Cyber Threat Risk Landscape

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Panel

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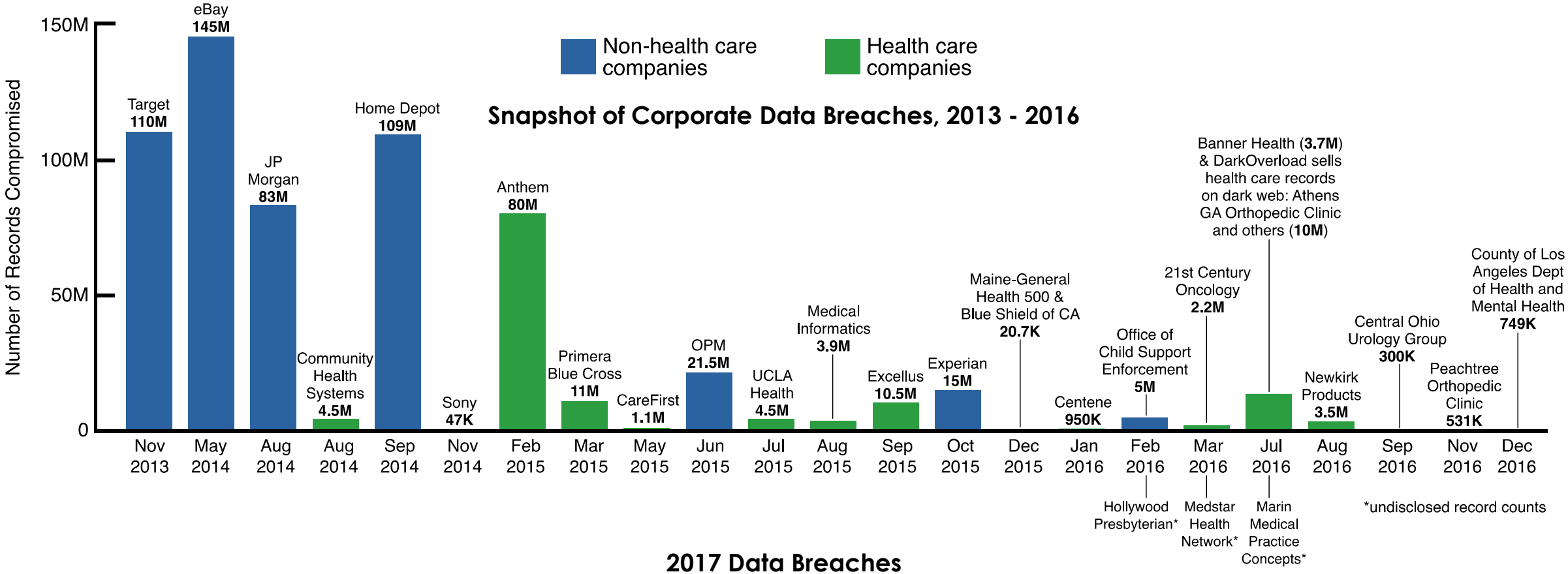
Health Care: Now Top Target For Attackers



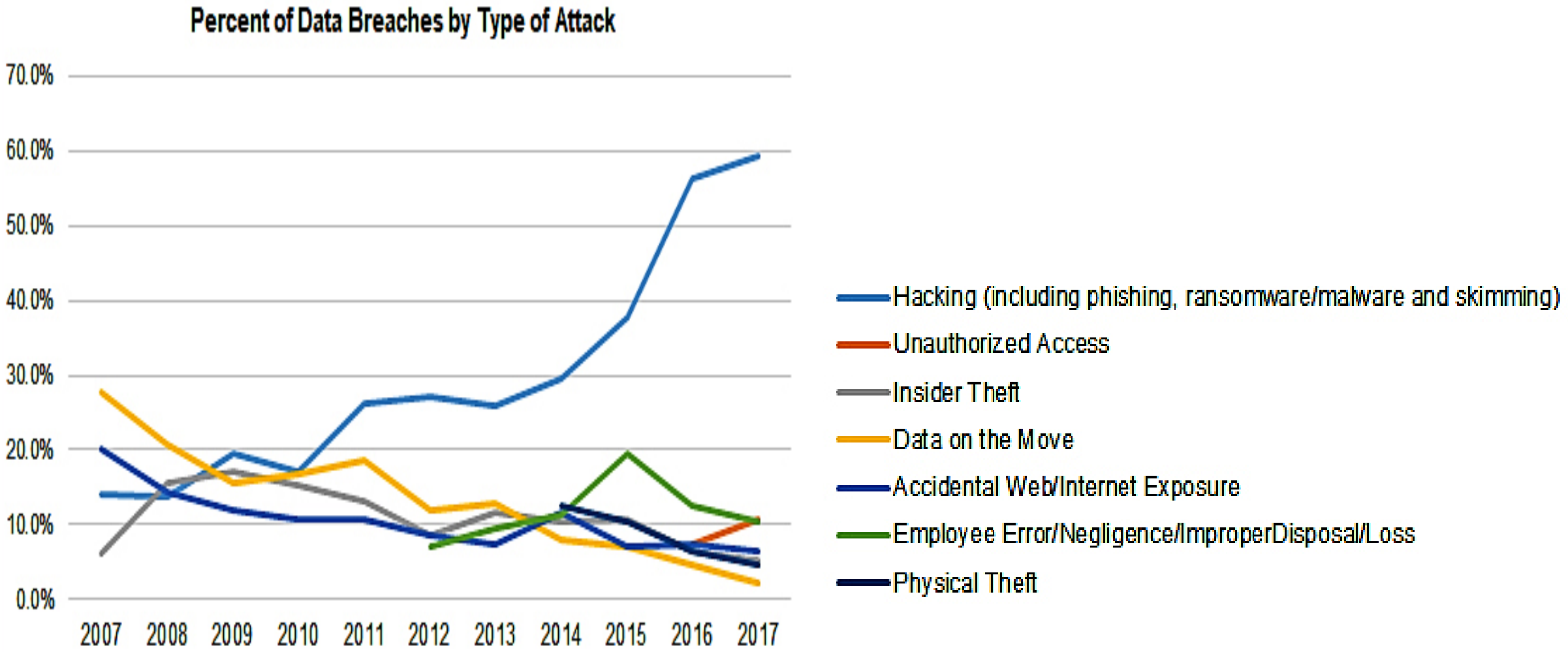
2017 Data Breaches

March 2017	May 2017	August 2017	September 2017
Urology Austin	**WannaCry**	**Pacific Alliance**	**Equifax**
Ransomware attack; **279,663 patients records breached**	Ransomware attack; **230,000+ computers infected in over 150 countries**	Ransomware attack; **266,123 patient records breached**	Security breach; **143,000,000 customer records breached**

Attackers and Methods

				
	HACK AS A SERVICE	**ORGANIZED CRIME**	**STATE-SPONSORED**	**HACKTIVISTS**
Risk Motive	**Financially motivated**, paid % of profit	**Financially motivated**	**Research, Espionage**	**Motivated by social justice causes**
Characteristics	• **Allows others to rent infrastructure** for attacks: botnets, phishing tools, and vulnerability scanning of targets	• Aim to **collect ransom, personal data, including medical records, credit cards and SSNs** • Efficient and **profit focused**	• **Highly skilled** and **persistent** with **unlimited resources** • Employ **sophisticated and previously unknown methods** • Can remain in the network for months to years	• **Unstructured** coalitions that come together based on **common cause** • Rely on **social engineering** techniques • Employ **less sophisticated** attack methods • Engage **armies of infected computers**

Attack Vectors



Source: Identity Theft Resource Center, 2017 Annual Data Breach Year End Review

Medical Device Cybersecurity: Worse Than Herding Cats

Limited incentives for device makers to make incidents public

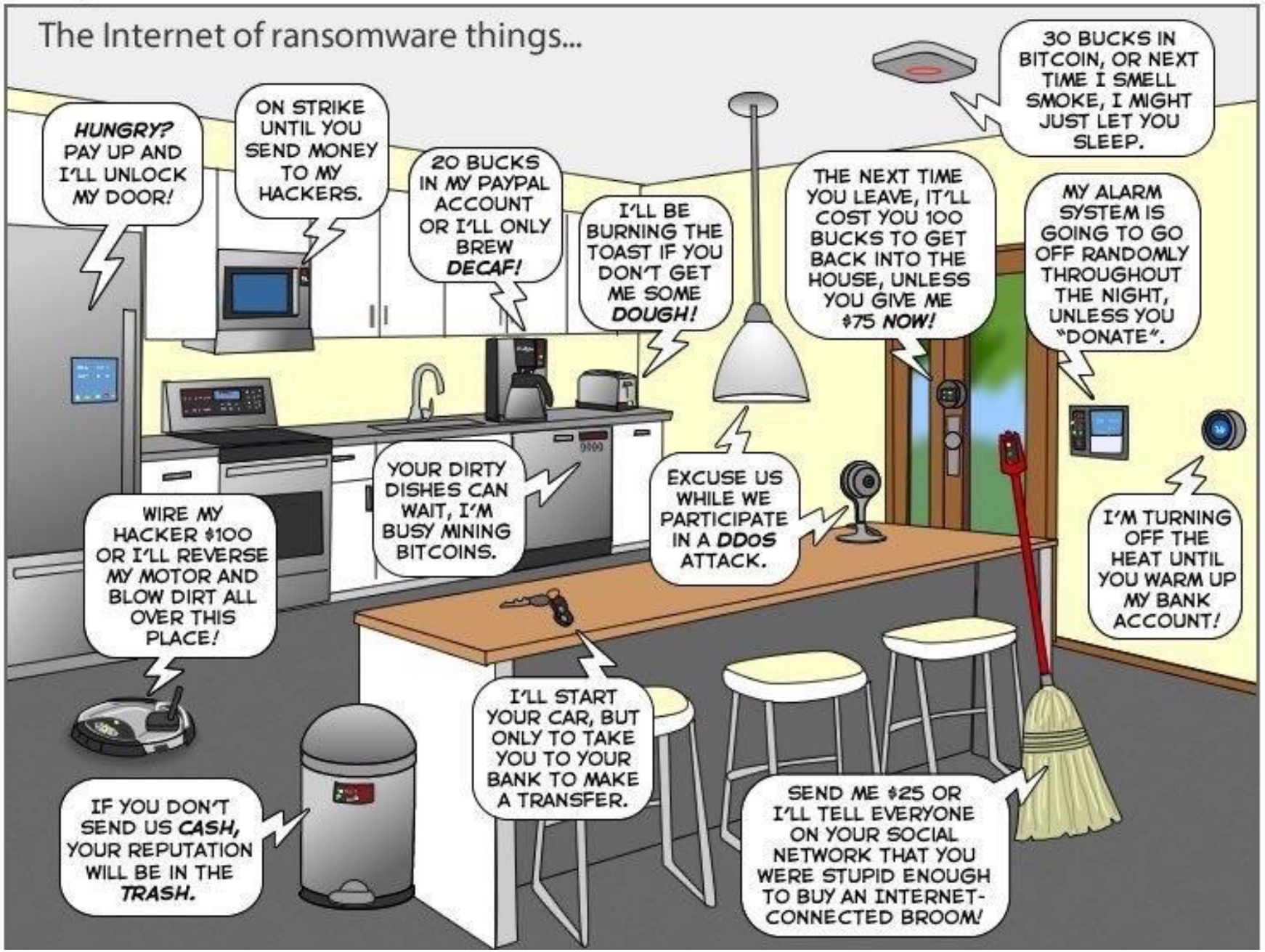
Clinicians generally don't appreciate risks

Healthcare CIOs can't keep up with patching

No central repository for vulnerabilities and incident reporting

Limited awareness of security impact on safety and efficiency

Executives, lawyers & compliance poorly understand cyber-risks


The Joy of Tech™ by Nitrozac & Snaggy
The Internet of ransomware things...
HUNGRY? PAY UP AND I'LL UNLOCK MY DOOR!
ON STRIKE UNTIL YOU SEND MONEY TO MY HACKERS.
20 BUCKS IN MY PAYPAL ACCOUNT OR I'LL ONLY BREW DECAF!
I'LL BE BURNING THE TOAST IF YOU DON'T GET ME SOME DOUGH!
30 BUCKS IN BITCOIN, OR NEXT TIME I SMELL SMOKE, I MIGHT JUST LET YOU SLEEP.
THE NEXT TIME YOU LEAVE, IT'LL COST YOU 100 BUCKS TO GET BACK INTO THE HOUSE, UNLESS YOU GIVE ME $75 NOW!
MY ALARM SYSTEM IS GOING TO GO OFF RANDOMLY THROUGHOUT THE NIGHT, UNLESS YOU "DONATE".
YOUR DIRTY DISHES CAN WAIT, I'M BUSY MINING BITCOINS.
EXCUSE US WHILE WE PARTICIPATE IN A DDOS ATTACK.
I'M TURNING OFF THE HEAT UNTIL YOU WARM UP MY BANK ACCOUNT!
WIRE MY HACKER $100 OR I'LL REVERSE MY MOTOR AND BLOW DIRT ALL OVER THIS PLACE!
I'LL START YOUR CAR, BUT ONLY TO TAKE YOU TO YOUR BANK TO MAKE A TRANSFER.
IF YOU DON'T SEND US CASH, YOUR REPUTATION WILL BE IN THE TRASH.
SEND ME $25 OR I'LL TELL EVERYONE ON YOUR SOCIAL NETWORK THAT YOU WERE STUPID ENOUGH TO BUY AN INTERNET-CONNECTED BROOM!

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