



Why Tech Transfer is Critical: Are You Ready for WVE?

Peter Kuper

February 25, 2015

15 Years Wall Street Analyst

- So I know how to BS with the best of them

5 Years IQT

- So I've heard the BS from the best of them

6 Years Advisor to DoE Lab

- So I've seen the best of both (BS and real deal)

It Used To Be This



But Now It Is This



It Used To Be This





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But Now It Is This



The Global Battle Field

Practically every nation is ramping up cyber warfare operations



“The heroes of Israel's future wars will not be dust-covered tankers, anonymous pilots or paratroopers in red berets.

Those heroes would be the techies, hackers, web and high-tech geeks that lie around in the halls and rooms of Israeli intelligence, bombarding their bosses with ideas, developments and new

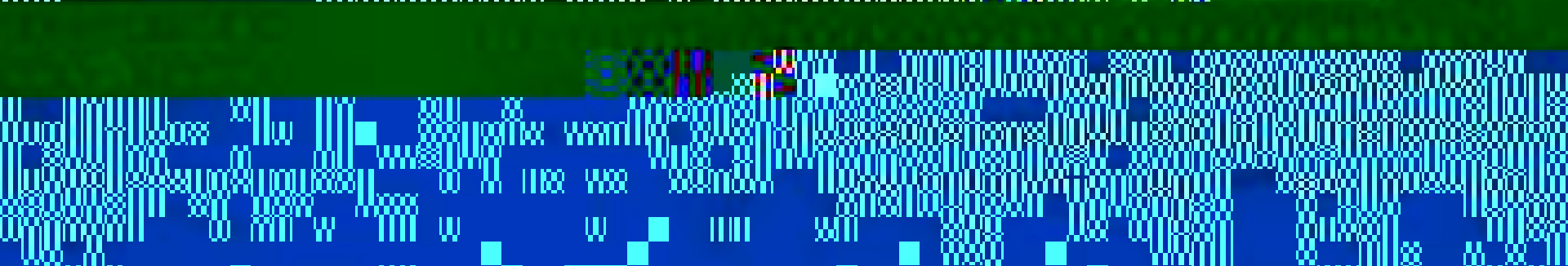
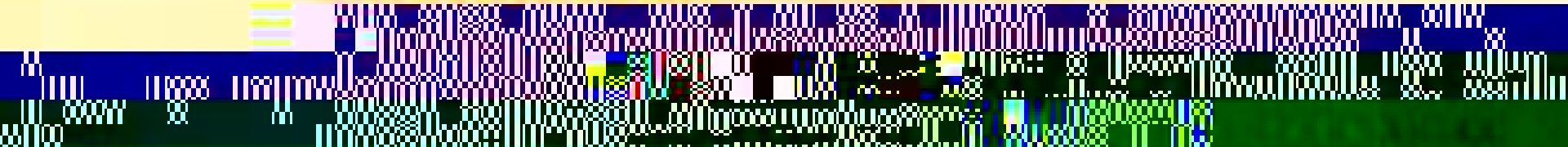
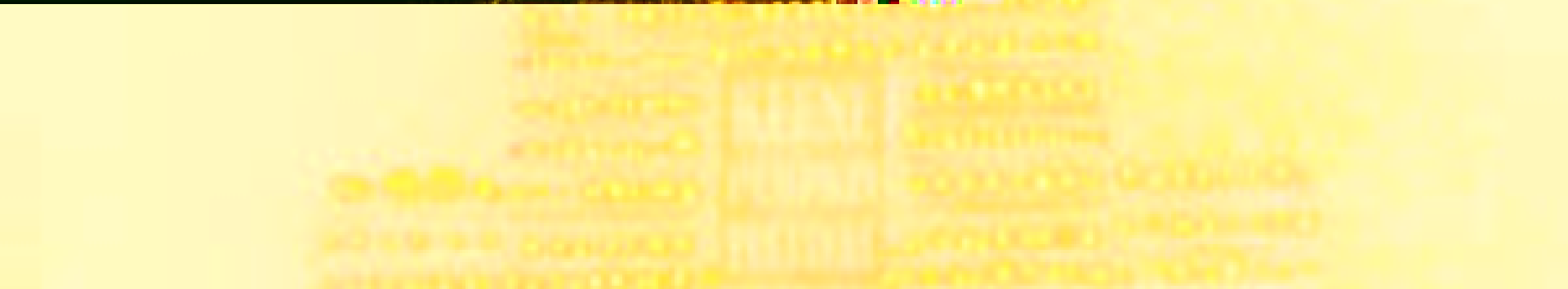
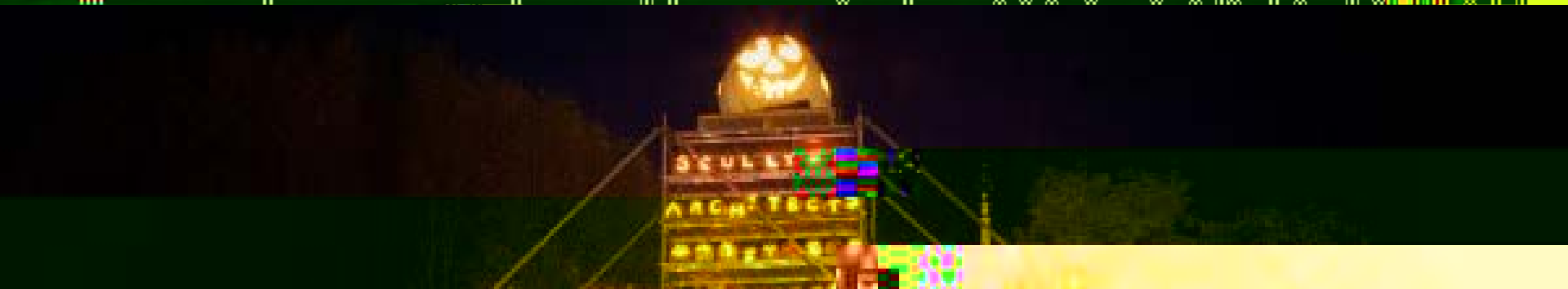
US cyber funding for cyber
technology steadily increases from

AGAIN, Ferguson, MO Pop: 21,000

What grant?

- Department of Homeland Security has distributed more than \$34 billion through “terrorism grants,” enabling local police departments

Oh The TERROR!!!



TOT

ACCELERATING INNOVATION for the Intelligence Community

We Got This...



Why So Angry?

Maybe because the “recovery”
never actually happened...

And Any Jobs Going to “Retirees”

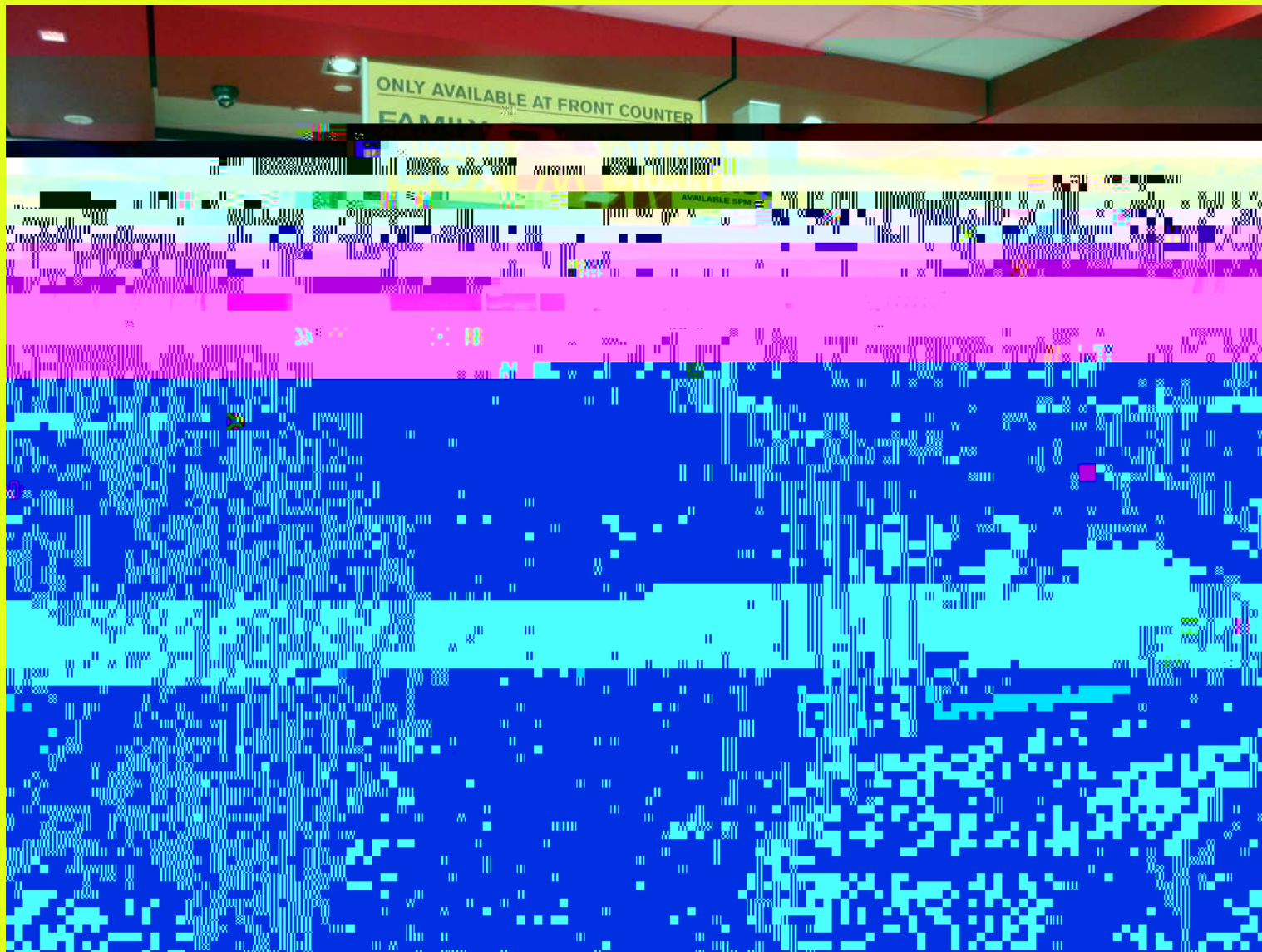


Not Just Here...

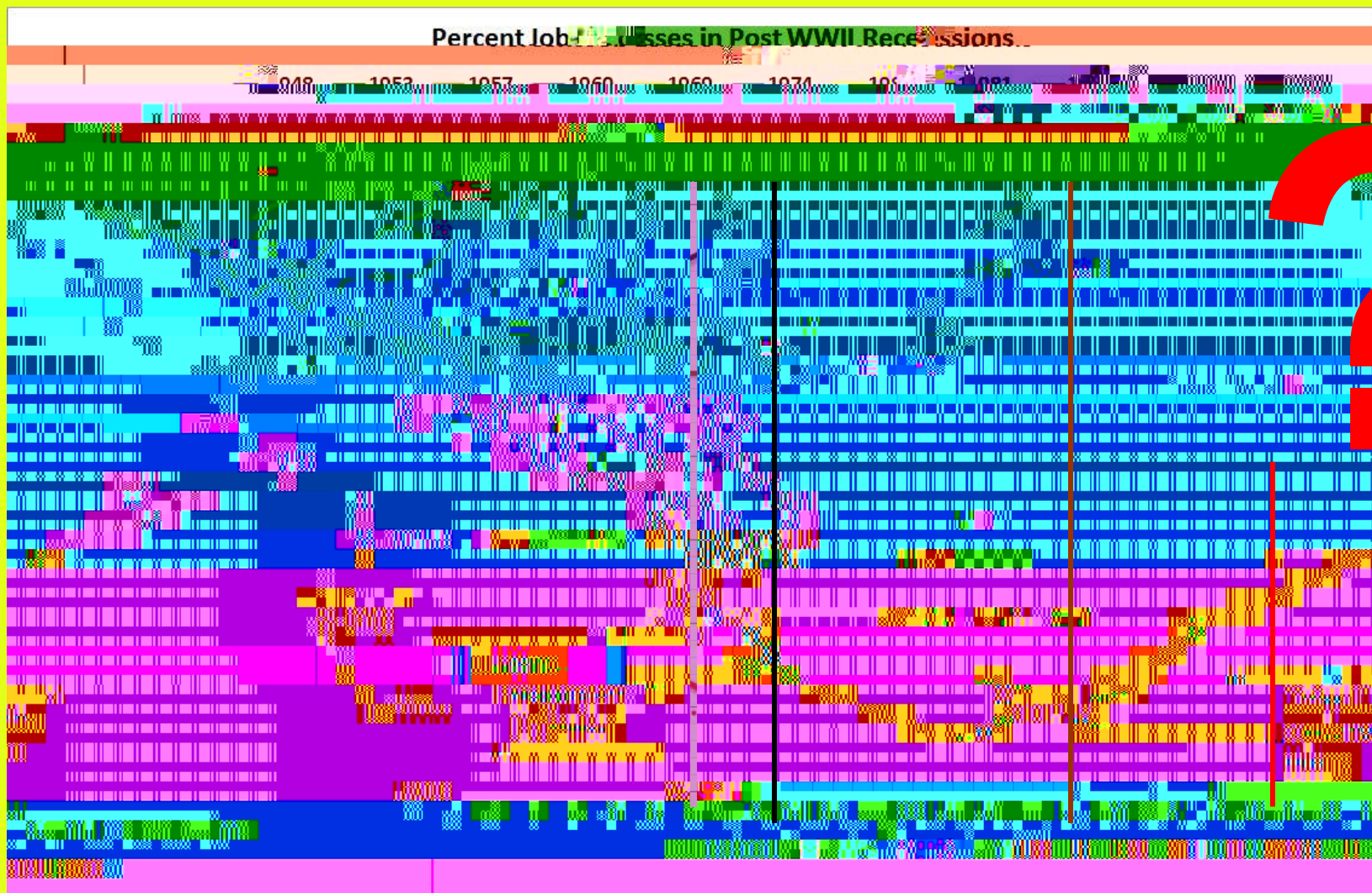
It Used To Be This



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Hang Overs Only Getting Worse



But the Stock Market Says All is Great!



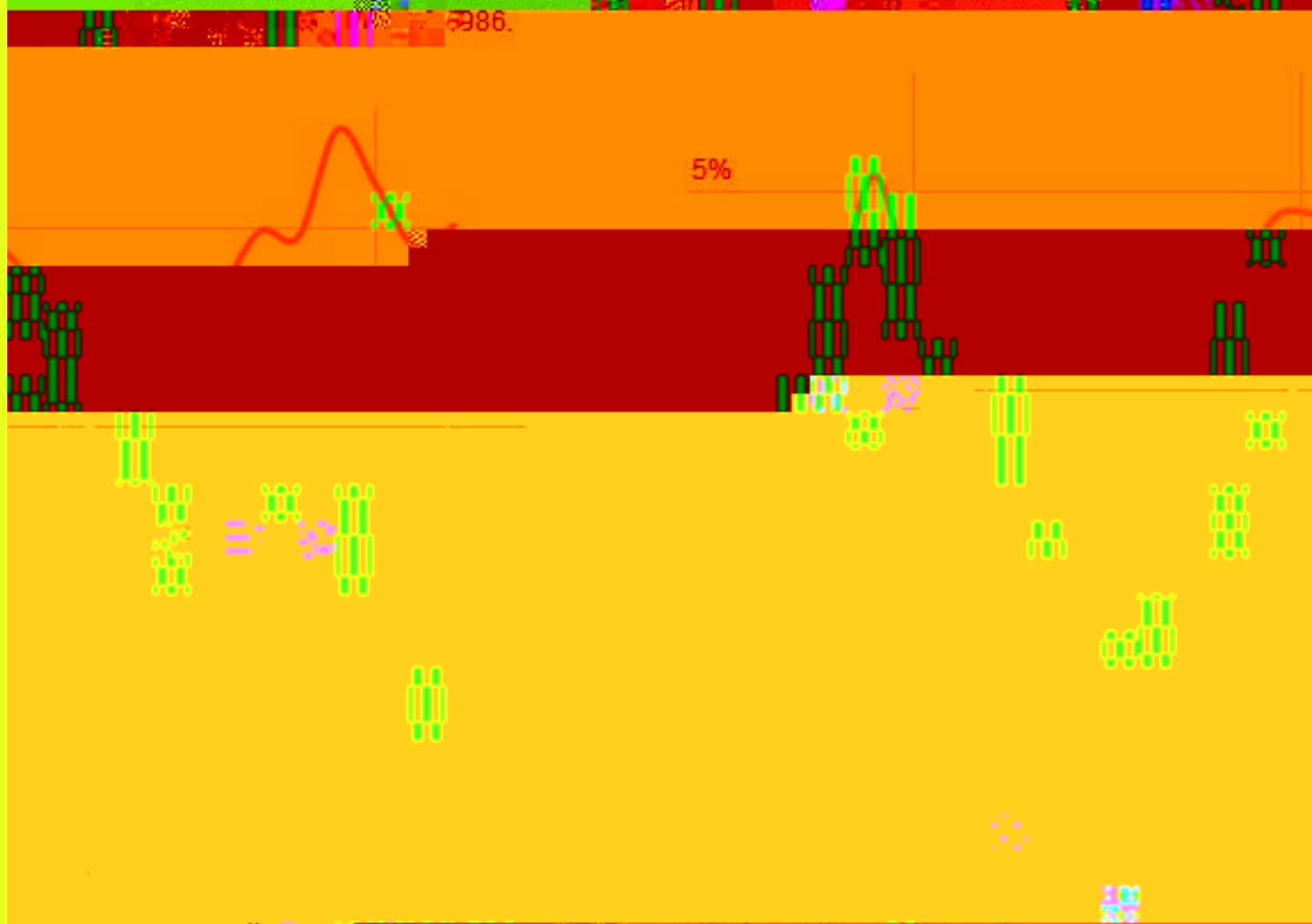
Up and To The Right (or down and to the left)

Home Prices Are Going Up, But Median Income Isn't

The percent change in median real estate prices compared to

1986.

5%



Angry, Indeed...

And That is Likely to Persist

What You Don't Know is What the Government

And shall we dare recall
that ~70% of US GDP is
powered by the
consumer?

And You Wonder Why...

- People feel like they are not getting ahead.
- Americans feel they are no longer dealing “our” government, but “THE” government.
- There is unrest in the streets (and fields).
- You’re an educated, unemployed, broke 20something. What are you going to do?
- Ferguson, Keene, etc., are essentially a barometer of what is really going on.

What does this have to do with cyber security?

Everything.

Why Take On This?

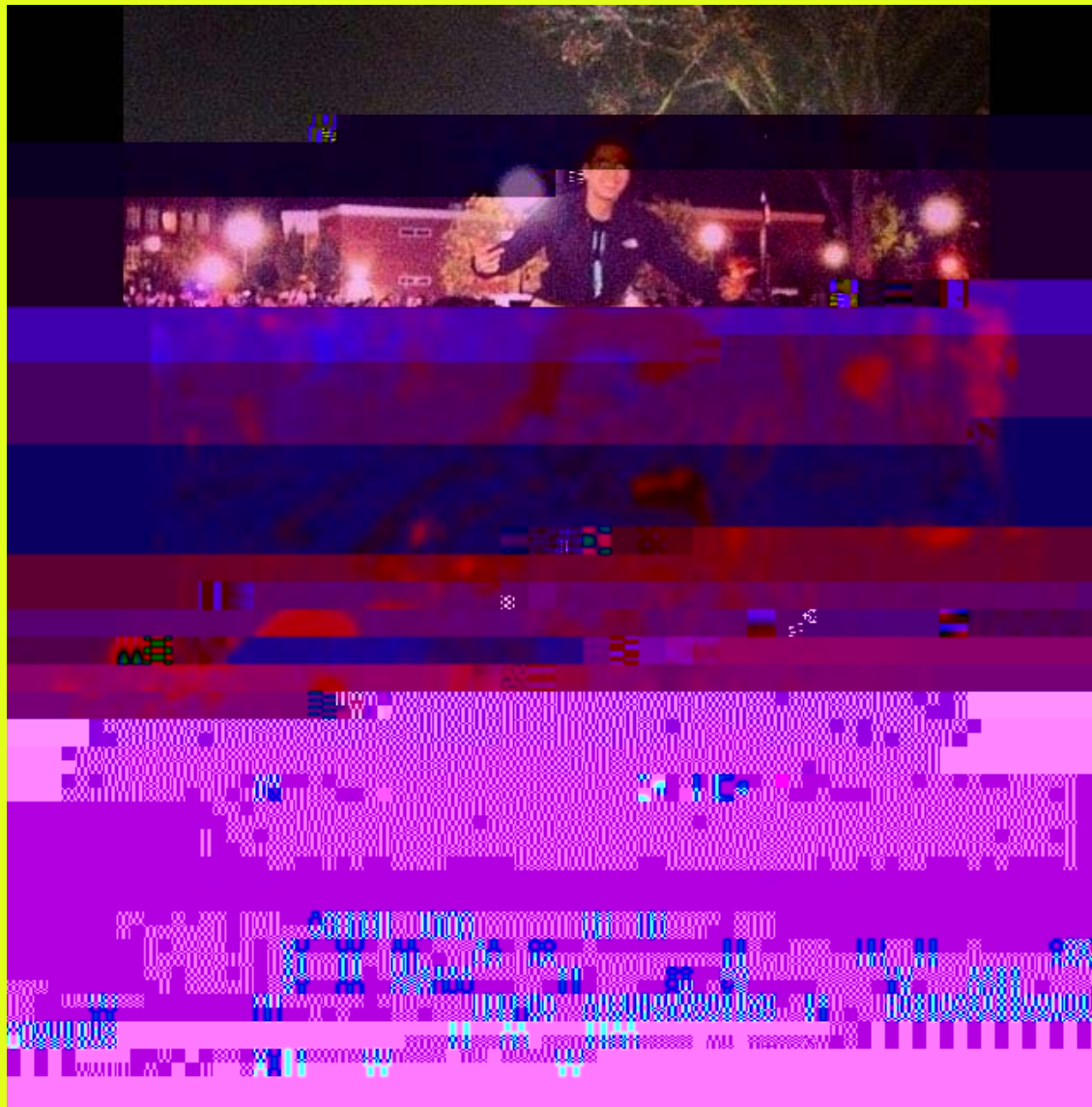


When you can do this?

From the Comfort of Your Favorite Coffee Shop



From this



Virtual War Machine

- Some smart protesters have already figured this out

Define “Nation-State”



“The OpIsrael campaign was launched by the hacking collective in retaliation for attacks on Gaza.”
- *BBC News*

Think Your Company is Not A Target?

The hackers who successfully infiltrated the network of JPMorgan Chase and hit 83 million records also breached the networks of approximately nine other financial institutions, none of which has been publicly named.

The report quotes unnamed U.S. officials, who suspect the hackers were operating from Russia and “appear to have” ties to the Russian government:

“It could be in retaliation for the sanctions” placed on Russia, one senior official briefed on the intelligence said.



Sony's Snowden Moment

“I ran this company and I had to worry about everybody ... People were really scared. ... But nagging in the back of my mind, I kept calling [IT] and being like, ‘They don’t have our emails, tell me they don’t have our emails,’” she said. “But then they did. That was a bad moment. And you know what you write in emails.”

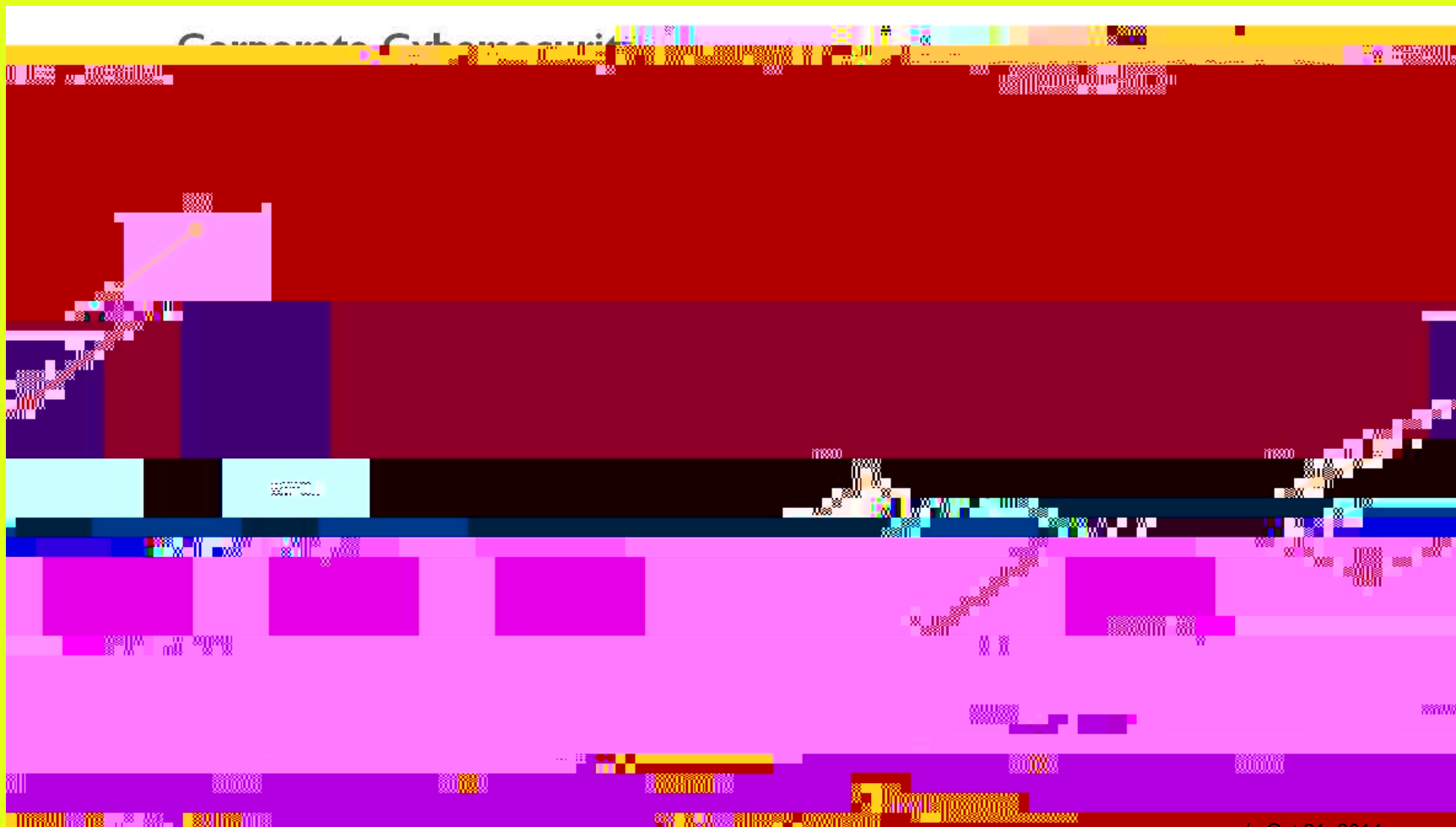
– *Amy Pascal, ex-Sony Pictures co-chair*

Not Wanting to be the Next Sony

And so now we get this:

- Piper Jaffray: Security the top spending priority for CIOs this year “with a whopping 75% of the respondents saying they would increase spending in 2015.”
- ComputerWorld survey in Nov 2014 found overall security budgets will increase 46% in 2015
- Gartner: Companies to spend **\$77BN** in ITsecurity Com957 c 27.96 0 0 27.96 70.7 0 27GT T

Corporate VC's Back With a Vengeance



a/o Oct 21, 2014

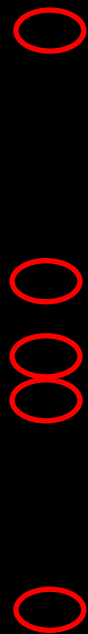
And Look Who's a Player

Rank	Investor
2	Google Ventures
3	Qualcomm Ventures
5	In-Q-Tel
6	INMINT Dept from Micro Ventures
6	T-Venture
9	Citrix Systems
9	Samsung Ventures
9	Salesforce Ventures
9	Cisco Investments
9	Citi Ventures
9	Symantec

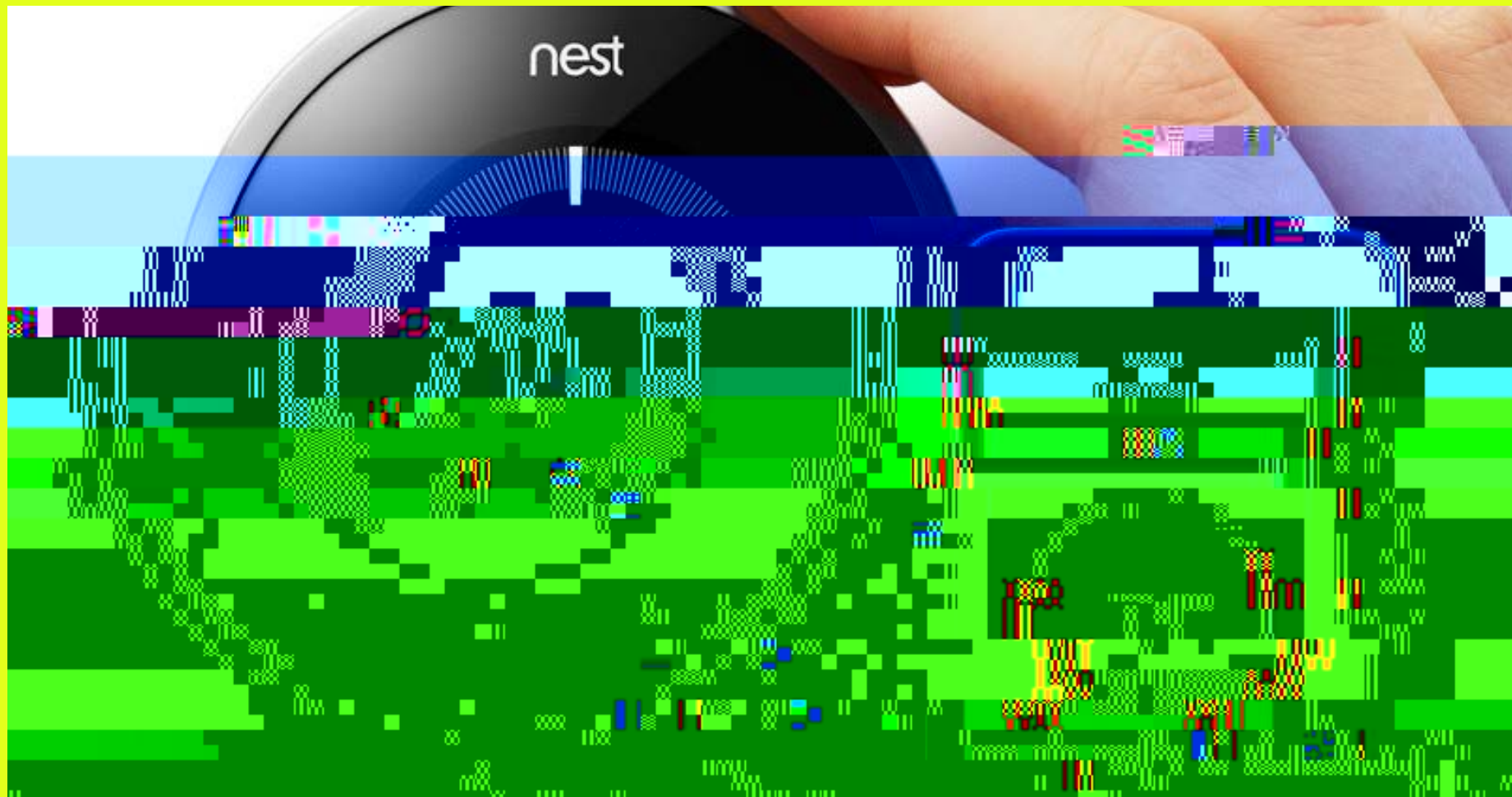
VC's Making It Rain

- Public market valuations for security very rich
 - FEYE: 30% premium
 - PANW: 76% premium
 - PFPT: 26% premium
 - SPLK: 70% premium
- Oh, and that is for revenues (in 2016), not earnings...
- 2016 P/E analysis:
 - FEYE: NMF
 - PANW: 72.7X
 - PFPT: NMF
 - SPLK: 621.1X

		Mkt. Cap		EV/ Rev Grw.		EV/ Rev Grw.		EV/ Rev Grw.		Software Ven	
Sales	Est									Sales	Est
4.7x	21.4%	ATHN	Athenahealth Inc.	\$134.61	\$5,141	7.0x	26.5%	5.7x	22.1%		
2.4x	24.6%	BNFT	Benefitfocus, Inc.	\$21.08	\$539	3.8x	29.5%	3.0x	26.3%		
5.4x	22.1%	CPM	Cloudmark, Inc.	\$63.95	\$1,180	7.7x	21.0%	5.7x	21.1%		



But Now It Is This



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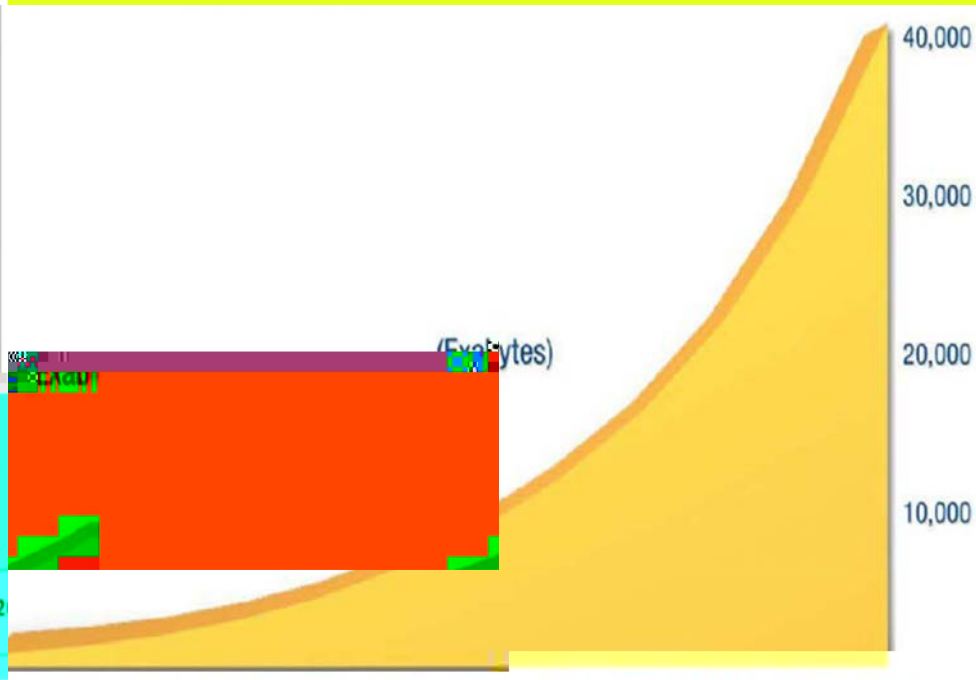
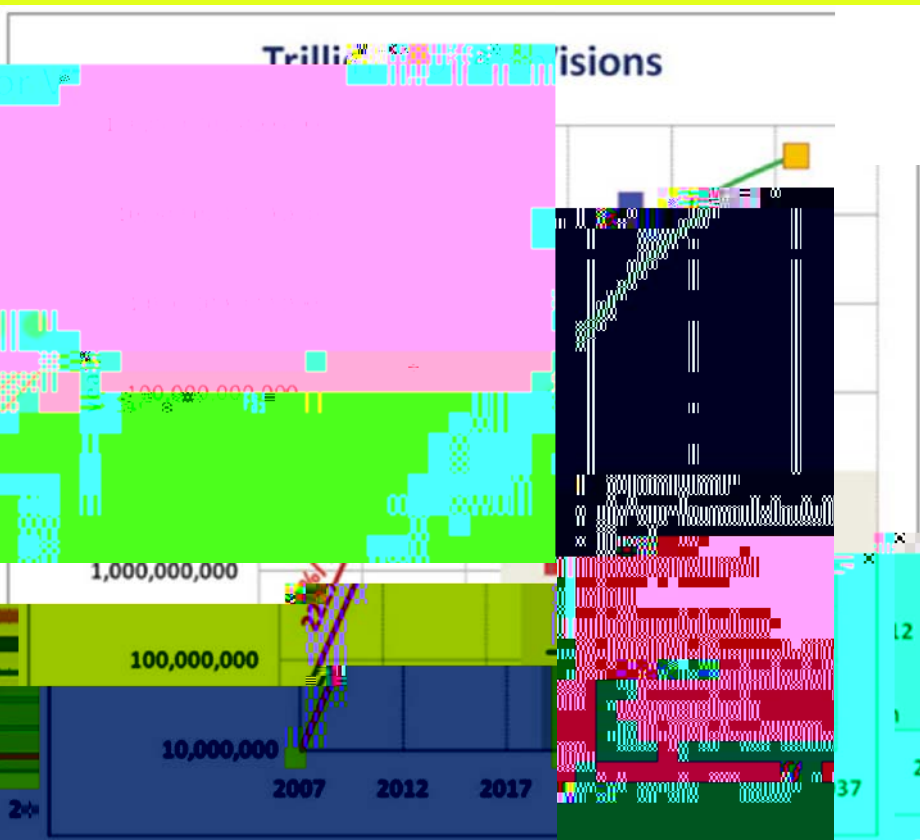


Big and Fast

More Sensors...

...More Data

44 Zettabytes by 2020

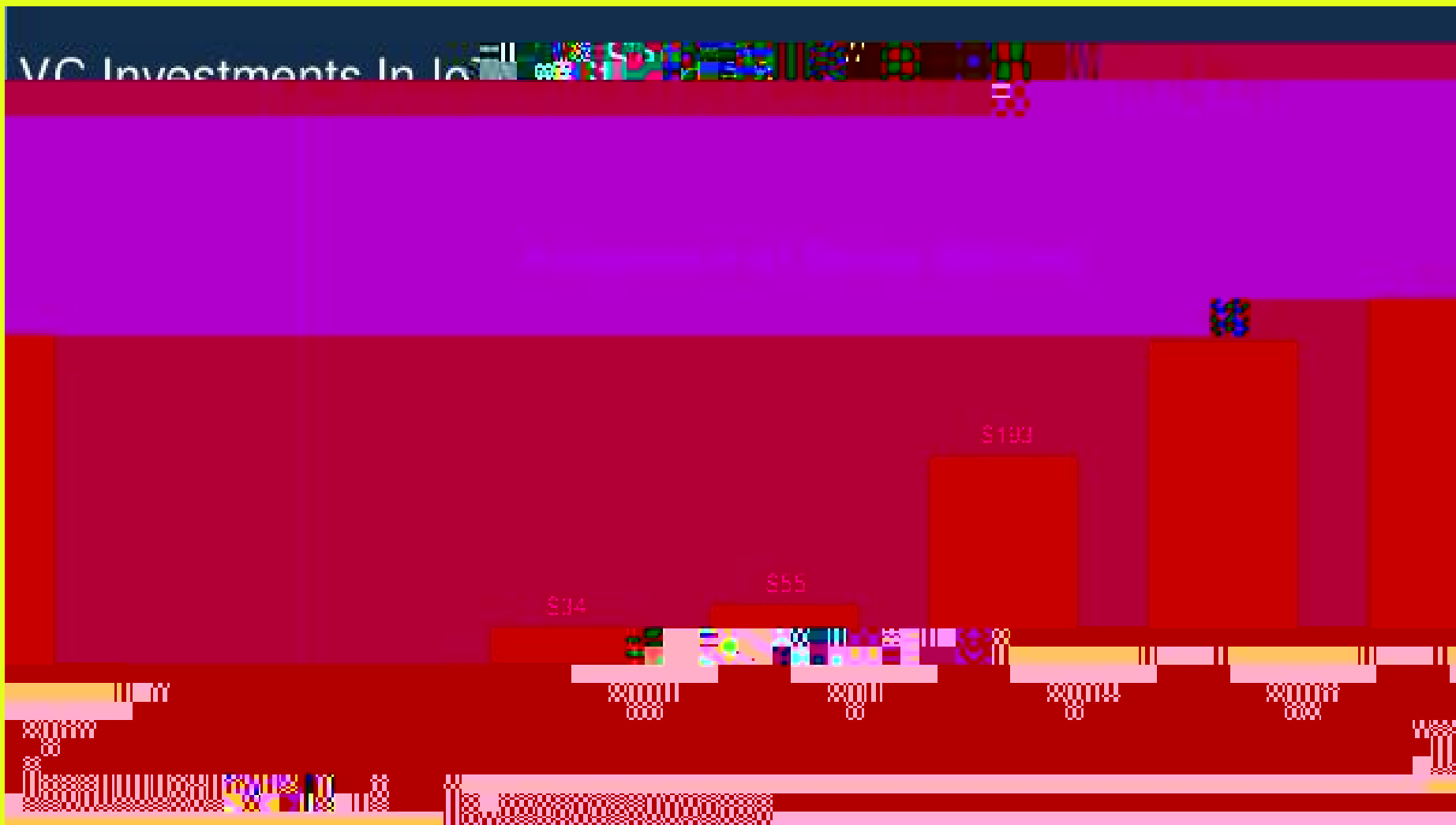


*Note 1 ZB = 1 BN TBs

This IDC
by 2020
Digital
in-2020.

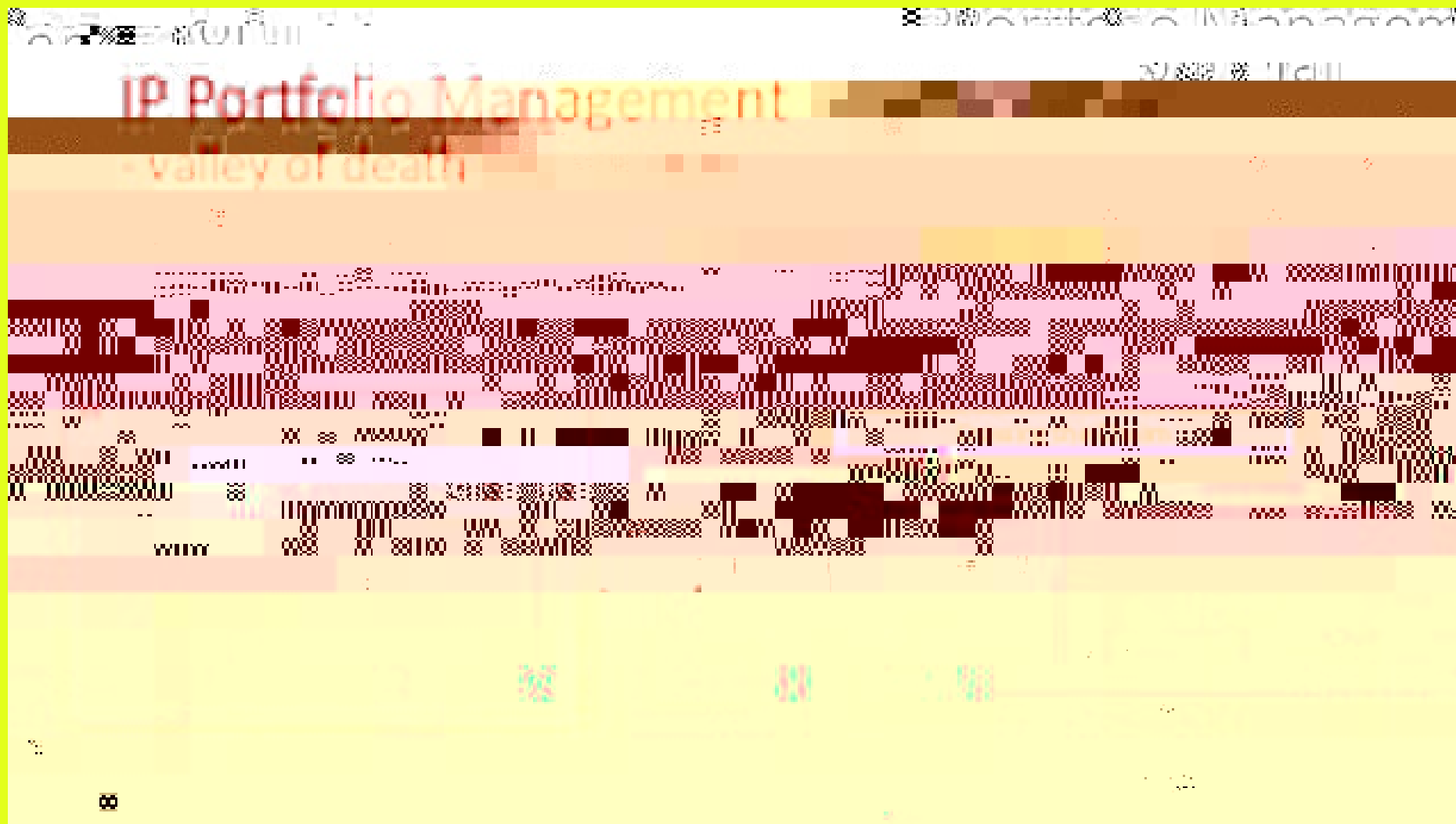
VC Money Already Flowing to IoT

VC Investments In IoT



But Automation Already Revealing Issues

Know Your Market



Cyber Security Will Remain Hot

- **There is an undeniable crucial need for innovation**
 - **Tech transfer will see greater interest if it can succeed in crossing the chasm**
 - **That means finding the champion to get it over the line**
-

A Call to Arms

What's your idea?

Efficient Market Theory

What is this?
QUESTIONS ?

pkuper@iq.t.org