SONY

Sony Network Hack 2011





Sony Corporation

Sony Group Organizational Chart Summary (as of April 1st, 2012)

Semiconductor Business Group Device Solutions Business Group

Digital Imaging Business Group

Professional Solutions Group

VAIO & Mobile Business Group Sony Mobile Communications

Home Entertainment & Sound Business Group

Sony Computer Entertainment

Sony Network Entertainment

Headquarters / Common Platforms

- Headquarters
- Corporate R&D
- System & Software Technology Platform
- Advanced Device Technology Platform
- UX, Product Strategy and Creative Platform
- Global Sales & Marketing Platform
- · Manufacturing, Logistics, Procurement and Quality Platform

Sony Financial Holdings Group

Sony Music Entertainment

Sony Pictures Entertainment

Medical Business Unit

Sony Computer Entertainment Inc.

- Video Game Company
- Tokyo, Japan
- PlayStation consoles
- Andrew House President and Sony Group
 CEO of SCE
- 1,400 employees
- PlayStation Network



Crisis Timeline April 17-19 April 19 April 20 April 21 April 22 April 24 April 23 April 25 Cyber Sony • "Will •"no Network "External First •"no discovers updates" Attack Shuttake intrusion time no updates" Hack down is the about 1 message to 2 cause" by Sony days" May 14 April 27-28 April 26 May 5 May 4 May 2 May 1 Sony Letter Letter to Media News •Q&A for •Letter to **US House** Release -Conferannouncfrom customer customer Howard of Reprenew hack "private ment: ence Stringer sentainfo Restoratinfo SCEI CEO tives stolen" ion

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April 20

"We're aware certain

functions of PlayStation

Network are down. We will

report back here as soon as

we can with more

information."



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April 21

"we are investigating the cause of the Network outage" "it may be a full day or two"

April 22

"An external intrusion on our system has affected our PlayStation Network and Oriocity services."

SONY April 26

- news conference unveil tablet PCs
- 12 hours later, statement confirmed personal information stolen
- difference in timing between intrusion identified and Sony learned consumers' data compromised.

April 27 - 28

Q&A to answer customer questions



SONY May 1

- Press Conference in Tokyo
- Kazuo Hirai
 - Bring Network back online in stages
 - full service resumed by mid-May.
 - Complementary offering of identity theft protection program and Welcome Back appreciation program

SONY May 2

Press Release

Another 25 million people's private information
compromised
SOE Network close down

May 4

- Written response to the US House of Representatives' questions
- We followed four key principles:
 - Act with care and caution.
 - Provide relevant information to the public when it has been verified.
 - Take responsibility for our obligations to our customers.
 - Work with law enforcement authorities.

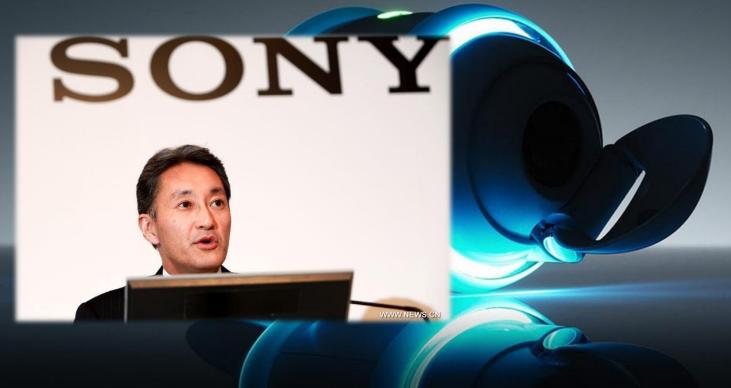
5 May 5

Letter from Howard Stringer – at the time
 SCE CEO

- \$1 million identity theft insurance policy per user

SON May 14

- Video message by Kazuo Hirai
 - PlayStation Network Restoration Announcement



Big Deal?

Texas State Comptrollers Office (2010-2011), Epsilon (April 2011), Canadian Government (April 2011)

- The amount of Data
 - largest data security breaches in history
- The type of information
 - credit card information
- Identity theft
 - Name, address, country, email address, birthdate, password, login name and PSN online ID
 - People use the same password for different accounts



Key Stakeholders

→ 77 million customers worldwide

Primary stakeholders

- PSN users
- Oriocity network users
- Gamers
- Sony employees

Hacktivist:

"Interventionist media art practices that engage and critique the dominant political and economic order" (Raley, 2009, p.1)

Secondary stakeholders

- Game developers
- PlayStation partners
 (e.g. Netflix, Hulu, Oore, Vudu)
- Hackers/hacktivist groups (e.g. Anonymous)
- International Gov. officials (e.g. US Senator)
- International Gov. agencies

 (e.g. Information Commissioner
 Office, UK)
- Insurance companies
- Credit card industry
- Media

Stakeholder Impact

SONY	Impact on:			
	Revenue	Reputation	Legislation	Customer Loyalty
Stakeholders:				
PSN users	X	X		X
Qriocity network users	X	X		X
Gamers	X	X		X
Game developers		X		
PlayStation partners		X		
Hackers/ Hacktivist groups	X	X		
International Government officials		X	X	
International Government agencies		X	X	
Insurance companies			X	
Credit card industry			X	
Sony employees		X		X
Media		X		X

Stakeholder Impact

PSN/Oriocity Consumer reactions

Speculation on the PlayStation Blog & online media Empathy for Sony → Frustration → Anger

+ Korbei83 on April 26th, 2011: If you have compromised my credit information, you will never receive it again. If the fact that you've waited this long to divulge this information to your customers is deplorable. Shame on you

SONY

+ sid4peeps on April 26, 2011: Ino regard for customers here.

+ jonabbey, April 26, 2011: It's rather incredible that this is the first meaningful communication you have given us [...] you really can't go wrong by over-communicating, here. It hope you will be telling us more about how this happened.

Stakeholder Impact

International Government reactions

Chastised Sony for failure to inform & protect users of the data security breach

April 26, 2011

Mr. Jack Tretton, President and CEO

Sony Computer Entertainment America

Dear Mr. Tretton:

I am writing regarding a recent data breach of Sony's PlayStation Network service. I am troubled by the failure of Sony to immediately notify affected customers of the breach and to extend adequate financial data security protections.

[...] When a data breach occurs, it is essential that customers be immediately notified about whether and to what extent their personal and financial information has been compromised.

[...] Compounding this concern is the troubling lack of notification from Sony about the nature of the data breach. Although the breach occurred nearly a week ago, Sony has not notified customers of the intrusion, or provided information that is vital to allowing individuals to protect themselves from identity theft, such as informing users whether their personal or financial information may have been compromised. Nor has Sony specified how it intends to protect these consumers.

PlayStation Network users deserve more complete information on the data breach, as well as the assurance that their personal and financial information will be securely maintained. I appreciate your prompt response on this important issue.

Sincerely,
Richard Blumenthal United States Senate

And More Comments

"Keeping your stakeholders in the dark for too long will create deep rooted suspicion and mistrust when the news breaks, potentially severing all positive sentiments previously built over the years," said Danny Phan, executive director at public relations firm Pelham Bell Pottinger Asia.

"The fault lies with the executives who declared a war on hackers, laughed at the idea of people penetrating the fortress that once was Sony, whined incessantly about piracy, and kept hiring more lawyers when they really needed to hire good security experts," said George Hotz a well -known hacker.

David Skillicorn, a Queen's University computer science professor who researches cyber security, said "It's not clear to me why on earth you would want anyone's physical address as part of being able to play on the PlayStation."

"The initial response was definitely slow," said Yasuyuki Katagi, president of Ogilvy Public Relations Worldwide.
He said Japanese firms were used to keeping problems quiet because local customers would assume they were taking steps to fix

"However, this doesn't apply when a problem extends to the global business environment," Katagi added.

Actions & Responses Timeline

Thurs., April 21

Tues., April 19

Sony learned of PSN & Qriocity compromise

No public announcement

Sony & external security investigations.
Announces these will take 1-2 days

Speculation on Sony Europe's PlayStation blog.

Sat., April 23

Sony announces they are rebuilding networks but did no disclosure of when services would resume

Mon., April 25

Sony Tokyo spokesman: "thorough investigations underway." Wed., April 27

Class-action lawsuit filed in US

Sony published website Q&A Fri., April 29

Speculation that 2.2 million credit card numbers were stolen

US Congressional committee asks Sony to explain several issues

PSN & Qriocity offline.

No disclosure of hacking.

PSN blog: "We're aware certain functions of PlayStation Network are down. We will report back here as soon as we can with more information."

Sony publicly announced problem as "external intrusion"

No disclosure of when services would resume.

Fri., April 22

No updates

Sun., April 24

Detailed public statement & letter on the hack, confirming stolen personal information

"While there is no evidence at this time that credit card data was taken, we cannot rule out the possibility"

Tues., April 26

Sony hinted some user compensation: "we are currently evaluating ways to show appreciation for your extraordinary patience..."

Announced plans to bring PSN & Qriocity back

Sony executives

news conference

apologized at

in Tokyo.

Sun., May 1

Thurs., April 28

Wed., April 20



S Outcomes

- Implementation of new security measures
- Creation of the position: Chief Information Security Officer
- Move to a new data centre
- Forced system update
- Complimentary offering
 - Debix Inc., AllClear ID Plus
- Welcome Back program
- 30 days free membership of PlayStation Plus and Oriocity subscribers
- Changes of PlayStation Network Terms & Conditions
- \$1 million data theft insurance policy

- Coombs (2007) situational crisis communication theory (SCCT)
 - Crisis type: accident crisis \rightarrow low crisis responsibility
 - Crisis history: similar crisis in the past, but not to same magnitude (January, 2011)
 - Prior reputations: good
- Attribution theory (Coombs, 2007)
 - Stability: stable
 - External vs. Internal control: external
 - Personal control: unforseen, could increase preventative measures
 - For crises with low attributions of crisis responsibility and an intensifying factor, add compensation and/or apology strategies to the instructing information and care response

- Instructing information
- Apr 26 2011, Update on PlayStation Network and Oriocity by Patrick Seybold // Sr. Director, Corporate Communications & Social Media: In response to this intrusion, we have: Temporarily turned off PlayStation Network and Oriocity services; Engaged an outside, recognized security firm to conduct a full and complete investigation into what happened; and Ouickly taken steps to enhance security and strengthen our network infrastructure by re-building our system to provide you with greater protection of your personal information.
- Apr 26 2011, Update on PlayStation Network and Oriocity by Patrick Seybold // Sr. Director, Corporate Communications & Social Media: For your security, we encourage you to be especially aware of email, telephone, and postal mail scams that ask for personal or sensitive information[...] When the PlayStation Network and Oriocity services are fully restored, we strongly recommend that you log on and change your password. Additionally, if you use your PlayStation Network or Oriocity user name or password for other unrelated services or accounts, we strongly recommend that you change them, as well. To protect against possible identity theft or other financial loss, we encourage you to remain vigilant, to review your account statements and to monitor your credit reports

- Adjusting information
- Apr 26 2011, Update on PlayStation Network and Oriocity by Patrick Seybold // Sr.
 Director, Corporate Communications & Social Media: We have discovered that between
 April 17 and April 19, 2011, certain PlayStation Network and Oriocity service user account information was compromised in connection with an illegal and unauthorized intrusion into our network.
- Apr 26 2011, Update on PlayStation Network and Oriocity by Patrick Seybold // Sr. Director, Corporate Communications & Social Media: Although we are still investigating the details of this incident, we believe that an unauthorized person has obtained the following information that you provided: name, address, country, email address, birthdate, PlayStation Network/Oriocity password and login,[...] While there is no evidence at this time that credit card data was taken, we cannot rule out the possibility.
- Apr 30 2011, Press Release by Patrick Seybold // Sr. Director, Corporate Communications & Social Media: The company is also creating the position of Chief Information Security Officer, directly reporting to Shinji Hasejima, Chief Information Officer of Sony Corporation, to add a new position of expertise in and accountability for customer data protection and supplement existing information security personnel.

- Rebuilding reputation management strategies (e.g. rebuilding: compensation, apology, repentance, rectification)
- May 05 2011, Letter from Howard Stringer (CEO): We are also moving ahead with plans to help protect our customers from identity theft around the world. A program for U.S. PlayStation Network and Oriocity customers that includes a \$1 million identity theft insurance policy per user was launched earlier today and announcements for other regions will be coming soon.
- Apr 30 2011, Press Release by Patrick Seybold // Sr. Director, Corporate Communications & Social Media: We have learned lessons along the way about the valued relationship with our consumers, and to that end, we will be launching a customer appreciation program for registered consumers as a way of expressing our gratitude for their loyalty during this network downtime, as we work even harder to restore and regain their trust in us and our services.
- May 05 2011, Letter from Howard Stringer (CEO): As a company we and I apologize for the inconvenience and concern caused by this attack. Under the leadership of Kazuo Hirai, we have teams working around the clock and around the world to restore your access to those services as quickly, and as safely, as possible.

- Lessons on communicating effectively in crisis situations (Ulmer, et al., 2011, p.61)
- 1. X Determine your goals for crisis communication
- 2. **X** Before a crisis, develop true equal partnerships with organisations and groups that are important to the organisation
- 3. XAcknowledge your stakeholders, including the media, as partners when managing a crisis
- 4.

 Develop strong, positive primary and secondary stakeholder relationships
- 5. X Listen to your stakeholders
- 6. Communicate early about the crisis, acknowledging uncertainty, and assure the public that you will maintain contact with them about current and future risk
- 7. Avoid certain or absolute answers to the public and media until sufficient information is available
- 8. 🗸 Do not over-reassure stakeholders about the impact the crisis will have on them.
- 9. XThe public needs useful and practical statements of self-efficacy during a crisis
- 10. ✓ Acknowledge that positive factors can arise from organisational crises

Sony's explanation of why they took so long to communicate (diminishment reputational repair strategy)

- **27 April, blog post** by Nick Caplin – Head of Communications, Sony Europe: There's a difference in timing between when we identified there was an intrusion and when we learned of consumers' data being compromised. We learned there was an intrusion 19th April and subsequently shut the services down. We then brought in outside experts to help us learn how the intrusion occurred and to conduct an investigation to determine the nature and scope of the incident.

It was necessary to conduct several days of forensic analysis, and it took our experts until yesterday to understand the scope of the breach. We then shared that information with our consumers and announced it publicly yesterday evening.

- Choice of media for crisis response
 - Blog posts
 - → When used properly used and managed, blogs create and enhance audience engagement in crisis communication, which leads to positive post-crisis perceptions (Yang et al., 2010; Valentini and Romenti, 2011).
 - Direct emails to registered network users
 - Websites
 - www.us.playstation.com/support
 - www.griocity.com
 - Media
 - Media Outlets

Strengths and Weaknesses

- Frequent updates
- Appropriate spokesperson
- Good choice of communication outlet (blog)

- Did not provide appropriate information early enough
- Overconfidence
- Lack of media contact
- Failed to communicate to all affected stakeholders

Recommendations

"Whether an organization survives a crisis with its reputation, operations, and financial condition intact is determined less by the severity of the crisis than by the timeliness and effectiveness of the response." (Garcia, 2006)

Recommendations

Better communication guidelines for a crisis with high uncertainty

 Develop tailored communication for different stakeholder groups

Tell the truth

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