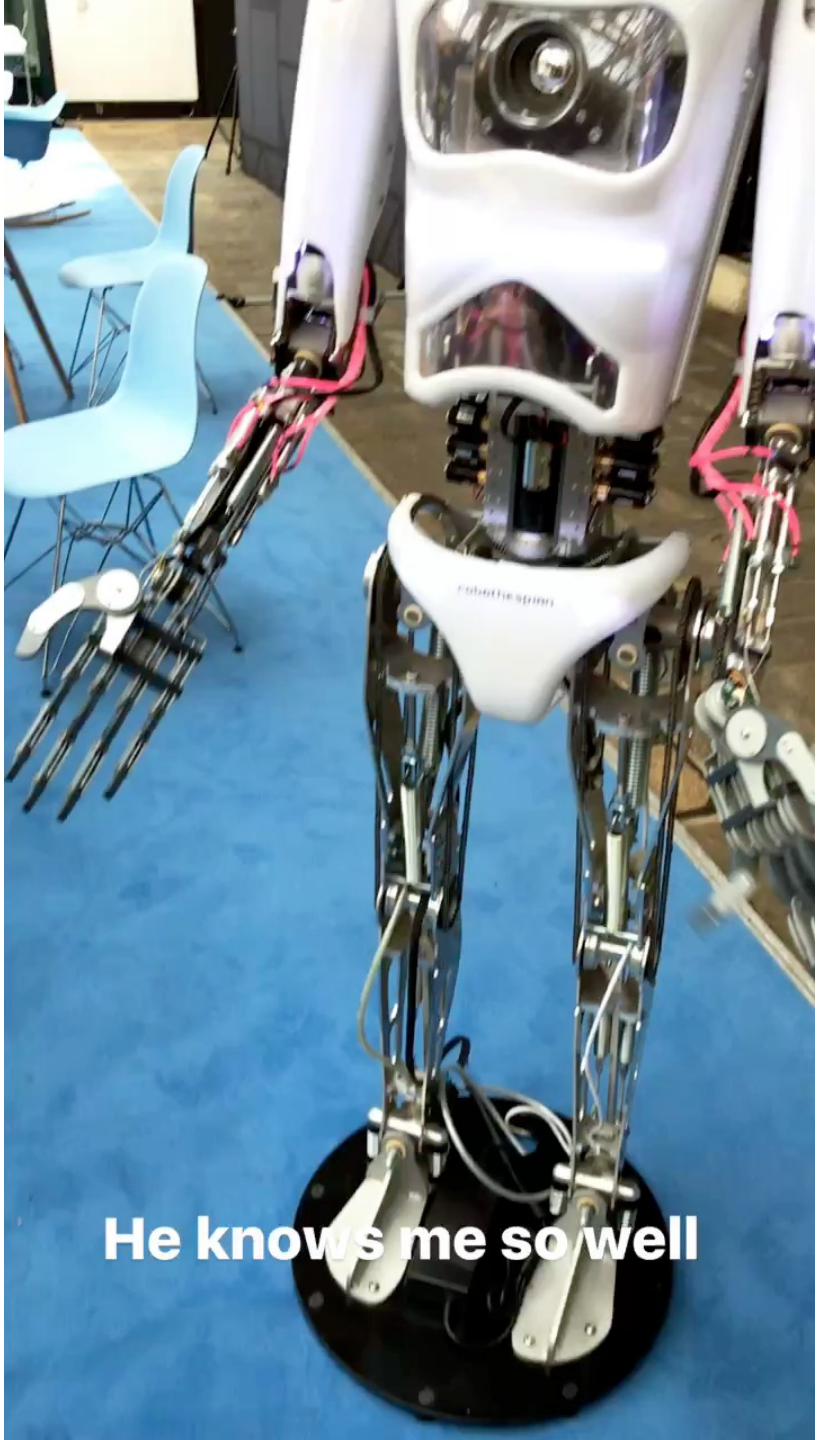
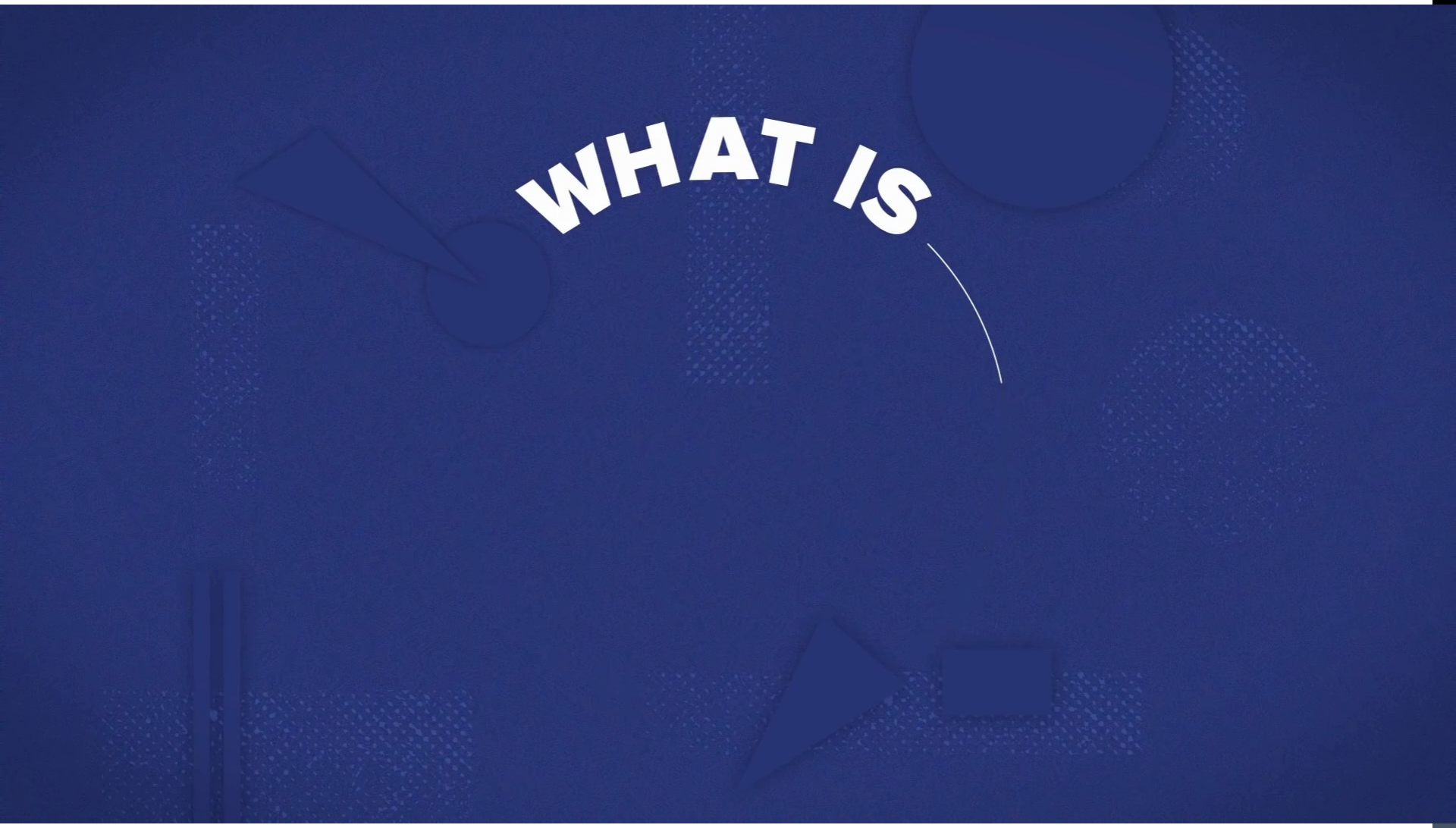

He knows me so well

5G

SUPERCHARGING THE 4TH INDUSTRIAL REVOLUTION

5G & ID2020



WELCOME TO OF 5G

About 5G

- The future of technology
- 20 times faster than current 5G
- Up to 1GB downloads per second
- A key driver of digital transformation
- Does not cause corona virus
- Uses high frequencies but still lower than frequencies used by microwaves in our kitchen.
- We should all have COVID-19 by now
- Will aid automation and the 4th industrial revolution.
- Remember there were massive conspiracy theories and oppositions to 2G, 3G and 4G so this is no different.
- We should all embrace 5G and the possibilities it brings

Problems with 5G

- Not perfect yet, still emerging and in infancy.
- Needs completely new equipment both from a device and network infrastructure perspective
- Higher bandwidth than 4G
- China Leading the race to manufacture 5G equipment
- Elements of trust and cyber security issues with Huawei developing these equipment.
- The Chinese government has total control of data and has policies that require companies to hand over sensitive data if asked to do so.
- This worries everybody.
- There is a race between the Chinese and Americans
- Americans are scared that if the Chinese control the 5G infrastructure they will start doing what the Americans have been doing all this time: spying on network activities.
- Better the devil you know.

ID2020

- A UN SDG initiative to help provide ID for everyone in the world: including the unbanked and underbanked in rural areas.
- Process involves implanting microchips into humans that contain identifiable data.
- This has been used on animals for several decades
- Can also be administered as a vaccine
- Already in use in places like Sweden.

ID2020

Pros

- Make it easier for everyone to consume financial or other services that require Identification
- Contactless and quicker access to airports, buses, etc
- Convenient way to identify your self than carrying passports and documents
- The irony is that ID2020 would actually be useful in these COVID-19 times to avoid contact.
- This will become the future trend in identification especially when adopted by major banks and key institutions.

Cons

- Controversial because it is a biometric process
- Fears that people may be vaccinated with implants without their consent
- I am not getting one anytime soon.