



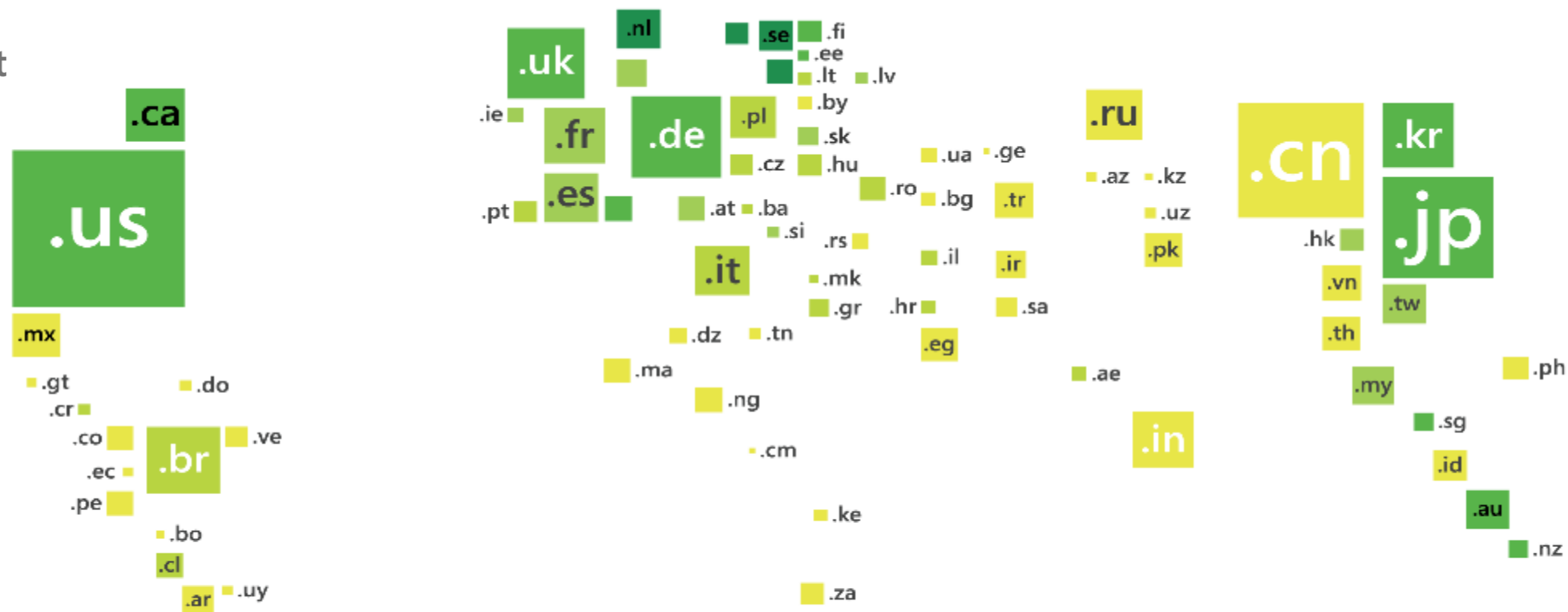
A Digital Geneva Convention

CEPS, March 29, 2017

Jan Neutze

Director of Cybersecurity Policy (Europe/Middle East/Africa)

Microsoft



2005 Internet User Map

Sizing Legend

■ = 2M Internet Users

□ = 5M Internet Users

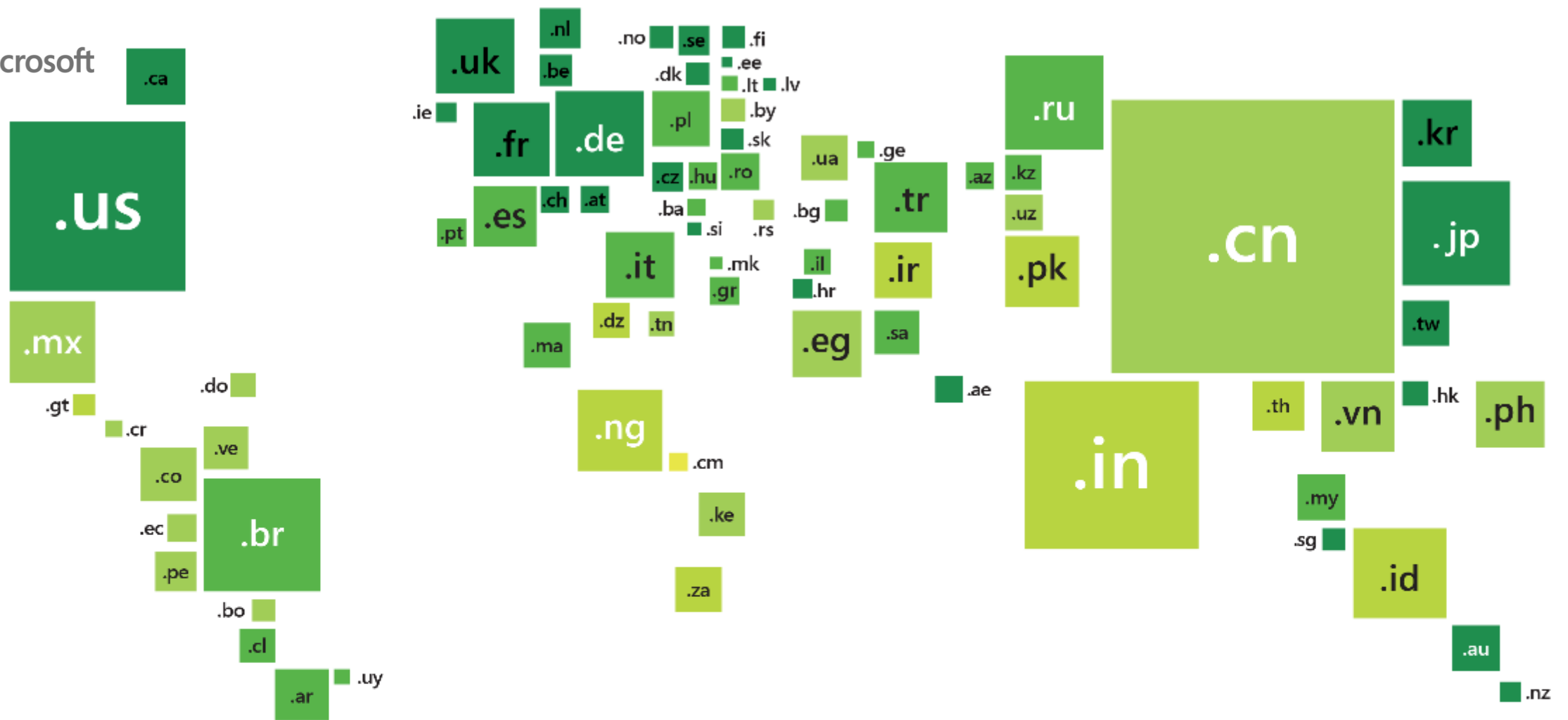
Percent Penetration of Internet Users



0 20 40 60 80 100

Number of Internet Users

USA	China	Japan	Germany	United Kingdom	Brazil	South Korea	India
201M	111M	86M	57M	42M	38M	35M	26M



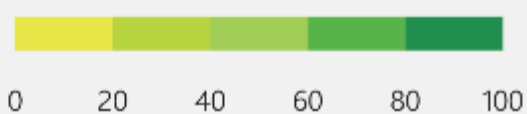
2015 Internet User Map

Sizing Legend

■ = 2M Internet Users

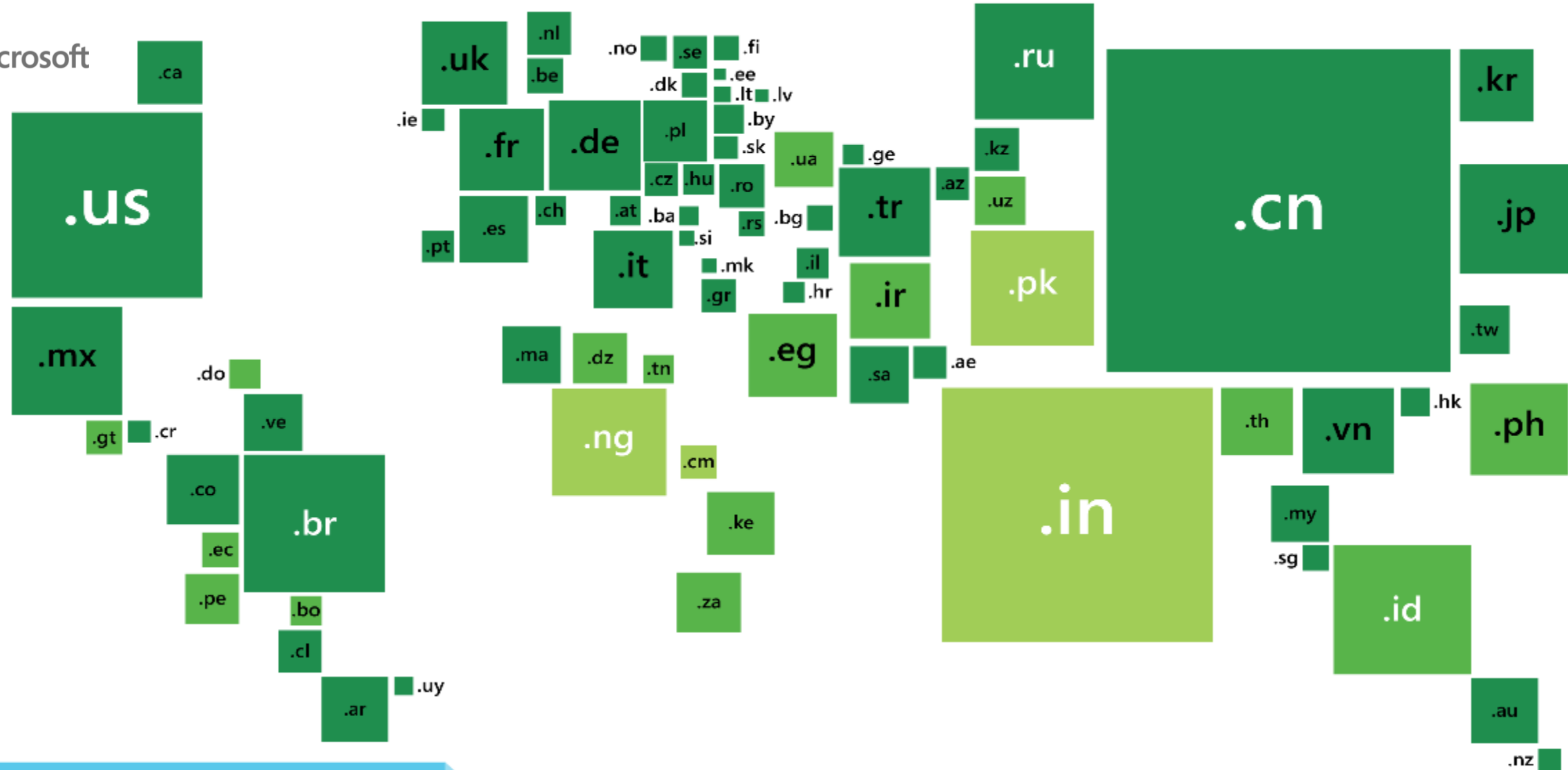
□ = 5M Internet Users

Percent Penetration of Internet Users



Number of Internet Users

China	USA	India	Brazil	Russia	Germany	Mexico	Nigeria
751M	287M	283M	127M	90M	72M	68M	66M

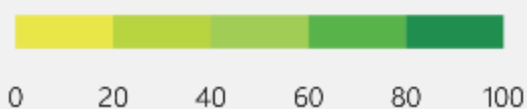


2025 Internet User Map

Sizing Legend

- = 2M Internet Users
- = 5M Internet Users

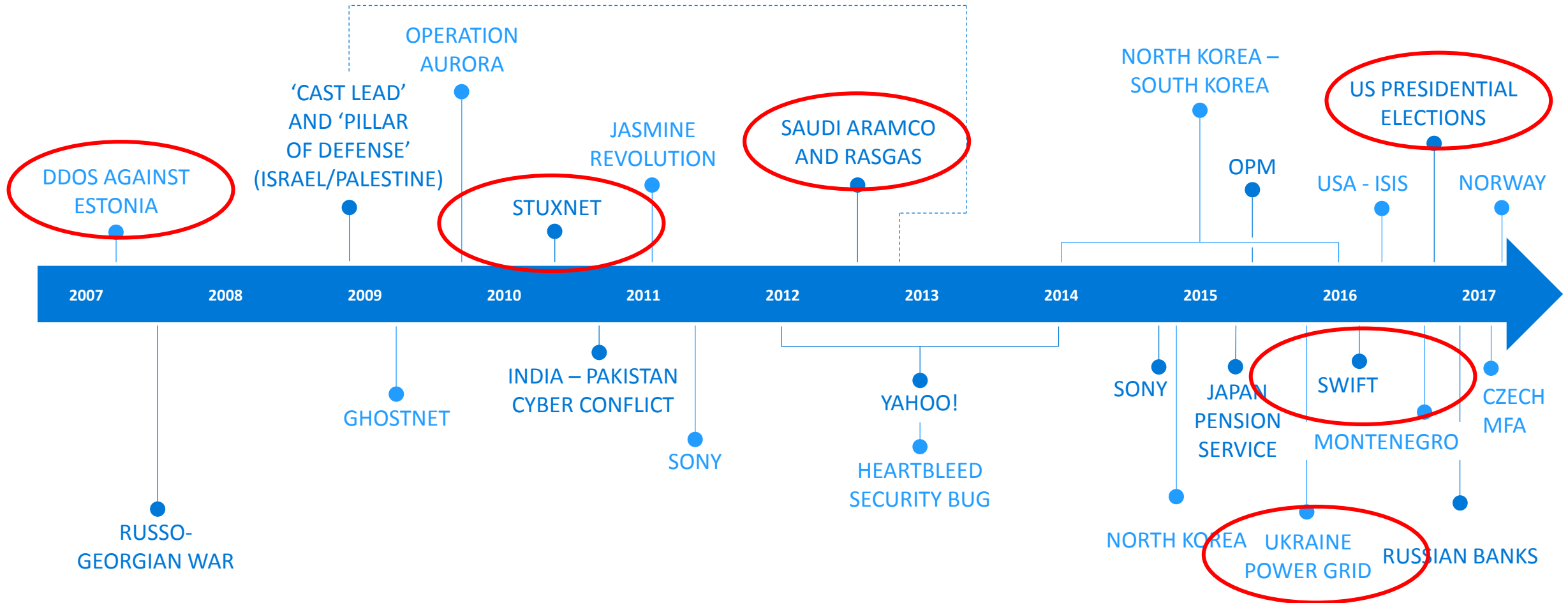
Percent Penetration of Internet Users



Number of Internet Users

China	India	USA	Indonesia	Brazil	Pakistan	Nigeria	Russia
1.1B	708M	317M	183M	173M	146M	126M	124M

Major (alleged) nation-state cyberattacks since 2007



Rise of cyber-attacks impacting the global economy



Average days **attackers are present** on a victim network **before detection**

Security



level issue

Impact of cyber attacks could be as much as **\$3 trillion** in **lost productivity and growth**



Average cost of a data breach to a company

15% increase YoY

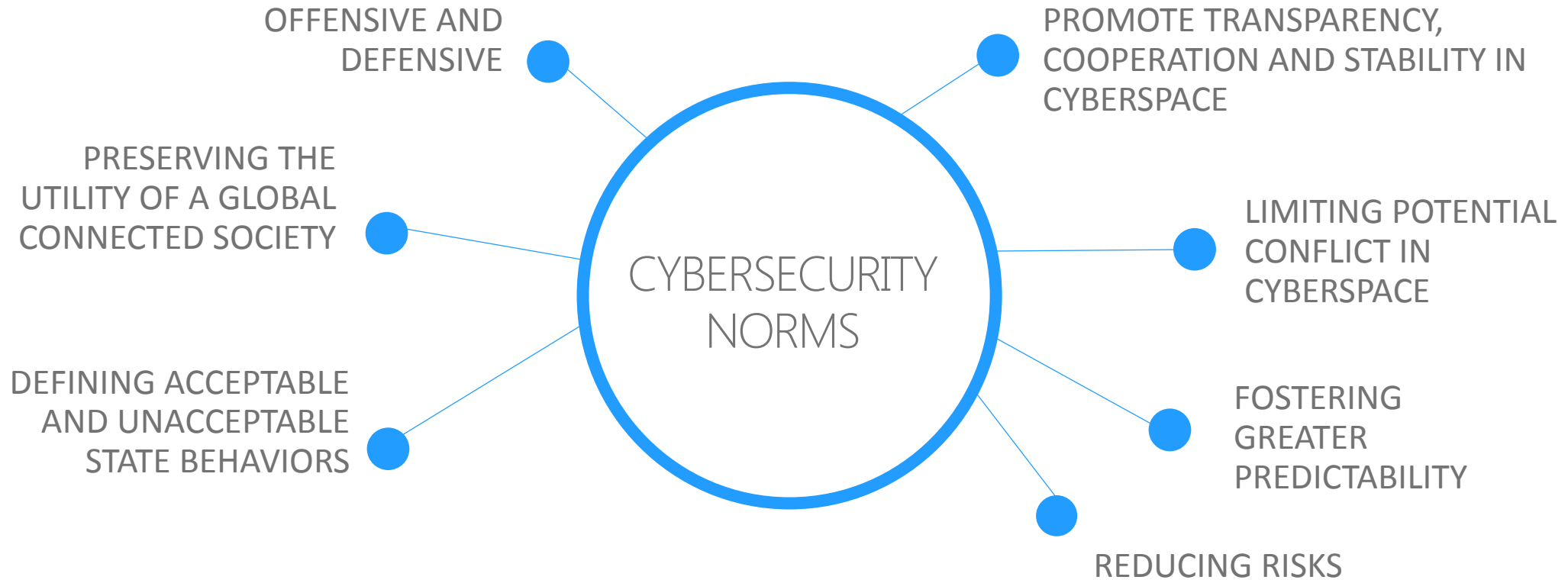
Job security Customer loyalty

Implications

Brand reputation Civil liability

Intellectual property

What are cybersecurity norms?



"Voluntary, non-binding norms, rules or principles of responsible behavior of States aimed at promoting an open, secure, stable, accessible and peaceful ICT environment".

UN Group of Governmental Experts (UNGGE), July 2015

The state of discussions on global norms

Multilateral fora for intergovernmental dialogue



Group of Twenty
(G20)

North Atlantic Treaty Organization
(NATO)

Organization for Security and Cooperation in Europe
(OSCE)

Shanghai Cooperation Organization
(SCO)

United Nations
(UN)

Multi-stakeholder fora



East West Institute
(EWI)

London Process

Munich Security Conference
(MSC)

World Economic Forum
(WEF)

Global Commission for Stability of Cyberspace

Microsoft norms proposal



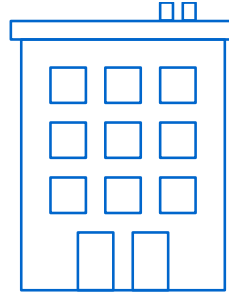
	Nation-states	Global ICT industry
Maintain trust	No targeting of tech companies, private sector or critical infrastructure	No assistance in offensive actions
Support response efforts	Assist private sector to detect, contain, respond to and recover from events	Collaborative remediation after attacks
Coordinated approach to vulnerability handling	Report vulnerabilities to vendors rather than to stockpile, sell or exploit them	Coordinated disclosure practices for vulnerabilities
Mitigate the impact of nation-state attacks	Exercise restraint in developing cyber weapons and ensure that any developed are limited, precise and not reusable	Collaborative and proactive defense
Stop proliferation of vulnerabilities	Commit to non-proliferation activities to cyber weapons	Support for intergovernmental defensive efforts
Prevent mass events	Limit offensive operation to avoid a mass event	No corresponding norm for the global ICT industry.
Patch customers globally	No corresponding norm for nation-states.	Software patches available to all

Microsoft's vision:



DIGITAL GENEVA
CONVENTION

GOVERNMENTS



"TECH ACCORD"

INDUSTRY



ATTRIBUTION
COUNCIL

PUBLIC-PRIVATE
PARTNERSHIP



Microsoft

@JanNeutze