

# TeleTrust-Konferenz 2019

Bundesverband IT-Sicherheit e.V. (TeleTrust)

Berlin, 28.11.2019

## IoT – Ein (beinahe ernstgemeinter) Ratgeber für Cyberkriminelle

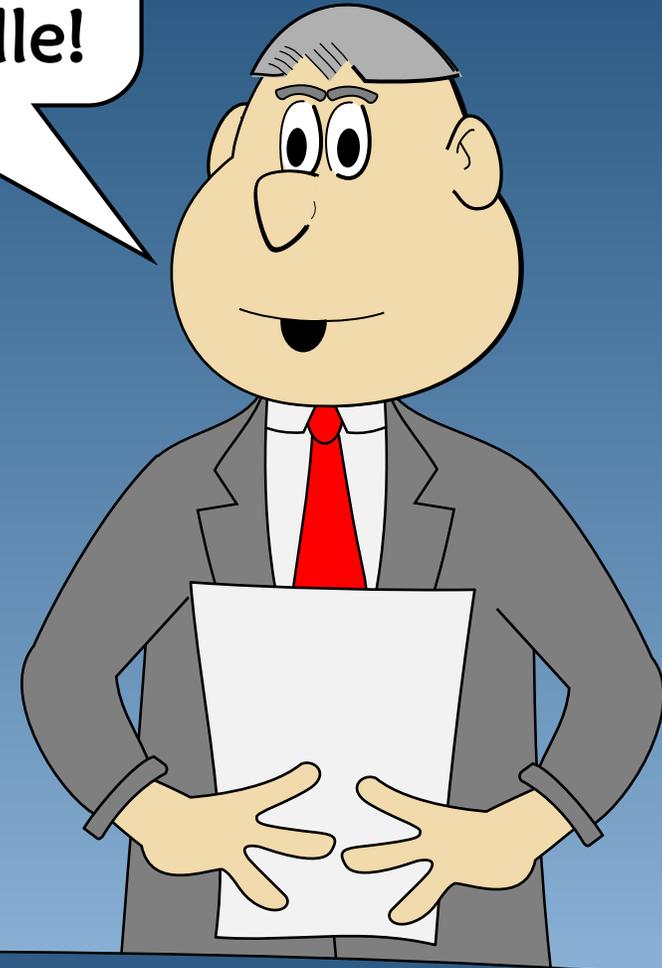
Klaus Schmeh, cryptovision

Die Zeiten sind  
schlecht für  
Cyberkriminelle!

A stylized world map with continents in brown and oceans in blue. Two semi-transparent blue rectangular boxes are overlaid on the map, containing white text. The top box covers North America and Europe, and the bottom box covers South America and Africa.

**2018: keine größeren  
Ransomware-Katastrophen**

**2017: Große Schäden durch  
Ransomware Petya**



2013 geschlossen, kein echter Nachfolger.

cryptoVision

The screenshot shows the Silk Road website interface. At the top, there's a navigation bar with "Welcome! Silk Road" and "State of the Road Address". Below that, the URL "silkradvb5piz3r.onion" is visible. The main header features the Silk Road logo (a camel) and the text "Silk Road anonymous marketplace". To the right, it says "Welcome OzFreelancer!" and provides links for "messages(0)", "orders(0)", "account(฿0.00)", "settings", and "log out". A search bar and a shopping cart icon with "(0)" are also present.

**Shop by category:**

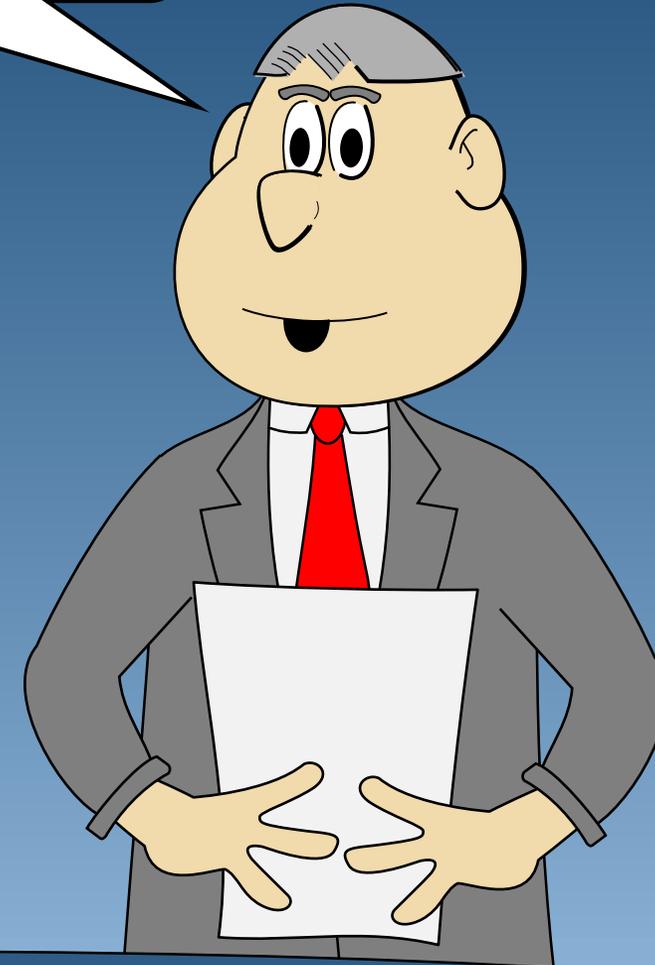
- Drugs(1582)
  - Cannabis(271)
  - Dissociatives(33)
  - Ecstasy(217)
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  - Prescription(274)
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- Food(1)
- Forgeries(34)
- Hardware(1)
- Home & Garden(5)
- Lab Supplies(5)
- Medical(3)
- Money(89)
- Musical instruments(2)

**Product listings:**

Image	Description	Price
	10 Grams high grade MDMA 80+%	฿61.17
	Amphetamines sulfate / Speed freebase...	฿28.59
	2g Jack Frost (weed) *420 SALE****	฿8.54
	5 Grams of pure MDMA crystals	฿42.04
	100 red Y tablets 111mg (lab tested)...	฿97.77
	***10gr. Amphetamine Sulphate...	฿2.52
	3.5g Albino Rhino (weed)	฿12.37
	10mg Flexeril (muscle relaxant)...	฿3.22
	***10gr. Amphetamine Sulphate...	฿33.19

**News:**

- The gift that keeps on **giving**
- Who's your **favorite?**
- Acknowledging **Heroes**
- A new anonymous market **The Armory!**
- **State of the Road Address**

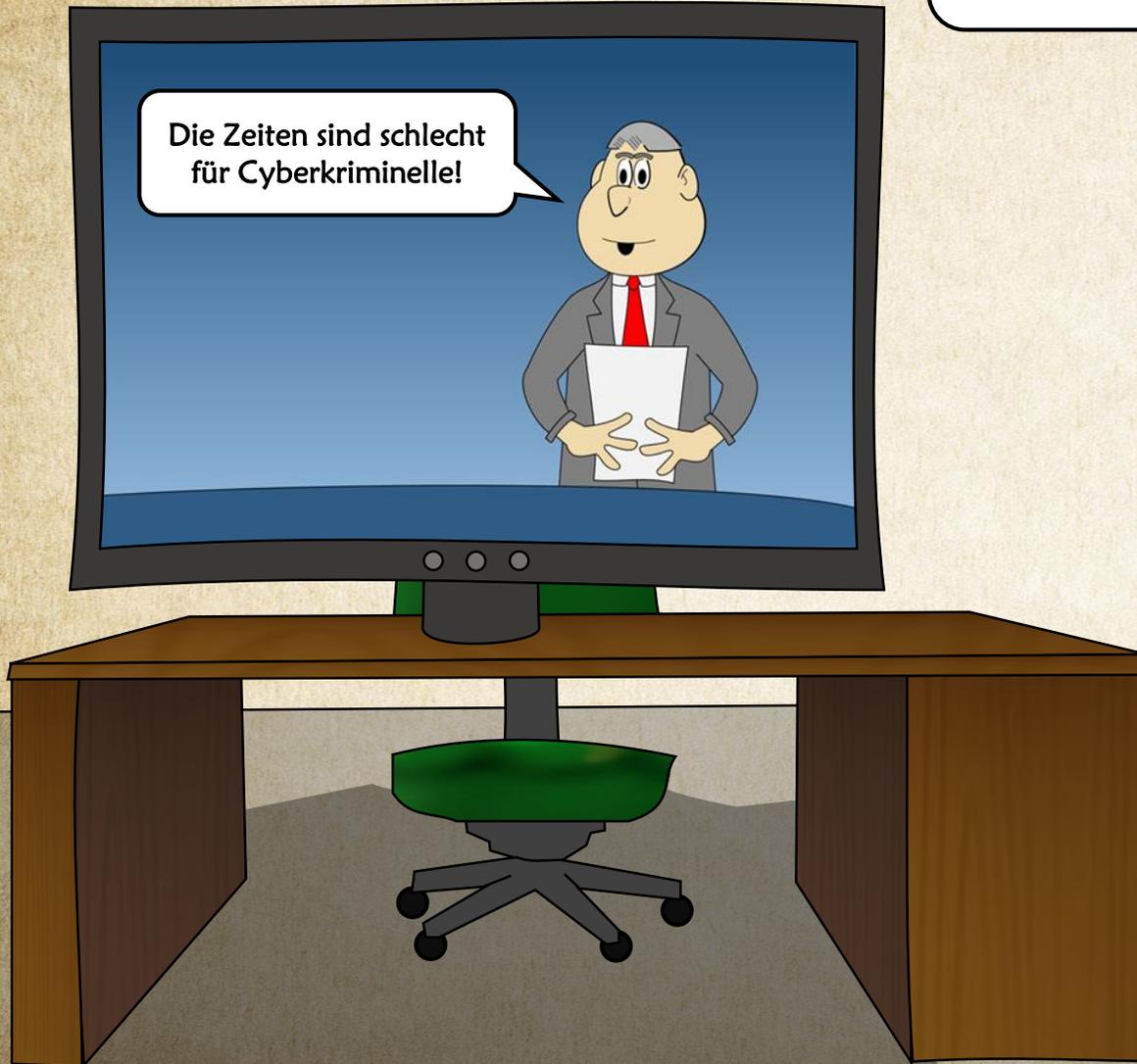


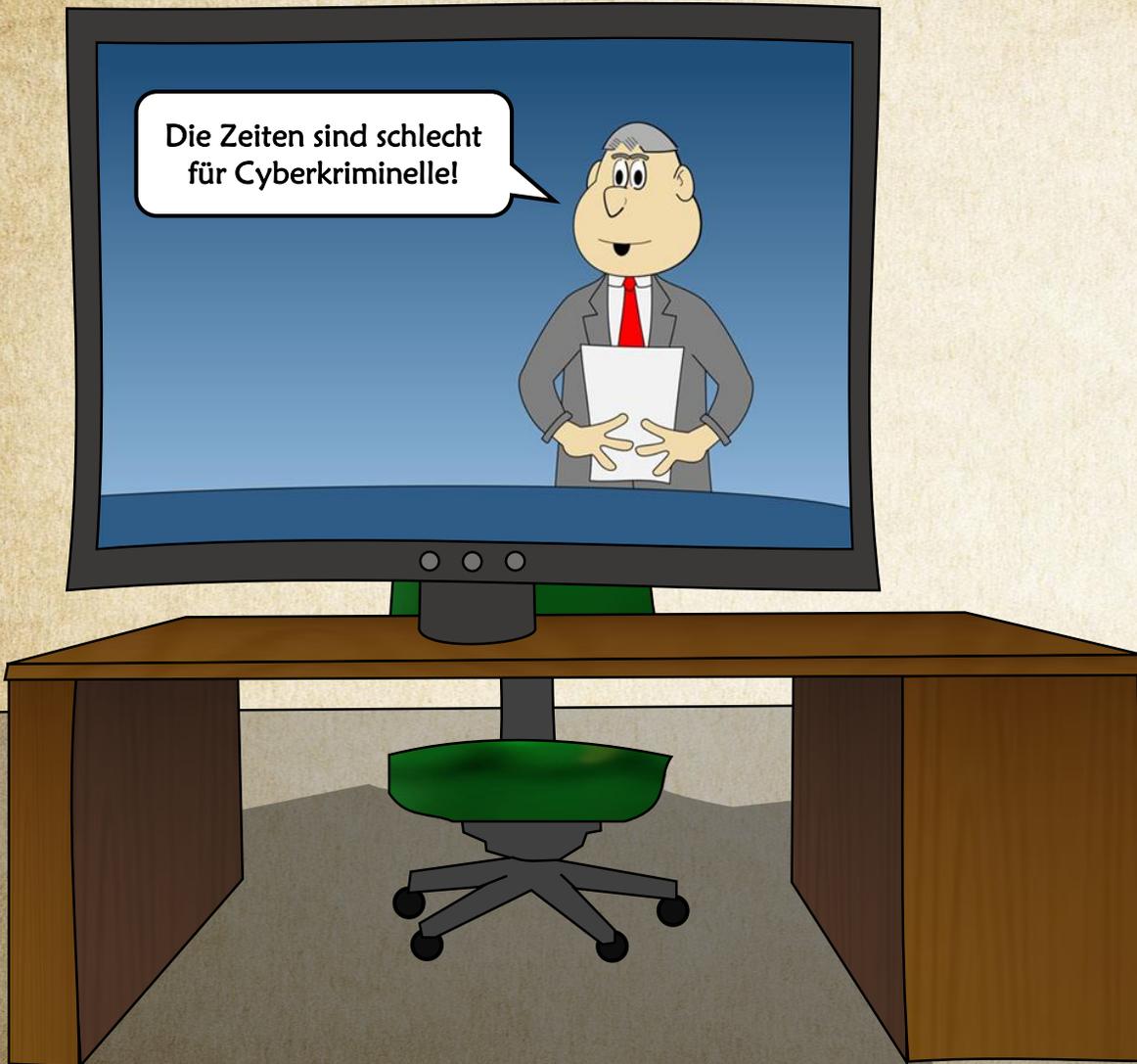
Kann man als Cyberkrimineller überhaupt noch erfolgreich sein?

Die Zeiten sind schlecht für Cyberkriminelle!

Ja!

Man muss das Internet der Dinge (IoT) nutzen!

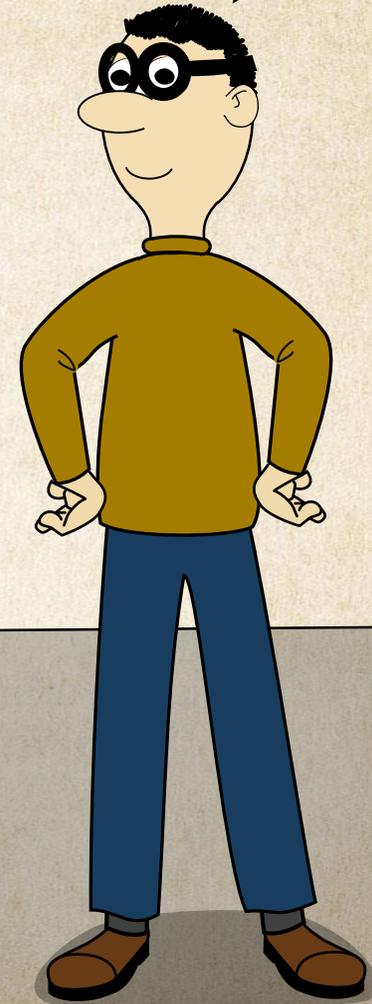




Mein Partner:  
Harry Hacker.



cryptoVision  
Hallo.



# Tipp 1

IoT bietet völlig neue Möglichkeiten



# Internet der Dinge (IoT)

Das „s“ in IoT steht für Security



Bisher ist kein Mord über das Internet der Dinge bekannt geworden, aber möglich wäre es.



Bruce  
Schneier



## Medtronic Herzschrittmacher



2017: Malware-  
Anfälligkeit wird  
bekannt

Keine  
authentisierten  
Software-Updates

18 Monate später:  
Sicherheitslücke  
besteht noch

Man muss keinen Herzschrittmacher hacken, um jemanden zu verletzen.



Was schon alles  
gehackt wurde

Autowaschanlage

Flughafen-  
Röntgengeräte

Segway



Ukrainisches  
Stromnetz

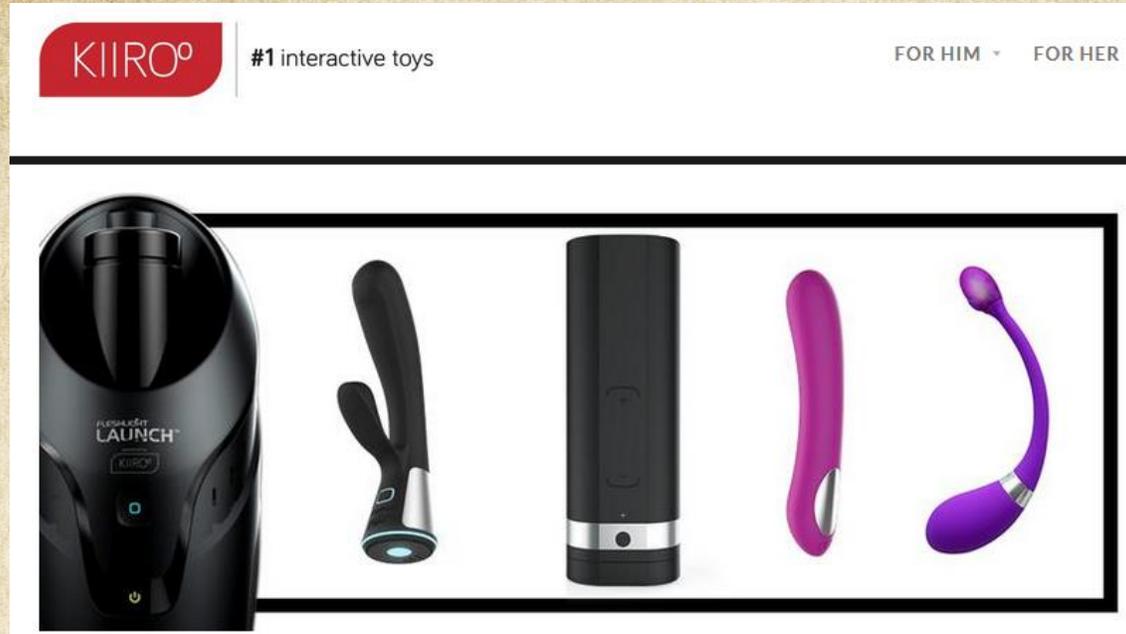
Web-Kamera

Es gibt nichts, was nicht schon gehackt wurde.

Wirklich nichts?

Wirklich nichts!





Smart-Sexspielzeug mit  
Netzanschluss

Einfach zu hacken, weil kein  
Passwort abgefragt wird.



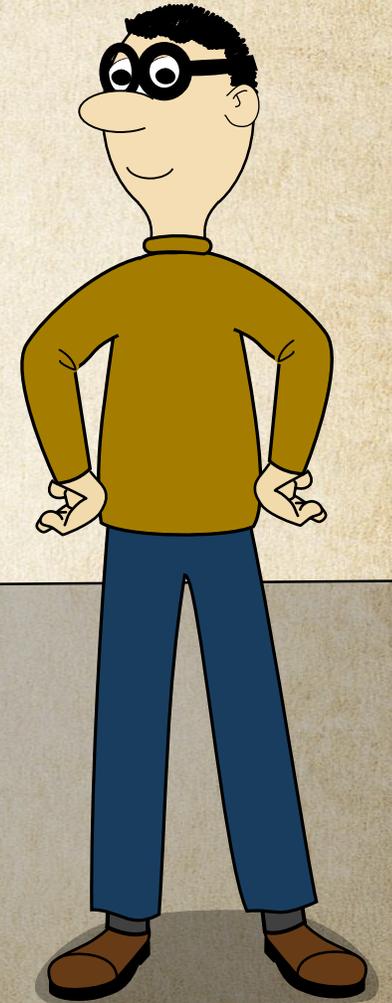
# Tipp 2

Alte Schwächen gelten auch im IoT

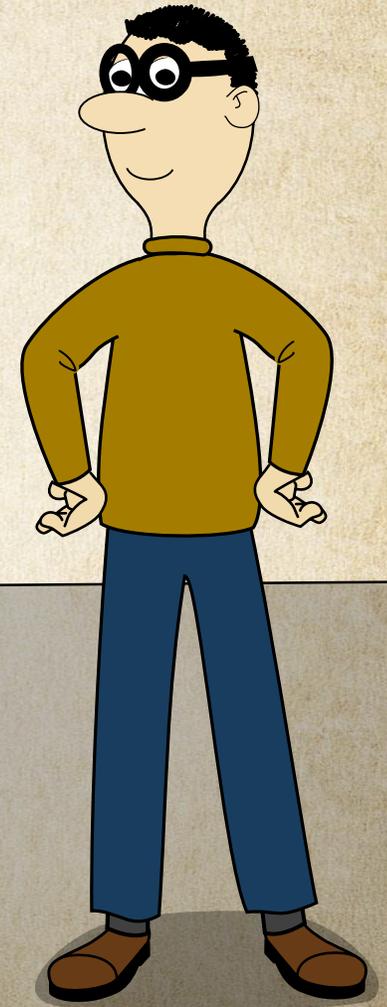
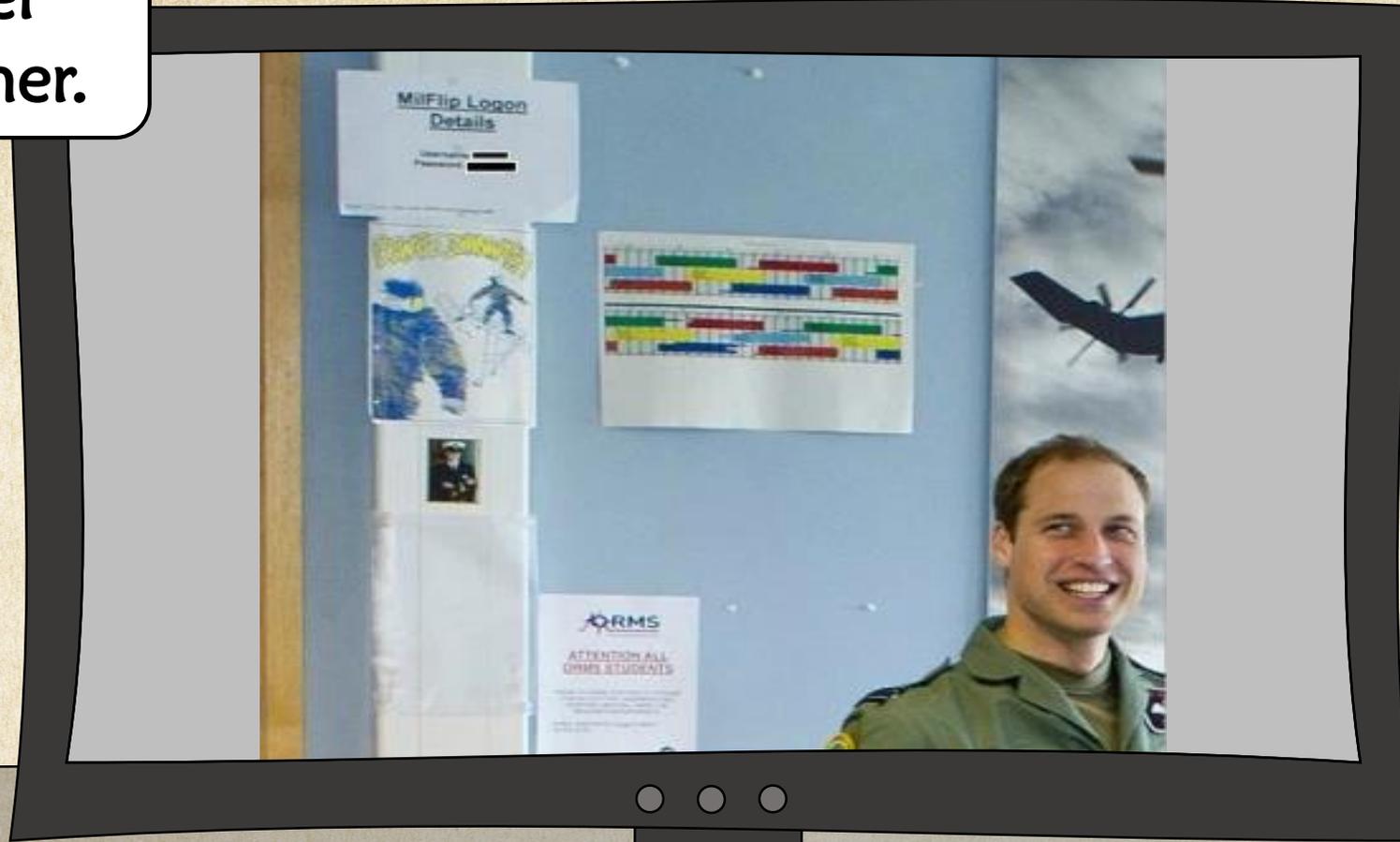


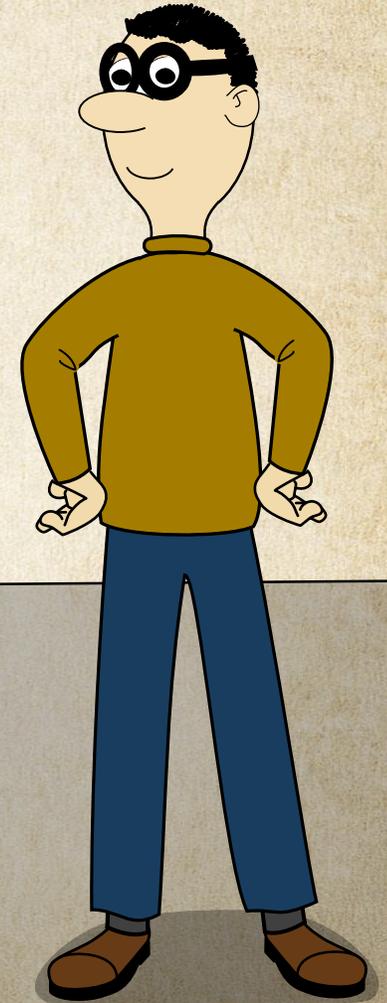
Die meistverwendeten  
Passwörter 2018

1. 123456
2. password
3. 123456789
4. 12345678
5. 12345
6. 111111
7. 1234567
8. sunshine



Es geht aber noch einfacher.





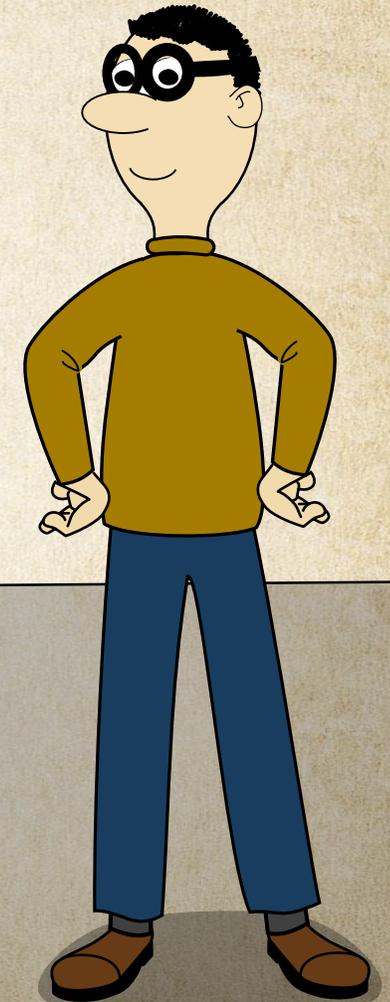
US-Rapper tippte  
iPhone-PIN vor  
laufender Kamera ein.

PIN lautete:  
000000.



8,49 Mio. Aufrufe

0:02 / 0:04



**Noch größere Gefahr:  
voreingestellte Passwörter.**



**Etwa 15 Prozent aller IoT-  
Anwender ändern sie nicht.**

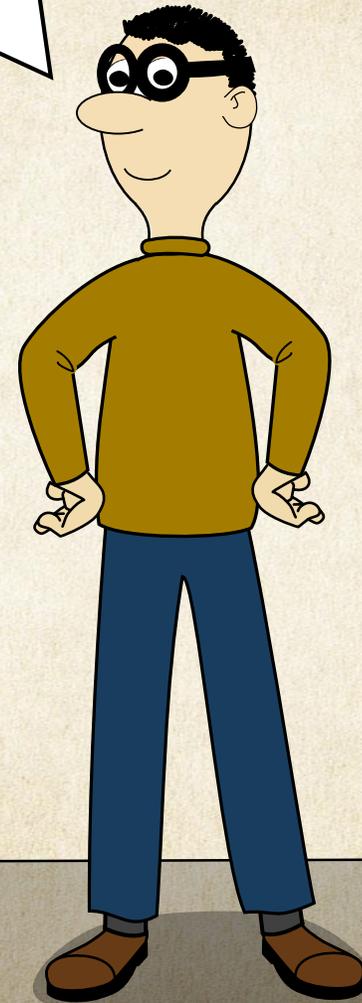


# Tipp 3

**Hinterlasse keine Spuren**



Zwei Beispiele, die nicht aus dem IoT-Bereich stammen.



BTK-Killer  
tötete 8  
Personen

Schickte  
Briefe an  
Polizei

2005: Schickte  
Diskette

Polizei konnte  
gelöschte Word-Datei  
wiederherstellen



I've enjoyed your 1st part of letter 6/1-05, and understand the last part.  
Want you to know that I do not hate you or don't love you.  
The problems I have are far worse from family love. I know that hurt, and hopefully someday your heart will mend and you can forgive me. You will always be my baby girl that I raise right - proud - independence + now is a grown adult with many years of love to Brian + Mom.  
I'm so glad we had that family vacation in May 2004. So many memories! I die before arrest was a good time, and the dark side took me away. I'll remember the family.



Document.docx Properties

General Security Details Previous Versions

Property	Value
Origin	
Authors	Dennis
Last saved by	
Revision number	2
Version number	
Program name	Microsoft Office Word
Company Manager	Evangelical Lutheran Church in America
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Date last saved	1/18/2003 7:13 PM
Last printed	
Total editing time	00:00:00
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Content status	
Content type	application/vnd.openxmlformats-offi...
Pages	1
Word count	48
Character count	277

[Remove Properties and Personal Information](#)

OK Cancel Apply

# Reformation Lutheran Church Wichita, KS

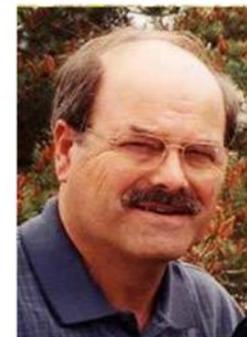
## Staff



Kimberly Leroc

### Dennis Rader, Custodian

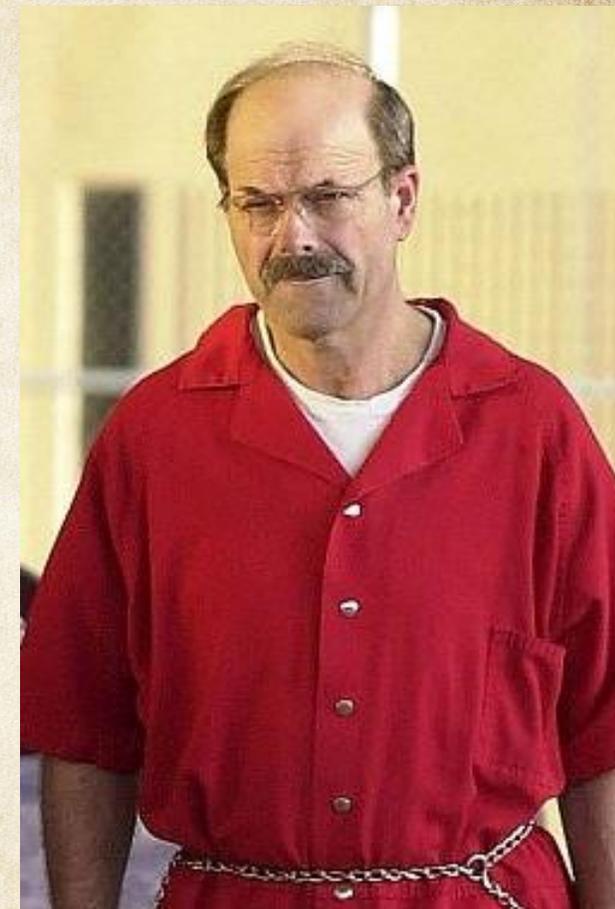
Talk to Carole for just a few minutes and it is quickly evident that she has a passion for people. She has been caring for people all her life in one form or fashion -- as a bus driver, a private caregiver, an activities coordinator, and a custodian. A self-described "neat freak", she has been taking care of Reformation facilities since 2000. Carole especially enjoys any opportunity to work with individuals in the senior population.



Dennis Rader

### Paula Clark, Provider

Sunday's are more special for children with Kim in the church nursery!



Welcome! Silk Road    State of the Road Address

silkkroadvb5piz3r.onion

Welcome **OzFreelancer!**  
 messages(0) | orders(0) | account(\$0.00) | settings | log out

**Silk Road**  
 anonymous marketplace

search | (0)

---

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Betreiber:  
 Dread Pirate Roberts

**Quote from: altoid on January 29, 2011, 07:44:51 PM**

What an awesome thread! You guys have a ton of great ideas. Has anyone seen Silk Road yet? It's kind of like an anonymous amazon.com. I don't think they have heroin on there, but they are selling other stuff. They basically use bitcoin and tor to broker anonymous transactions. It's at <http://tydgccykixpbu6uz.onion>. Those not familiar with Tor can go to [silkroad420.wordpress.com](http://silkroad420.wordpress.com) for instructions on how to access the .onion site.

Let me know what you guys think

altoid

**Topic: IT pro needed for venture backed bitcoin startup**

October 11, 2011, 08:06:22 PM

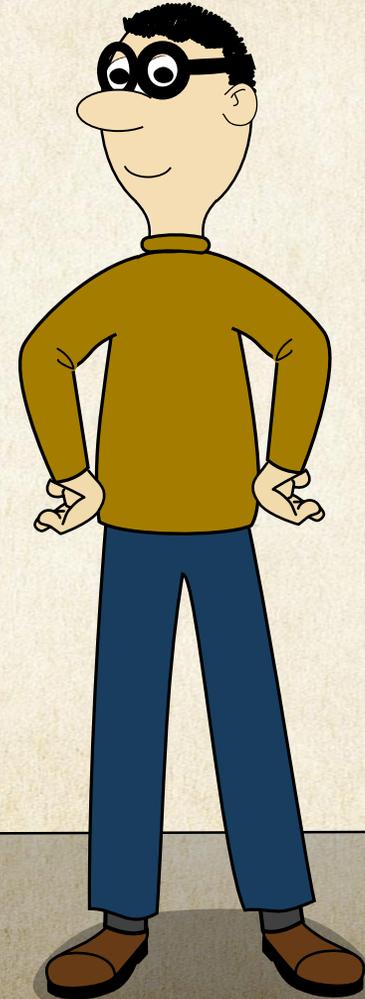
Hello, sorry if there is another thread for this kind of post, but I couldn't find one. I'm looking for the best and brightest IT pro in the bitcoin community to be the lead developer in a venture backed bitcoin startup company. The ideal candidate would have at least several years of web application development experience, having built applications from the ground up. A solid understanding of oop and software architecture is a must. Experience in a start-up environment is a plus, or just being super hard working, self-motivated, and creative.

Compensation can be in the form of equity or a salary, or somewhere in-between.

If interested, please send your answers to the following questions to [rossulbricht at gmail dot com](mailto:rossulbricht@gmail.com)

**Ross Ulbricht****Wurde 2013  
verhaftet**

Auch im IoT wird man  
Spuren hinterlassen.



# Tipp 4

## Nutze die Blockchain



Ist die Blockchain für  
Kriminelle interessant?



Ja. Wenn es  
beispielsweise um  
Kunstdiebstahl geht.



Kunst im 16. Jahrhundert



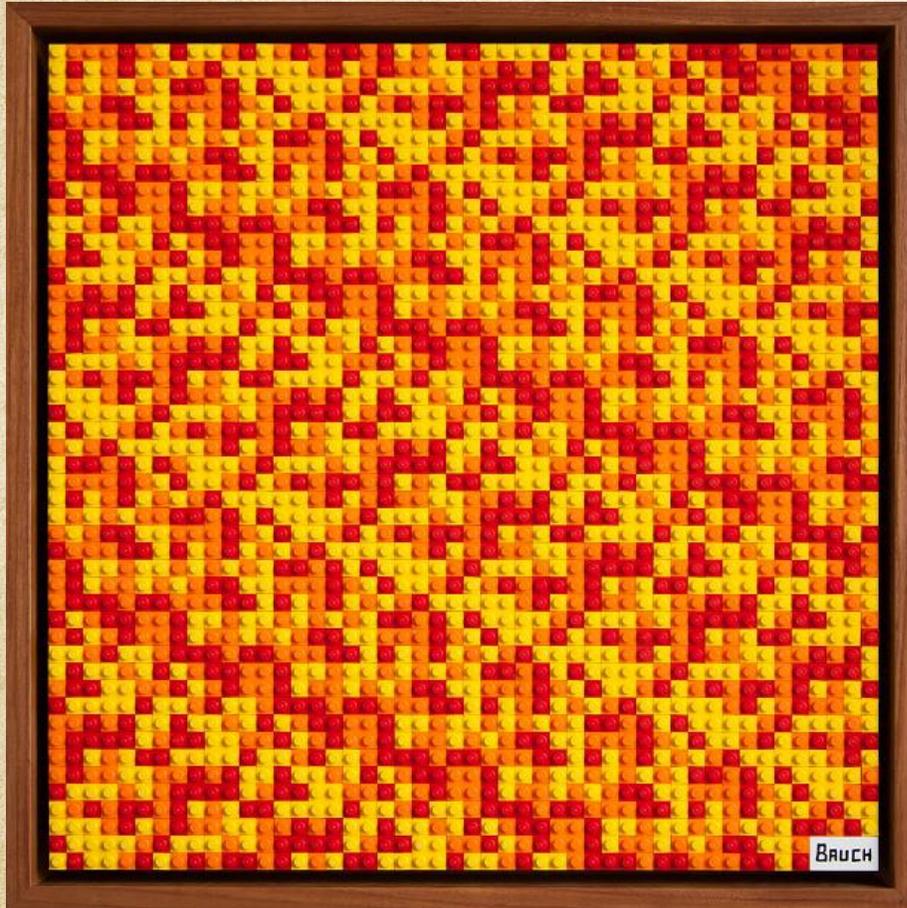
Kunst im 21. Jahrhundert



Man kann Kunst und Geld gleichzeitig stehlen.



Man weiß genau, welchen Wert das Kunstwerk hat.



<b>Kodierte Bitcoins:</b>	<b>100 \$</b>
<b>Legos:</b>	<b>10 \$</b>
<b>Künstlerischer Wert:</b>	<b>0 \$</b>
	-----
	<b>110 \$</b>

Was bringt die  
Blockchain sonst?



Polizei kann Geld nicht  
beschlagnahmen.





Ross Ulbricht

Polizei konnte sein  
BitCoin Wallet  
nicht entschlüsseln

Wert: \$28,5  
Millionen

# Tipp 5

Wenn es fast zu spät ist, ...



Es gibt inzwischen zahlreiche Kriminelle, die Verschlüsselung nutzen.

Meist ist die Polizei machtlos.



Joseph  
Duncan



Max  
Butler



Albert  
Gonzales



Maskenmann





**Ross Ulbricht**

**Gründer von Silk Road  
(illegales Verkaufsportal)**

**Nutzte transparente  
Festplatten-Verschlüsselung**

**Polizei verhaftete ihn  
am laufenden Laptop.**





**Ross Ulbricht**

**Gründer von Silk Road  
(illegales Verkaufsportal)**

**Strafe: 2x lebenslänglich  
+ 40 Jahre**





Juelle Grant

In Schießerei  
verwickelt

Polizei  
beschlagnahmte  
ihr iPhone

Löschte Daten  
durch  
Fernzugriff



Polizei hätte  
Faraday-Tasche  
verwenden  
sollen.



# Tipp 6

## Plane für den Ruhestand



Was kann ein Cyberkrimineller nach seiner Karriere tun?



Das kommt darauf an.



Wenn du im  
Gefängnis bist, ...



Twittern!

cryptoVision



Angehefteter Tweet



**Ross Ulbricht** @RealRos

Pinch me, I must be dreaming!  
[FreeRoss.org/petition](https://www.freeross.org/petition)

Tweet übersetzen

Pinch me, I must be dreaming! 100,000 signers want to see me released from prison! This is incredible to see such a huge wave of support in these first few months since the petition launched. Our 500k goal feels totally doable now.

I haven't felt this hopeful the whole time I've been locked up. Thank you! 🙏

Ross

76

538

2,1 Tsd.

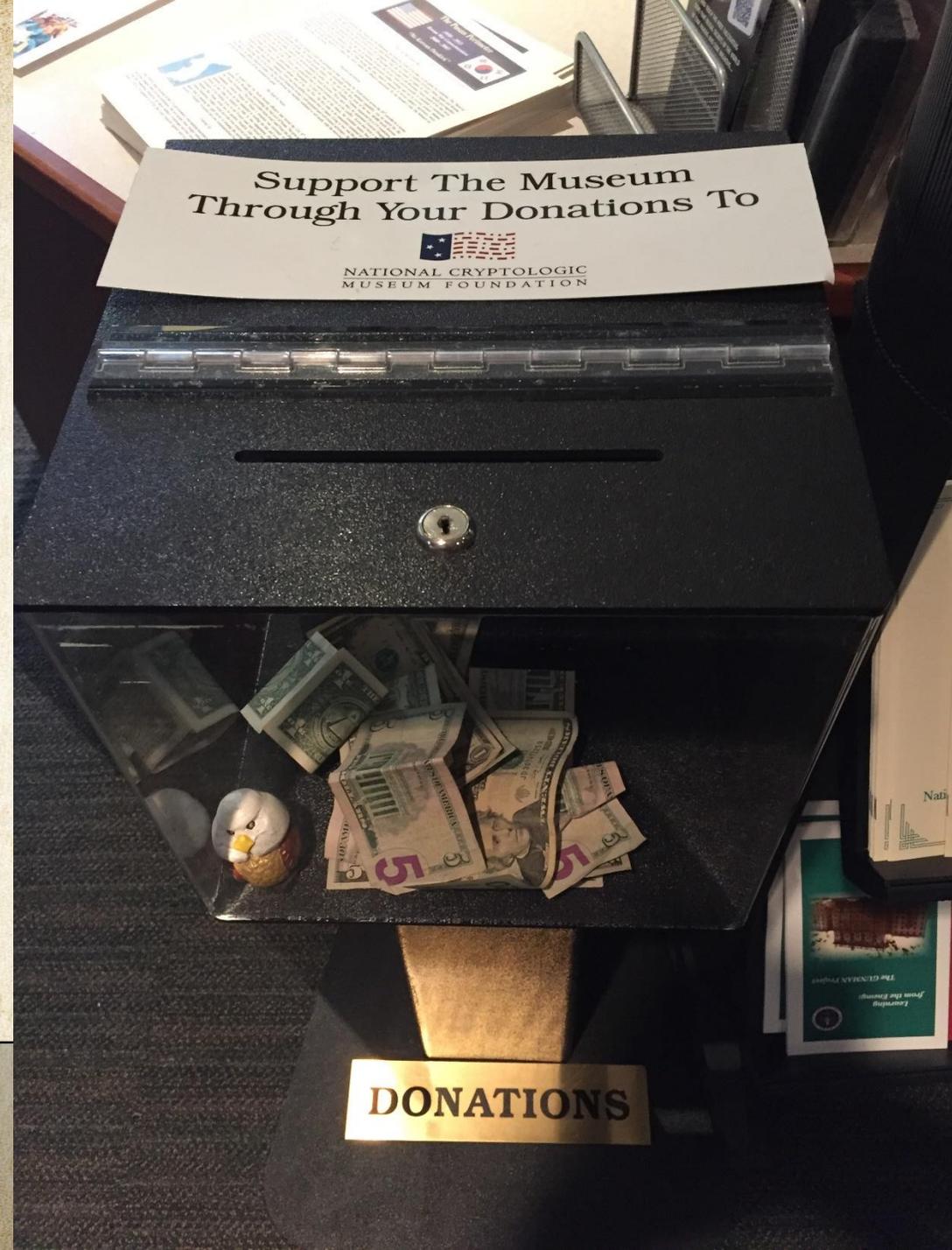


Wenn du Geld hast, ...



Spende das illegal verdiente Geld.

Zum Beispiel der NSA.



**ENDE**

**[www.cryptovision.com](http://www.cryptovision.com)**