AI - ETHICS THE NEXT GENERATION

PRESENTED BY

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OVERVIEW

INTRODUCTION

FRAMEWORK - TRUSTWORTHY AI

ASSESSMENT – TRUSTWORTHY AI

CONCERNS AND CONCLUSION







E2E TRANSPARENCY

HUMAN-CENTRIC

PREVENT HARM

TRUSTWORTHY



ACCOUNTABILITY

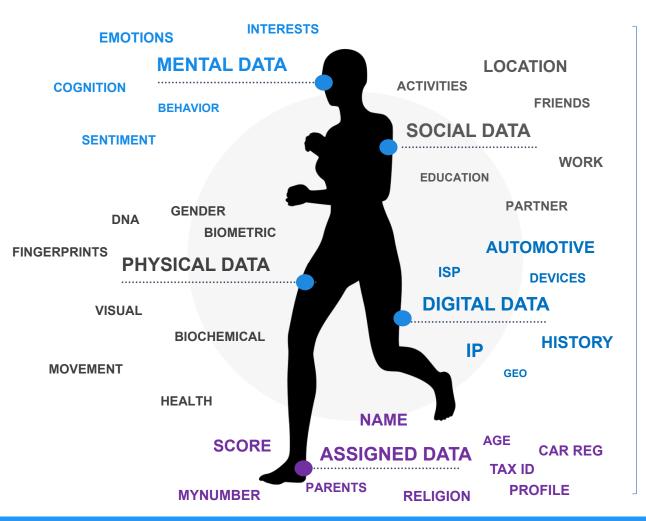
MINIMIZE RISKS

MAXIMIZE BENEFITS

FAIRNESS

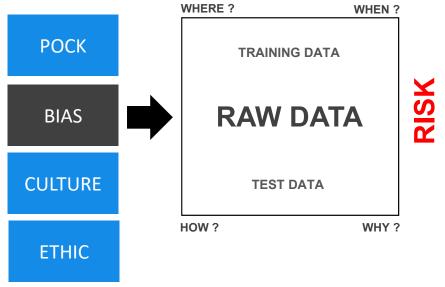






DATA - ETHICS

KNOW YOUR DATA



POCK - POINT OF CURRENT KNOWLEDGE



META IS KING
HUMAN DATA MODEL



AI & ETHICS











What society thinks I do

What my parents think I do

What friends think I do













What my co-workers think I do

What I think I do

What I really do

What my Mom thinks I do

What society thinks I do





IN AN IMPERFECT WORLD?

What the government thinks I do

ink I do

What I think I do

What I really do









2013

NHL DRAFTS THE WRONG PLAYERS DUE TO BIRTHDAY BIAS

https://www.sciencedaily.com/releases/2013/02/130227183506.htm
Research led by Robert Deaner, associate professor of psychology at Grand Valley.

On average, National Hockey League (NHL) draftees born between July and December are much more likely than those born in the first three months of the year to have successful careers...[]

2018

AMAZON DITCHED AI RECRUITING TOOL THAT FAVORED MEN FOR TECHNICAL JOBS

https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G

Amazon's computer models were trained to vet applicants by observing patterns in resumes submitted to the company over a 10-year period. Most came from men, a reflection of male dominance across the tech industry....[]





DATA - ETHICS

COMPUTER PROGRAMMER







What my mom thinks I do



What society thinks I do



What my spouse thinks I do



What I think I do



What I actually do





EU - FRAMEWORK



FOR TRUSTWORTHY AI

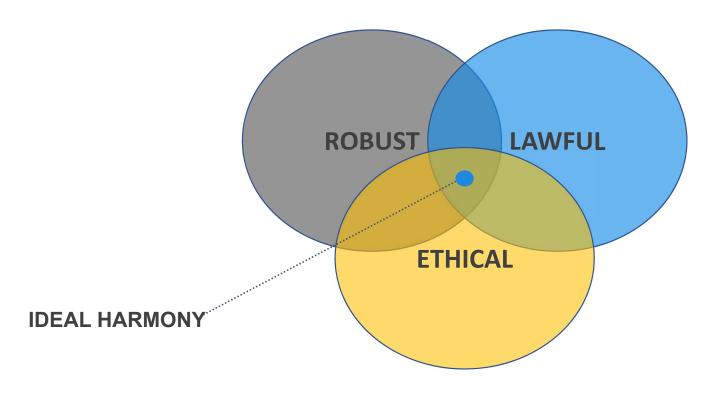






THE COMPONENTS





EACH COMPONENT IS IMPORTANT AND NECESSARY, HOWEVER ONE ITSELF IS NOT SUFFICIENT TO ACHIEVE TRUSTWORTHY AI.







LAWFUL AI IS **NOT COVERED** IN THE GUIDELINE.



APPLICABLE LAWS

EU PRIMARY LAW

- TREATIES OF THE EUROPEAN UNION
- CHARTER OF FUNDAMENTAL RIGHTS

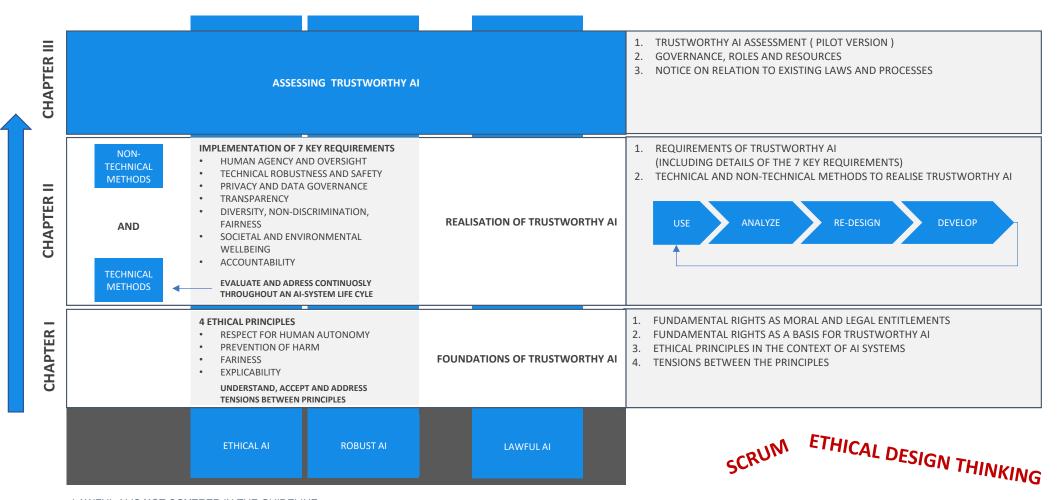
EU SECONDARY LAW

- GENERAL DATA PROTECTION REGULATION
- PRODUCT LIABLITY DIRECTIVE
- REGULATION OF FREE FLOW OF NON-PERSONAL DATA
- ANTI-DISCRIMINATION DIRECTIVES
- UN HUMAN RIGHTS TREATIES
- COUNCIL OF EUROPE CONVENTIONS
- EU MEMBER STATE LAWS

AND MORE...



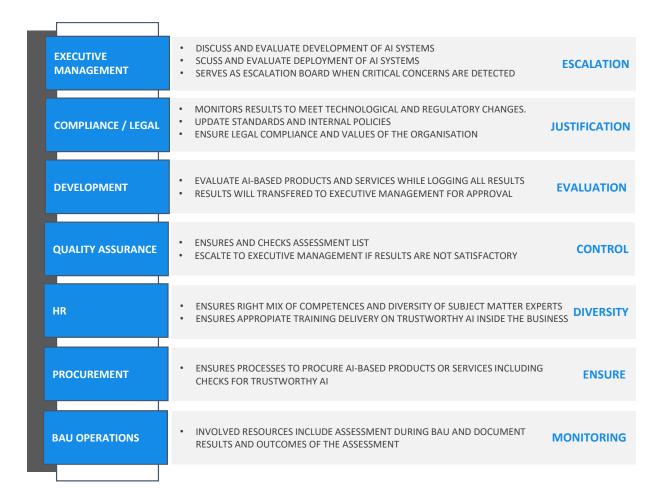




LAWFUL AI IS NOT COVERED IN THE GUIDELINE.









ADDITIONAL DIVERSITY RECOMMENDATIONS

HUMAN DIVERSITY

ENSURE APPROPIATE BALANCE OF WOMEN AND MEN

GENERATION BALANCE

• ENSURE APPROPIATE BALANCE OF DIFFERENT AGES.

CULTURE BALANCE

 ENSURE APPROPIATE BALANCE OF MULTIPLE DIFFERENT CULTURES. ESPECIALLY IN INTERNATIONAL COMPANIES OR IF DIFFERENET GLOBAL MARKETS ARE TARGETED.

ADDITIONAL SPECIALISTS

- EXTERNAL CONTRACTOR, IS ABLE TO SEE BEYOND BUSINESS STRUCTURES AND ENABLES NEW INSPIRATION
- DATA ETHICISTS, ADDING PHILOSOPHICAL, PSYCHOLOGICAL EXPERTISE
- IT ARCHITECTS / IT SPECIALISTS / IT SECURITY

BAU - BUSINESS AS USUAL



ASSESSMENT TEAM BUILD

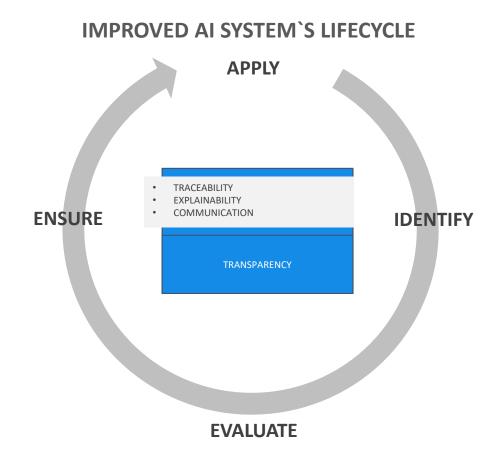




- RESPECT FOR PRIVACY AND DATA PROTECTION
- QUALITY AND INTEGRITY OF DATA
- ACCESS TO DATA

PRIVACY AND GOVERNANCE

TECHNICAL ROBUSTNESS AND SAFETY



- UNFAIR BIAS AVOIDANCE
- ACCESSIBILITY AND UNIVERSAL DESIGN
- STAKEHOLDER PARTICIPATION

DIVERSITY, NON-DISCRIMINATION AND FAIRNESS

- SUSTAINABLE AND ENVIRONMENTALLY FRIENDLY AI
- SOCIETY AND DEMOCRACY

SOCIETAL AND ENVIRONMENT WELL-BEING

- AUDITABLE
- MINIMISING AND REPORTING
- TRADE-OFF DOCUMENTATION
- ABILITY TO REDRESS

ACCOUNTABILITY







CONCERNS









CONNECTING THE DOTS





LETHAL AUTONOMOUS WEAPON SYSTEMS

2017, A STUDY BY PROF. STUART RUSSEL AT BERKELEY

 FULLY AUTONOMOUS DRONES EQUIPPED WITH EXPLOSIVES, TARGETING SUBJECTS BASED ON PROFILES. IDENTIFICATION THROUGH FACIAL RECOGNITION. (STUDY)

PRIVACY AND TRACKING

2019, GERMANY

 A CHINESE CITIZEN IN GERMANY DEVELOPED AN FACIAL RECOGNITION ALGORYTHM TO IDENTIFY DATA SUBJECTS FROM PORN SITES THROUGH SOCIAL MEDIA

RANSOMWARE 2.0

BLACKMAILING THROUGH AI
 MATCHING

FREE AVAILABLE DATA SETS

- FACE PICTURES
- PERSONAL DATA

QUANTUM ARTIFICAL

IMPACT YET UNKNOWN





CONCLUSION









THANK YOU









SOURCES

COGNITIVE BIAS

https://en.wikipedia.org/wiki/List_of_cognitive_biases

ETHICS GUIDELINES FOR TRUSTWORTHY AI – HIGH-LEVEL EXPERT GROUP

https://ec.europa.eu/digital-single-market/en/news/draft-ethics-guidelines-trustworthy-ai

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT

https://ec.europa.eu/digital-single-market/en/news/communication-building-trust-human-centric-artificial-intelligence

LAWS - SLAUGHTERBOTS

https://en.wikipedia.org/wiki/Slaughterbots

FACIAL RECOGNITION, DATA SUBJECT IDENTIFICATION (GERMAN)

https://www.heise.de/newsticker/meldung/Stalking-per-Bilderkennung-4442417.html

EDPB – EUROPEAN DATA PROTECTION BOARD

https://edpb.europa.eu/







WEB: www.it-germany.com



