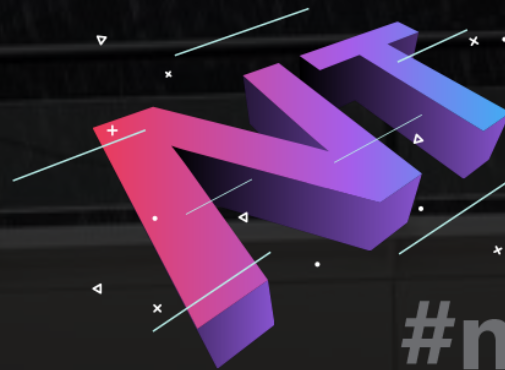




# Talking Cyber Security with The Board

Marko Kavcic, Microsoft  
Tjaz Jelovcan, Microsoft

NTK, Maj 2019



#ntk19



**Awareness**



**Action Plan**



**Buy-in**







More revenue?

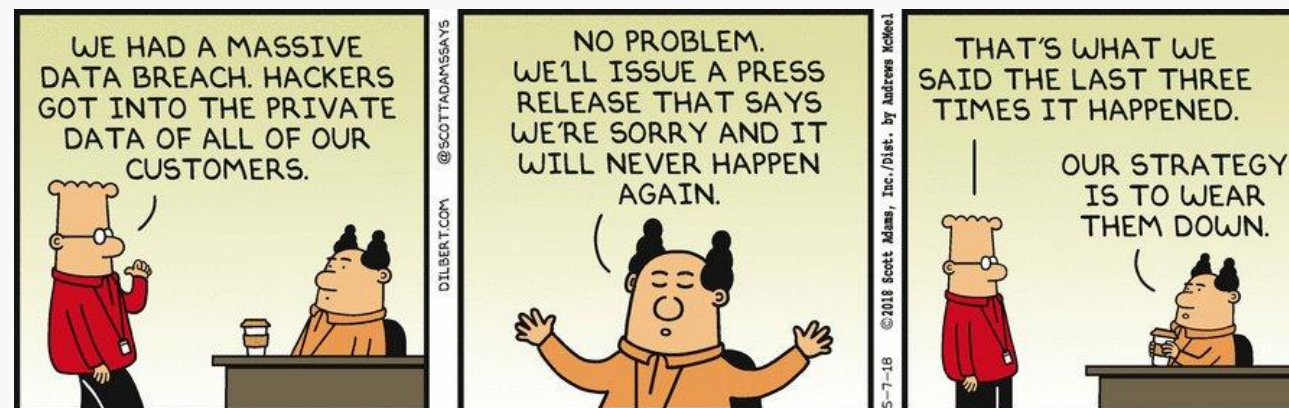
Less churn?

ROI?

...

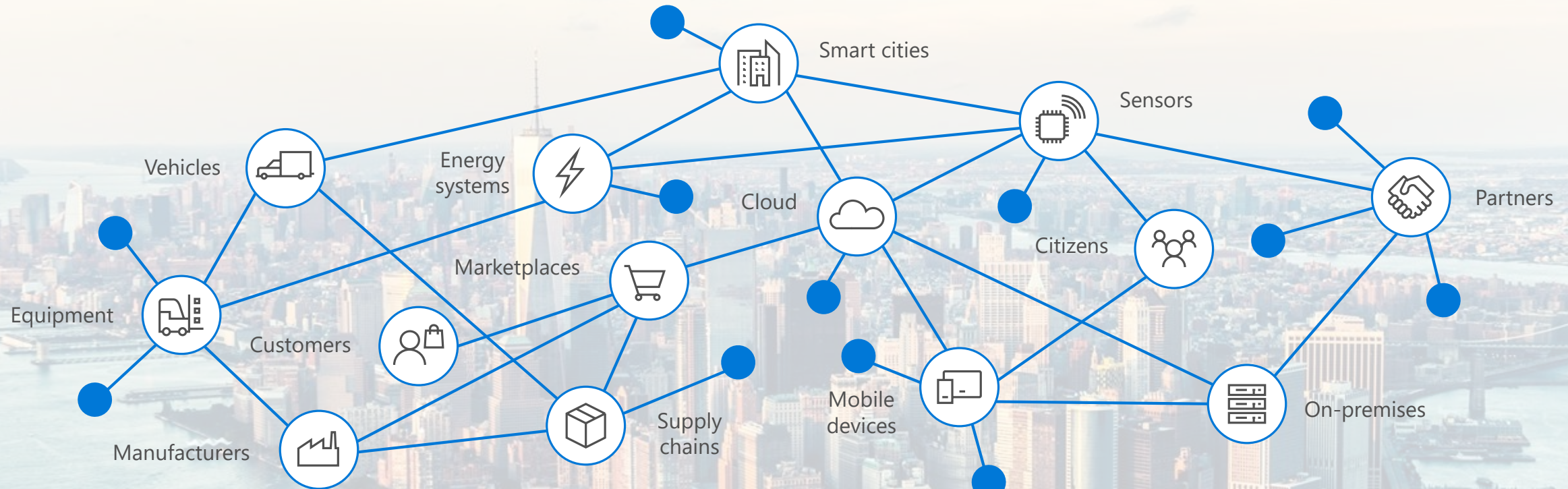
# Good PR. Bad PR.

 <p>Iran commits 'major cyber assault' on UK infrastructure</p> <p>Arutz Sheva</p> <p>13 hours ago</p>	 <p>Nearly all organisations polled hit by cyber attacks last year</p> <p>The Straits Times</p> <p>8 hours ago</p>	 <p>Nearly all organisations in Singapore have suffered close to 4 cyber attacks in past...</p> <p>The Straits Times</p> <p>1 day ago</p>	 <p>Toyota Reveals a Second Data Breach</p> <p>BankInfoSecurity.com</p> <p>1 day ago</p>	 <p>Hackers steal credit card data from Planet Hollywood, Buca di Beppo customers</p> <p>USA TODAY</p> <p>1 day ago</p>	 <p>FEMA Data Breach Impacting Disaster Survivors a Cause For Concern</p> <p>CPO Magazine</p> <p>18 hours ago</p>
---	---	---	---	--	--





# Internet was built to connect, not to protect.



More devices. More technologies. More data.



# CYBERscape: The Cybersecurity Landscape

## Network Security



Managed Security Service Provider



## Risk & Compliance



## Industrial / IoT Security



## Endpoint Security

### Endpoint Prevention



## Endpoint Detection & Response



## Web Security



## Application Security

## WAF & Application Security



## Vulnerability Assessment



## Messaging Security



## Security Operations & Incident Response



## Security Incident Response



### Fraud Prevention / Transaction Security



## Threat Intelligence



## Specialized Threat Analysis &amp; Protection



## Data Security



## Identity & Access Management



## Mobile Security



## Cloud Security





# Wait!

Business objectives?

---



Processes?

---



Technology solutions?

---



People?



#ntk19

Strategic, Legal, Financial, Operational (Cyber Risk)



Enterprise risk management



**Maintain business operations**



**Protect critical assets (what are our crown jewels)**



**Innovate for future (secure but innovative environment)**

Technology



Firewall, VPN, IPS, DDoS protection, encryption, backups ...



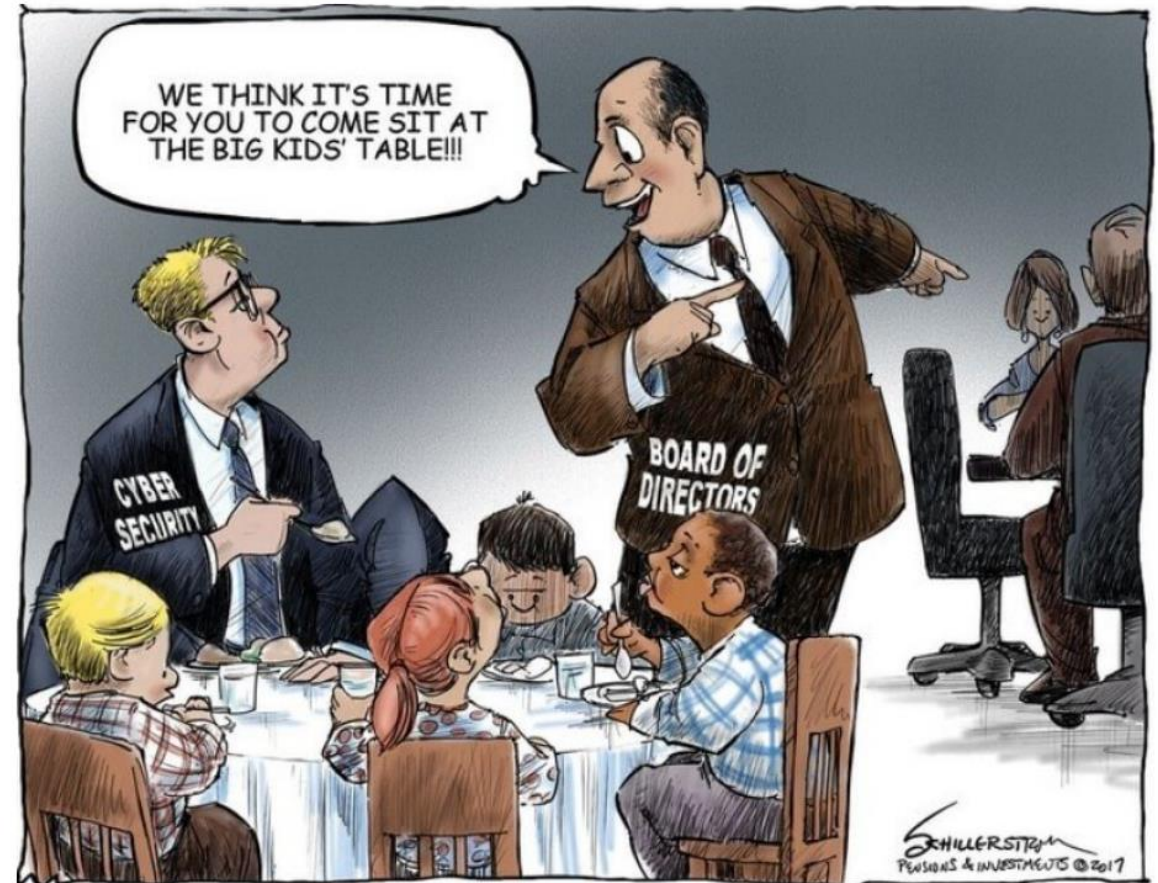
#ntk19



# I want board's buy-in

What does the Board need?  
What do they think?

- ✓ Are we secure? Will you keep the business running?
- ✓ Board Worries: Reputational risk, business loss.
- ✓ What's Your plan? Why do you need more resources?



[https://www.pionline.com/article/20170123/PRINT/301239998/get-real-on-cybersecurity?utm\\_content=45437329](https://www.pionline.com/article/20170123/PRINT/301239998/get-real-on-cybersecurity?utm_content=45437329)

# Example 1: Security landscape has changed.

Traditional security measures are not sufficient anymore.





## Example 2: Bad guys are being very innovative.

### Plačali 60.000 evrov: opozarjajo na vrnitev direktorske prevare in napada s posrednikom

0 | 12. Jul 2018, 17:10 | Posodobljeno: 18:16 / 12.7.2018

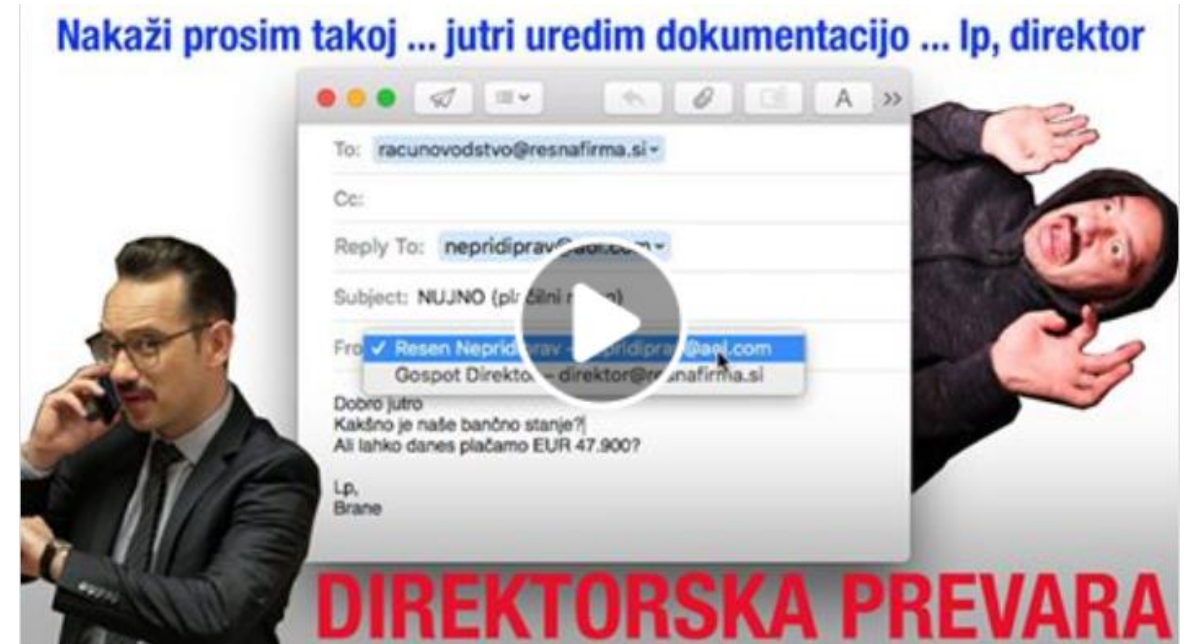
Priporoči 6

Deli na:

Facebook

Twitter

Nepredvidnost lahko drago stane: podjetja na območju PU Maribor in PU Murska Sobota ter širom Slovenije še vedno na udaru spletnih kriminalcev.



**Example 3: In digital age  
stealing sensitive data is a  
Copy-Paste function**

Ctrl + C

Ctrl + V





# How to Prepare CyberSec Program: Overview



Security  
Leadership



Ongoing  
Assessment



Security Strategy,  
Policy, and Budget  
Review



Incident  
Response  
Plan



Internal  
Education



#ntk19

# How to Prepare CyberSec Program: Frameworks

1. NIST Cybersecurity Framework - <https://www.nist.gov/cyberframework>
2. COBIT 5 – ISACA - <https://cobitonline.isaca.org/>
3. ISO 27001 - <https://www.iso.org/isoiec-27001-information-security.html>
4. TOP 20 Cybersecurity Controls – CSC - <https://www.cisecurity.org/controls/>
5. NIST 800 – 53 - <https://nvd.nist.gov/800-53/Rev4/impact/high>





# Risk Assessment

## Identify Context

Business Objectives

Business Strategies

Business Processes

## Identify Risks

Strategic

Legal/Compliance

Financial/Reporting

Operations

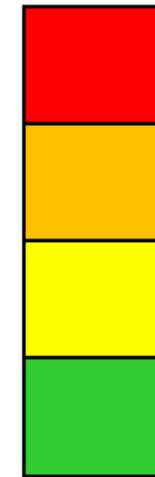
## Assess Risks & Identify

Survey

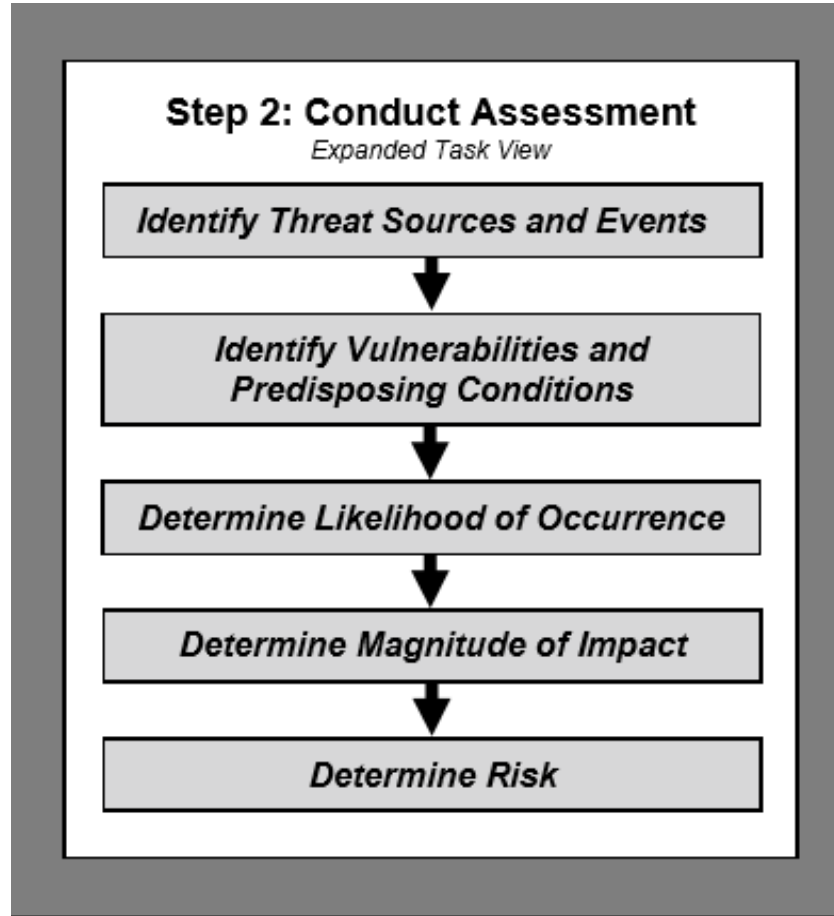
Interviews

Workshop

## Prioritize Risk



# Risk Assessment



Identified Threat	Impact	Likelihood	Value	Risk Calculation
Unauthorized Access (Malicious or Accidental)	High [100]	High [1.0]	100*1.0=100	Severe
Misuse of Information by Authorized Users	High [100]	Medium [.5]	100*.5=50	Elevated
Data Leakage / Unintentional Exposure of Customer Information	High [100]	Medium [.5]	100*.5=50	Elevated
Failed Processes	High [100]	Low [.1]	100*.1=10	Low (Normal)
Loss of Data	High [100]	Low [.1]	100*.1=10	Low (Normal)
Disruption of Service or Productivity	High [100]	Low [.1]	100*.1=10	Low (Normal)

Operational approach – use NIST 800-30

<https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-30r1.pdf>

# Risk Assessment – „But it never happens“

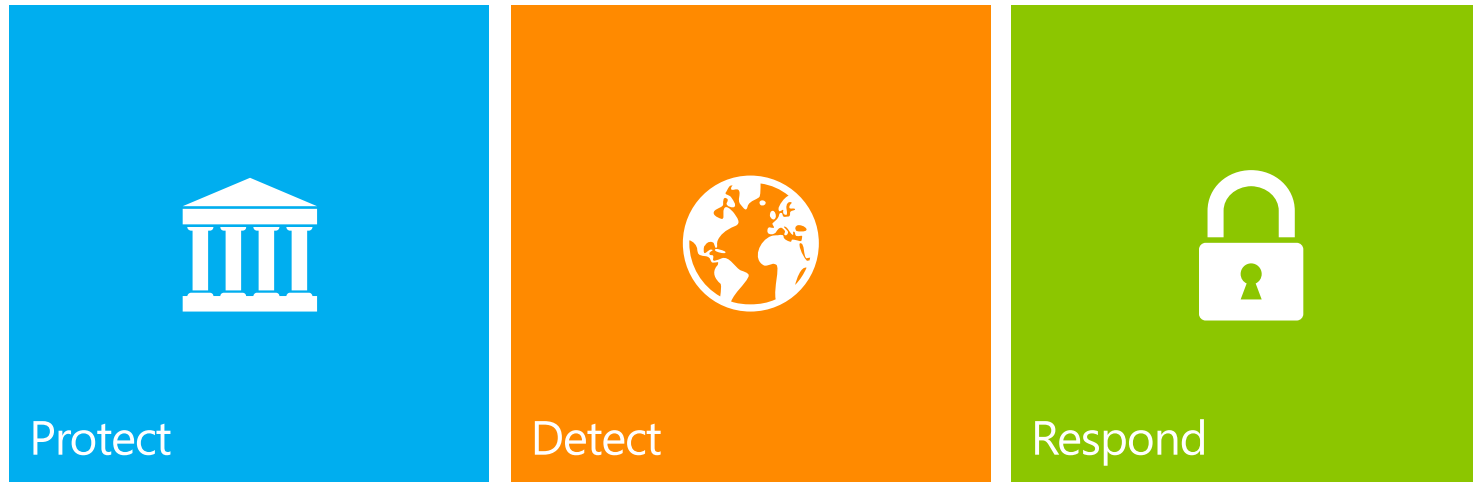


Watch the whole story – RSA Conference – 12min:  
<https://www.youtube.com/watch?v=kHbvyhAVm6k>



# Your Holistic Approach to Cybersecurity

Protect, Detect & Respond



- Identify & protect your highest-value assets,
- Protect critical data everywhere
- Gain the best visibility into potential attacks through context & heuristics
- Respond quickly & recover integrity

# Business implication of good Cybersecurity posture

More revenue? Less churn? Better brand? ROI?

Last question from the Board: **Can it help the business?**

- Be productive: work from everywhere but in a safe way.
- Simpler to meet regulatory compliance by certified platforms.
- Good brand reputation: no breach.
- Secure use of latest technology.
- Unstressed employees.
- We are not firefighters; we are adding value to business.

# Key take aways

Cyber Security is not only about technology & products.

Get a seat at the big table.

Establish a Cyber Security strategy program for your company.







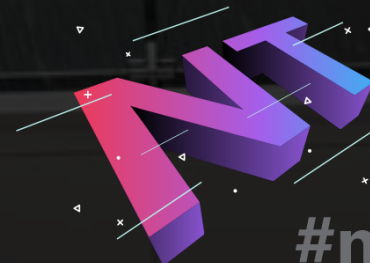
# Talking Cyber Security with The Board

<https://aka.ms/CyberSecurityProgram>

Marko Kavcic, Microsoft – [a-makav@microsoft.com](mailto:a-makav@microsoft.com)

Tjaz Jelovcan, Microsoft – [tjaz.jelovcan@microsoft.com](mailto:tjaz.jelovcan@microsoft.com)

NTK, Maj 2019



#ntk19

