

CYBERSECURITY CONFERENCE: KODOLÁNYI JÁNOS UNIVERSITY

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RISK-EVALUATION POSSIBILITIES CONCERNING IT- ACTIVITIES IN HOME-OFFICE

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- Why this Project ?
- Various Attributes used in the Project
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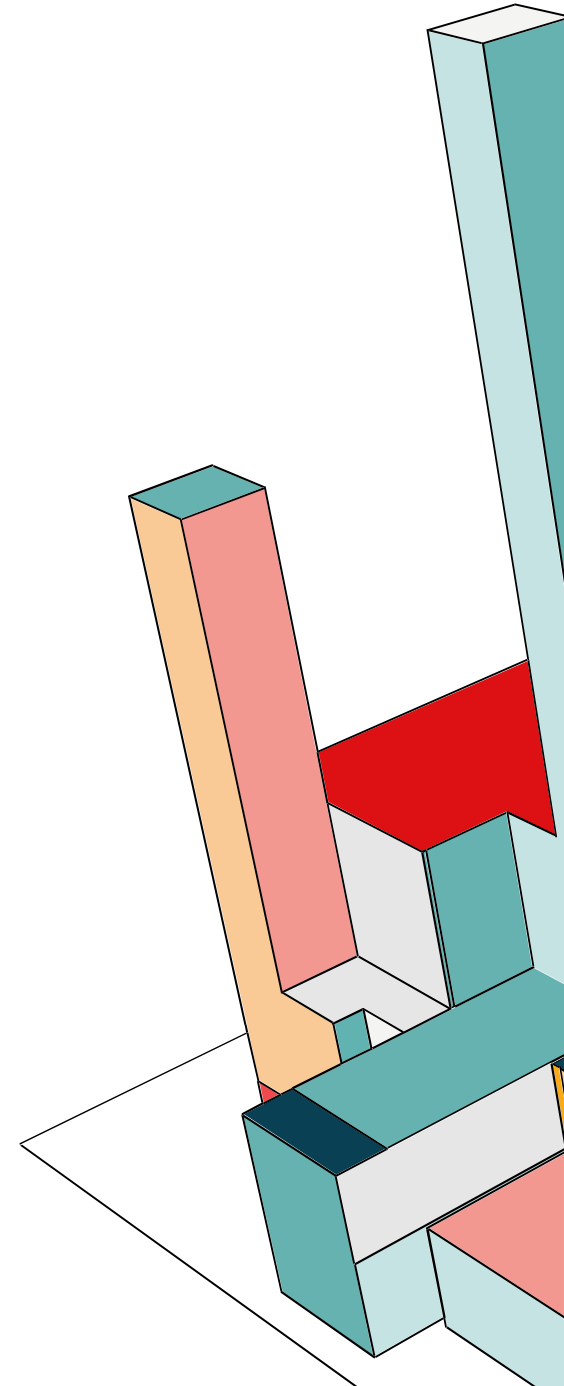
AS MORE AND MORE COMPANIES ARE OPTING FOR REMOTE OR HYBRID WORK OPPORTUNITIES, WORKERS ARE ENJOYING THE POSSIBILITY TO WORK FROM HOME OR ANYWHERE, WHICH GIVES ME MORE FREEDOM AND A BETTER WORK-LIFE BALANCE.

BUT THIS LUXURY COMES AT A COST AND RISK OF INCREASED VULNERABILITIES TO CYBER-ATTACKS AND OTHER CHALLENGES.

NEED ANALYSIS

WHY THIS PROJECT

- Protecting data
- Ensuring compliance
- Maintaining business continuity
- Safeguarding assets
- Managing reputation
- Saving costs
- Providing peace of mind.



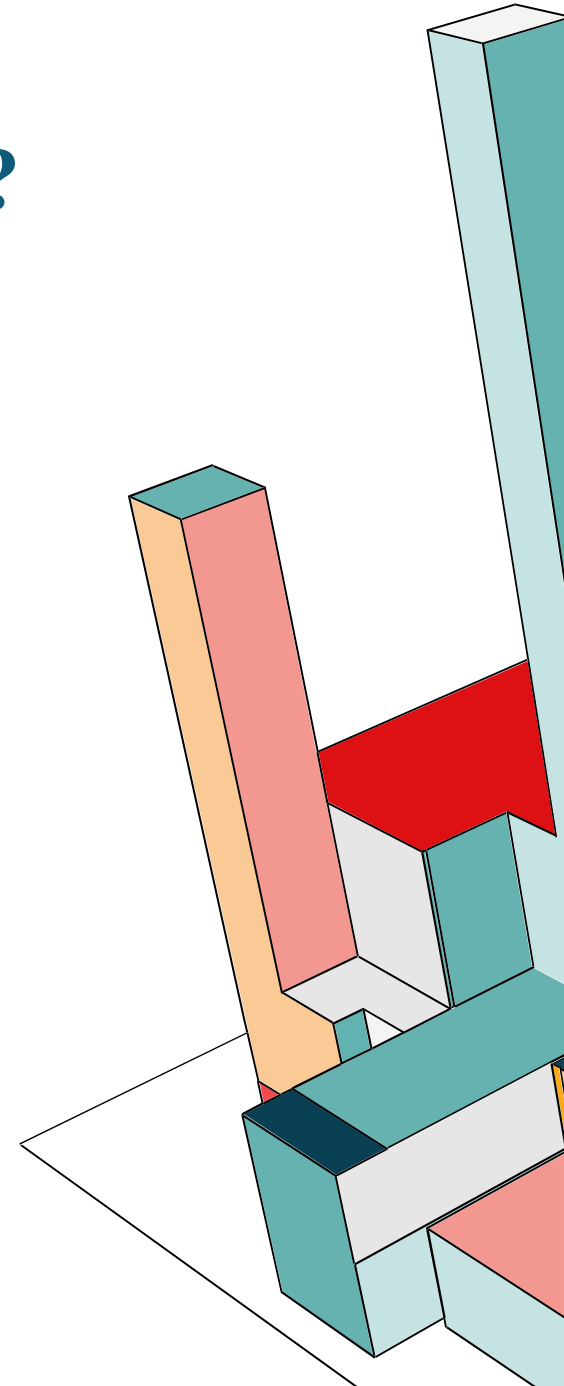
Various Attributes used in the Analysis

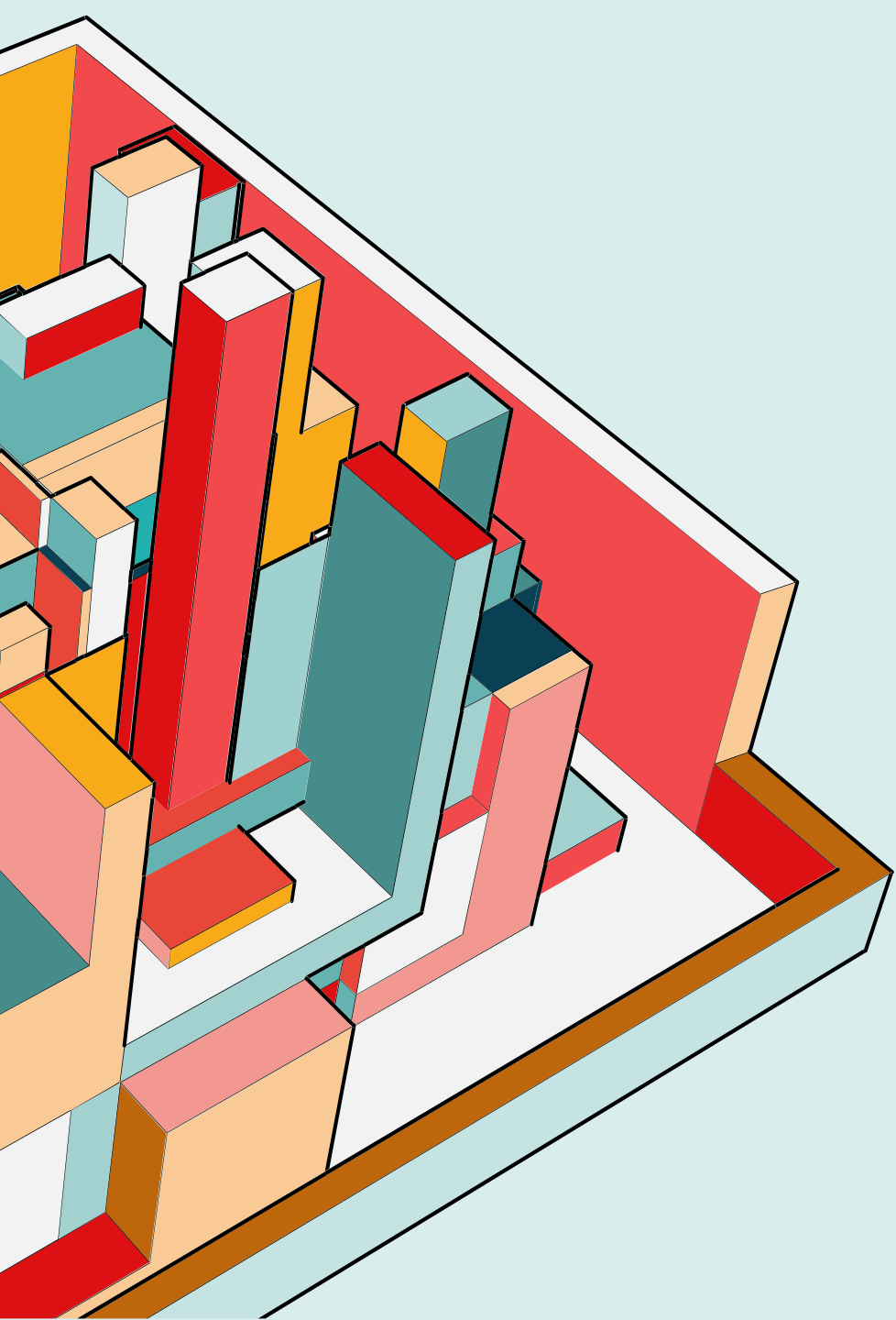
Machine Scores	Pubic vs Private Wifi
Machine Scores	Devices in the LAN
Machine Scores	Quality of hardware
Machine Scores	Number of Firewallls
Machine Scores	Settings on Firewall
Machine Scores	VPN
Machine Scores	Antivirus Results
Machine Scores	Software Updates
Machine Scores	Intrusion Detection System (IDS)
Machine Scores	Network Traffic Analysis
Human Scores	Using unauthorized websites
Human Scores	Complaine with accounts
Human Scores	Stress
Human Scores	Phishing Email Testing
Human Scores	Trainings score
Human Scores	Questionnaire
Human Scores	Authorized Softwares



HOW THE DESIRED GOAL WAS ACHIEVED?

- USING HOW VARIOUS ATTRIBUTES AFFECT THE SCORES
- USING AI + SOLVER MODULE AND STEP ANALYSIS
- WE CAN PREDICT WHICH USERS ARE MORE VULNERABLE THAN OTHERS
- BASE OF THE ANALYSIS COCO ANALYSIS





COCO ANALYSIS

- **AI-BASED ONLINE/FREE ANALYTICAL TOOL
E.G. FOR TERM-CREATION CHALLENGES
(LIKE RIKS – AS A HUMAN ABSTRACTION)**
- **CAN USE THE HUMAN-DEFINED DIRECTIONS
OF THE INVOLVED ATTRIBUTES**
- **CAN BE USED AS A RANKING MODULE AND
HELP DERIVE WHICH ATTRIBUTES ARE MORE
IMPORTANT THAN OTHERS AND USE AI TO
PREDICT OUTCOMES IN AN OPTIMIZED AND
SELF-VALIDATED WAY**
- **POWER STRATEGY FOR DATA ANALYTICS
AND DATA SUMMARIZATION**

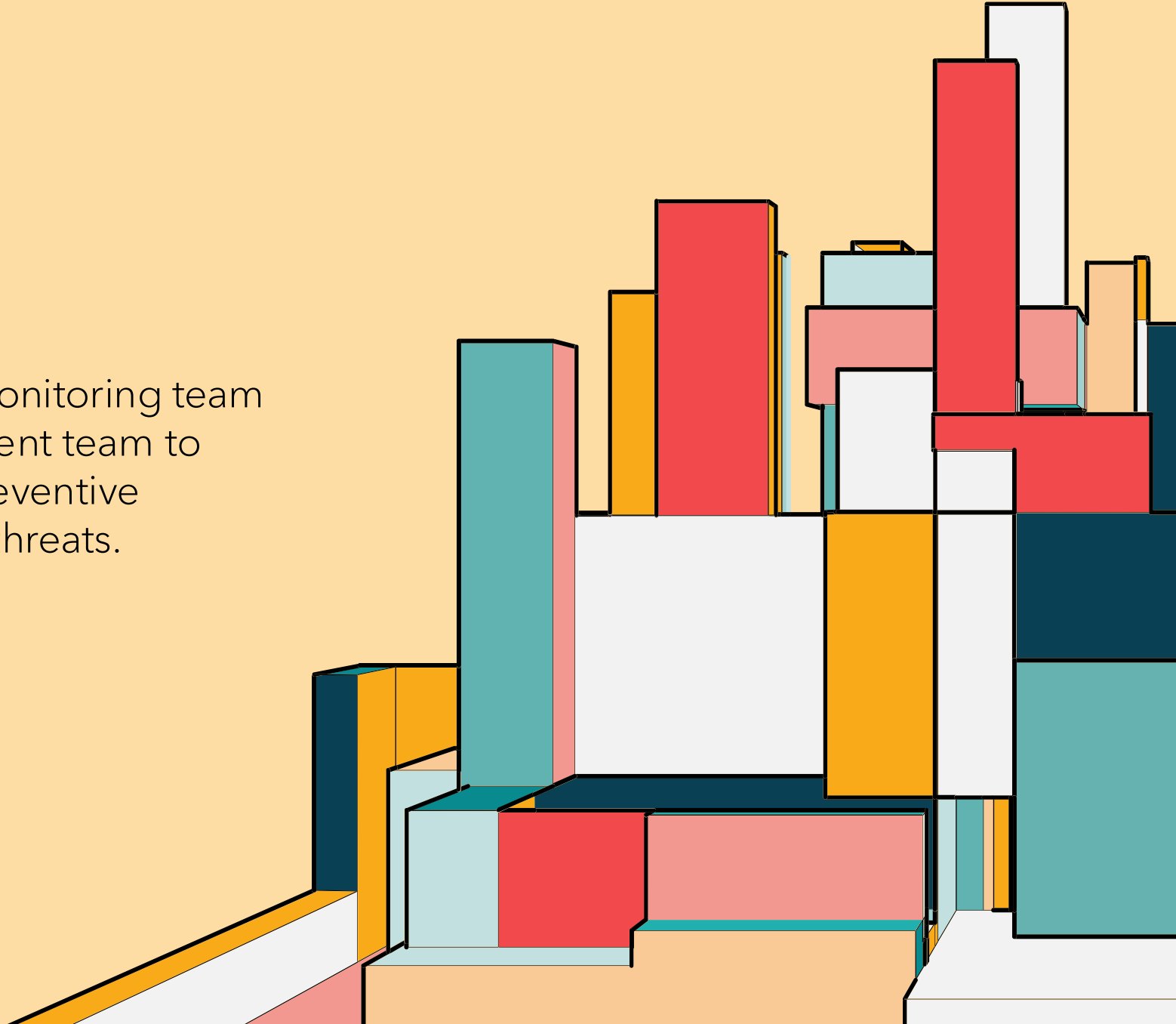
CHALLENGES

- The most challenging task is the collection of real or realistic raw data due to legal issues such as GDPR etc.
- This task has been circumvented by first creating quasi-randomized data using real life research on the likelihood of various parameters and their minimum, maximum, average, mean, median and mode values.



REAL LIFE USE

The tool can be used by the IT monitoring team for threat analysis and Management team to provide targeted training and preventive measures against cyber security threats.



THANK YOU!

Further questions/remarks: miau@my-x.hu

