# GLOBAL DIGITAL ECONOMY HOW TO BE PART OF IT AND HOW TO PROTECT YOUR BUSINESS



JOWITA MICHALSKA DIGITAL UNIVERSITY





## "THE WORLD TODAY BELONGS TO NEW TECHNOLOGIES, AND WE ARE JUST LIVING IN IT".

**PROF. SCOTT GALLOWAY** 





*"BETTER SURF ON TOP OF THIS TSUNAMI INSTEAD OF BEING CRUSHED BY IT"* 

Peter Diamandis

Networks & sensors Robotics 3D Printing VR & AR Artificial Inteligence Blockchain

New Business Models & Ecosystems

# EXPLOSION OF NETWORKS





- 5G connection speed
- Drones, balloons, satellites from Google, Facebook, Amazon, Virgin
- SpaceX 4 thousand satellites

### 2025 - 8 billion people connected (4.2 billion new minds)





# METATRENDS ARE CREATED AT THE INTERFACE OF SEVERAL TECHNOLOGIES AND THE IMPOSSIBLE SUDDENLY BECOMES POSSIBLE



# METAVERSE

15



### 90+ companies building the metaverse



### Products



#### **Avatars**





### Asset marketplaces



### **Hardware interfaces**





### **Financial services**





## Chinese tech giant Baidu says it could be 6 years before it can fully deliver its metaverse

Evelyn Blackwell 3 weeks ago

News

**4** minutes read





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### **ARTIFICIAL INTELLIGENCE SYSTEMS NO LONGER NEED TO SEE YOUR FACE TO** 1001 1010011 101010010101 **RECOGNISE YOU** 1010100011100 1001010

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ARTIFICIAL INTELLIGENCE CAN RECOGNIZE YOU BY YOUR "HEART PRINT"



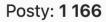
# ARTIFICIAL INTELLIGENCE CAN RECOGNIZE YOU BY YOUR BREATH



# WE ARE GETTING **CLOSER TO THE DAY** WHEN AI SYSTEMS **CAN MAKE THEIR OWN DECISIONS,** WITHOUT US







3,1mln obserwujących

Obserwowani: 1911



Miquela

#### #BlackLivesMatter

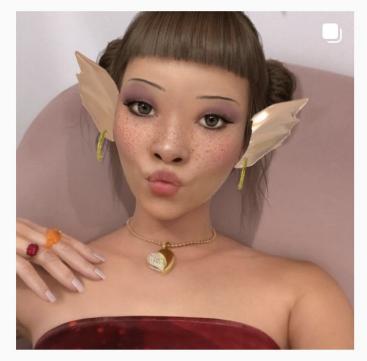
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Obserwowane przez: agastelma, nataliaglowacka\_im, joannaracewicz + jeszcze 10 użytkowników

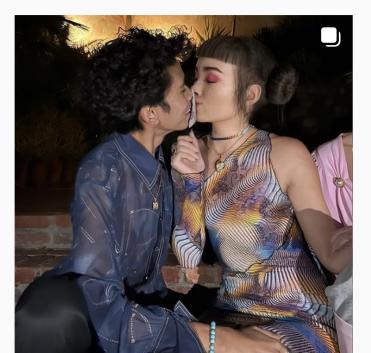


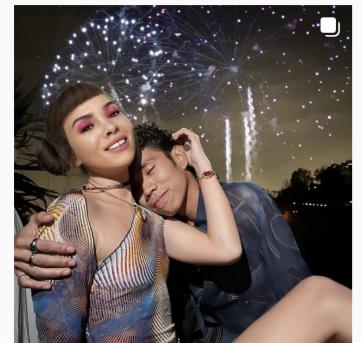
# **SYNTHETIC INFLUENCERS**

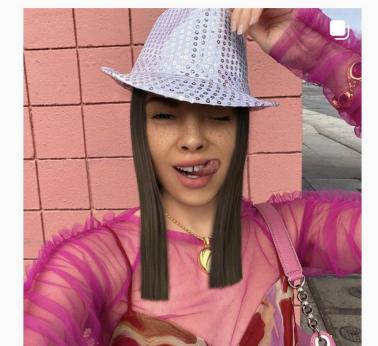














500 BILLION DEVICES TILL 2030
"ELECTRIC SKIN"
SATELITES 0,5 M
DRONES 0,5 CM
LIDAR SENSORS
1,3 MLN DATA/SEK

# **100 BILLION SENSORS MONITORING THE WORLD**



# **ENTREPRENEUR WORLD IN NUMBERS**

- THE AMOUNT OF MONEY THAT CHANGES HANDS DIGITALLY EACH YEAR AROUND THE WORLD IS NOW NORTH OF <u>\$5</u> BILLION.
- DEVELOPING COUNTRIES ACCOUNT FOR 90% OF THE GLOBAL GROWTH IN INTERNET USE, WITH THE HIGHEST GROWTH RATE REPORTED IN LEAST DEVELOPED COUNTRIES
- MORE THAN HALF OF THE WORLD'S POPULATION IS ONLINE, WITH 80% MORE CONCERNED ABOUT THEIR ONLINE PRIVACY THAN THEY WERE A YEAR AGO
- DIGITAL ECONOMY IS GOOD FOR YOUR BUSINESS. YOU MIGHT INVEST IN A CUSTOMER RELATIONSHIP MANAGEMENT SYSTEM, A NEW MOBILE APP ETC. ALL OF THOSE INVESTMENTS ARE DRIVING THE DIGITAL ECONOMY WHICH INCREASES AGILITY, PRODUCTIVITY, EFFICIENCY, REVENUE GROWTH, AND COST-SAVING.



# WHAT SHOULD ENTREPRENEURS DO TO PROTECT THEIR ASSETS IN DIGITAL ERA?



# WHAT DO WE DO AT DIGITAL UNIVERSITY TO PROTECT OUR BUSINESS?

PEOPLE ARE THE KEY – WE OFFER THEM TRAININGS AND COURSES WE PROTECT OUR DATA

# HOW CAN A COMPANY BE PROTECTED GAINST CYBERATTACKS?

MOST COMPANIES TRY TO PROTECT THEMSELVES FROM ANY TECHNICAL ATTACK, BUT FORGET THAT THEIR EMPLOYEES ARE THEIR MAIN LINE OF DEFENCE.

IT IS EXTREMELY IMPORTANT TO OFFER THEM REGULAR TRAINING TO TEACH OR REMIND THEM OF GOOD SECURITY PRACTICES. TO PROTECT YOURSELF FROM PHISHING, YOU SHOULD:

- DO NOT CLICK ON UNKNOWN LINKS
- DO NOT OPEN UNKNOWN ATTACHMENTS
  - NEVER GIVE OUT ANY INFORMATION TO STRANGERS
  - BEWARE OF E-MAILS THAT CREATE A SENSE OF URGENCY
  - CHECK THE SENDER'S E-MAIL BY HOVERING THE CURSOR OVER THE ADDRESS
     WITHOUT CLICKING

# WHAT YOUR COMPANY CAN DO TO KEEP





# IDENTIFY AND PRIORITIZE CONFIDENTIAL

- CATEGORIZE TYPES OF INFORMATION BY VALUE AND CONFIDENTIALITY, AND PRIORITIZE WHAT DATA TO SECURE FIRST
- ACCOUNT NUMBERS, PERSONAL IDENTIFICATION NUMBERS, CREDIT CARD NUMBERS AND OTHER TYPES OF STRUCTURED INFORMATION NEED TO BE PROTECTED. ALSO CONTRACTS, FINANCIAL RELEASES AND CUSTOMER CORRESPONDENCE.



# STUDY INFORMATION FLOWS AND PERFORM RISK ASSESSMENT

- UNDERSTAND HOW CONFIDENTIAL INFORMATION FLOWS AROUND AN ORGANIZATION
- ASK YOURSELF THE FOLLOWING QUESTIONS:
  - WHICH PARTICIPANTS TOUCH THESE INFORMATION ASSETS?
  - HOW ARE THESE ASSETS CREATED, MODIFIED, PROCESSED OR DISTRIBUTED BY PARTICIPANTS?
- BY ANALYZING INFORMATION FLOWS WITH THESE QUESTIONS IN MIND, YOU CAN QUICKLY IDENTIFY VULNERABILITIES IN THEIR HANDLING OF SENSITIVE INFORMATION.



# **CREATE APPROPRIATE POLICIES**

- CRAFT DISTRIBUTION POLICIES FOR VARIOUS TYPES OF CONFIDENTIAL INFORMATION. WHO CAN ACCESS, WHICH TYPE OF CONTENT AND WHEN
- FOUR TYPES OF DISTRIBUTION POLICIES:
  - CUSTOMER INFORMATION
  - EXECUTIVE COMMUNICATIONS
  - INTELLECTUAL PROPERTY
  - EMPLOYEE RECORDS



# **IMPLEMENT MONITORING**

- CREATE CONTROL POINTS TO MONITOR INFORMATION USAGE AND TRAFFIC, VERIFY COMPLIANCE WITH DISTRIBUTION POLICIES AND PERFORM ACTIONS FOR VIOLATION OF THOSE POLICIES. MONITORING SYSTEMS MUST BE ABLE TO IDENTIFY THREATS AND PREVENT THEM FROM PASSING THOSE CONTROL POINTS.
- MONITORING SYSTEMS SHOULD HAVE POWERFUL IDENTIFICATION ABILITIES TO AVOID FALSE ALARMS AND HAVE THE ABILITY TO STOP UNAUTHORIZED TRAFFIC.



# **REVIEW PROGRESS**

- REGULARLY REVIEW YOUR SYSTEMS, POLICIES AND TRAININGS. YOU CAN IMPROVE EMPLOYEE TRAINING, EXPAND DEPLOYMENT AND SYSTEMATICALLY ELIMINATE VULNERABILITIES.
- IT IS A JOURNEY RATHER THAN A ONE-TIME EVENT!



# **THANK YOU!**





## Thank you!

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