ネットワークという巨大な生命を育む、次世代の情報セキュリティへ。

情報セキュリティ大学院大学

4th Japan & US
Computer Crime & Security Survey

Katsuya Uchida
Professor, Ph. D.
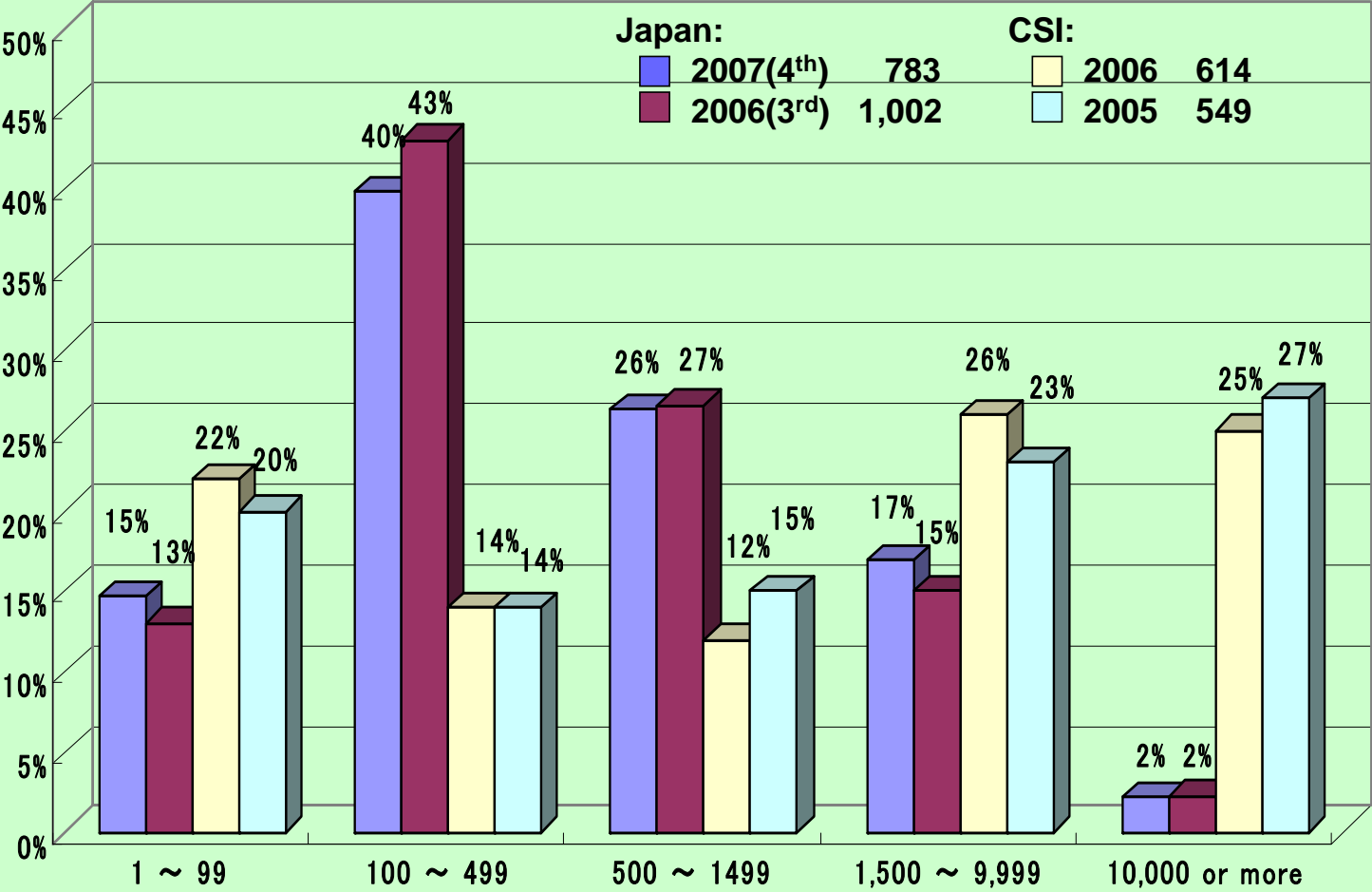Institute of Information Security
uchida@iisec.ac.jp

INSTITUTE of INFORMATION SECURITY
Graduate School of Information Security

Respondents by Number of Employees

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)
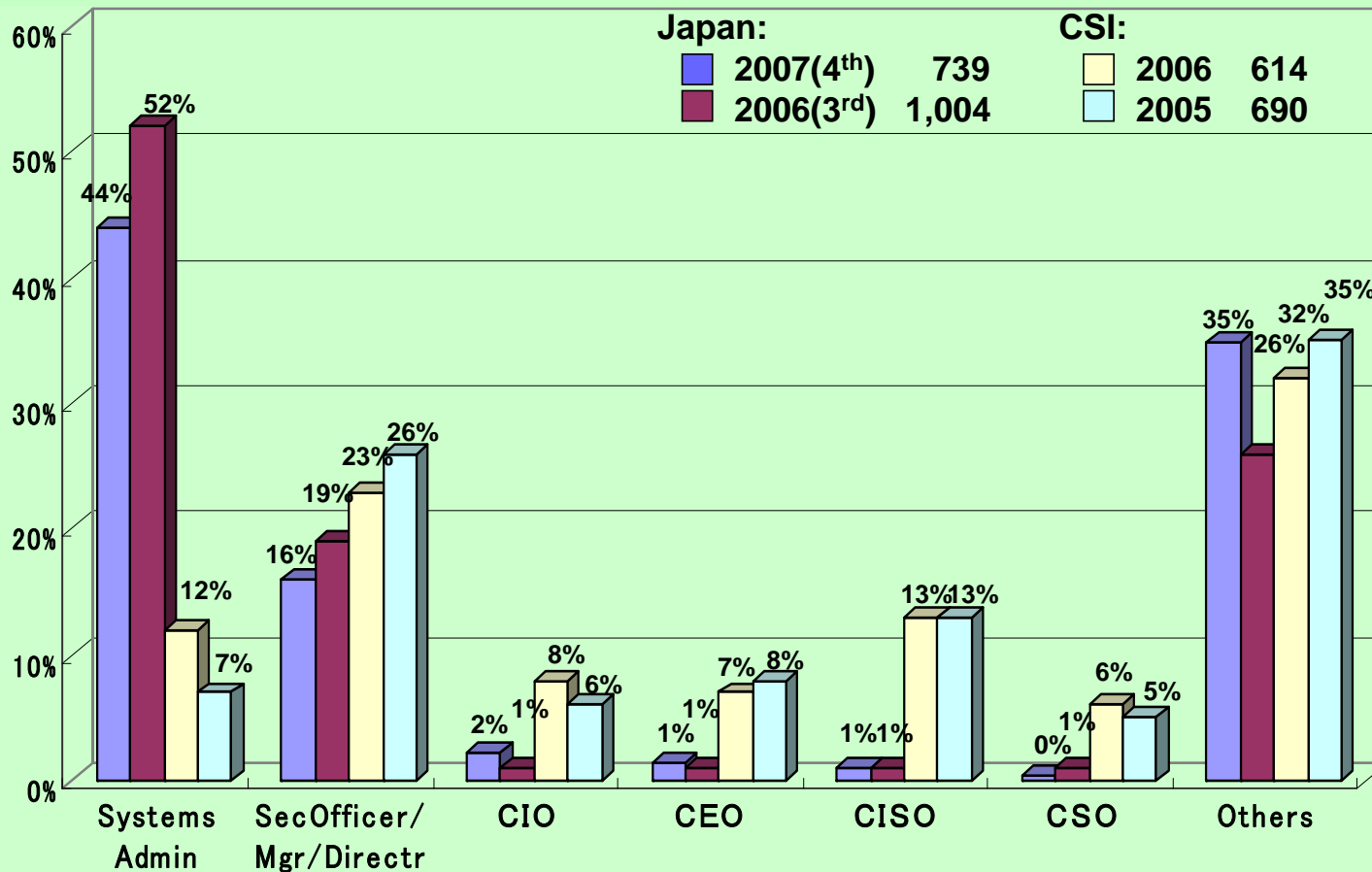
2

Respondents by Industry Sector

C S I			JAPAN		
Industry Sector	2006	2005	Industry Sector	2007	2006
Financial	17%	17%	Manufacturing	27%	34%
High-Tech/Info. Tech	11%	15%	Retail	15%	14%
Manufacturing	9%	9%	Educational	13%	12%
Federal Government	8%	9%	Government	13%	5%
Medical	7%	7%	Construction	7%	8%
Educational	8%	6%	Telecommunication	7%	7%
State Government	3%	5%	Complex retail	3%	5%
Telecommunication	4%	4%	Transportation	3%	3%
Utilities	3%	4%	Financial	3%	2%
Local Government	3%	2%	Real estate	2%	2%
Transportation	1%	1%	Food / Hotel	1%	1%
Retail	1%	1%	Medical / Welfare	1%	1%
Legal	1%	1%	High-tech	1%	1%
Consulting	14%	-	Utilities	0%	0%
Others	11%	19%	Others	6%	6%

Respondents: CSI: 2006=615,   2005= 699   Japan: 2007=782, 2006=1,004

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

Respondents by Job Description

Japan:
2007(4th)   739
2006(3rd) 1,004

CSI:
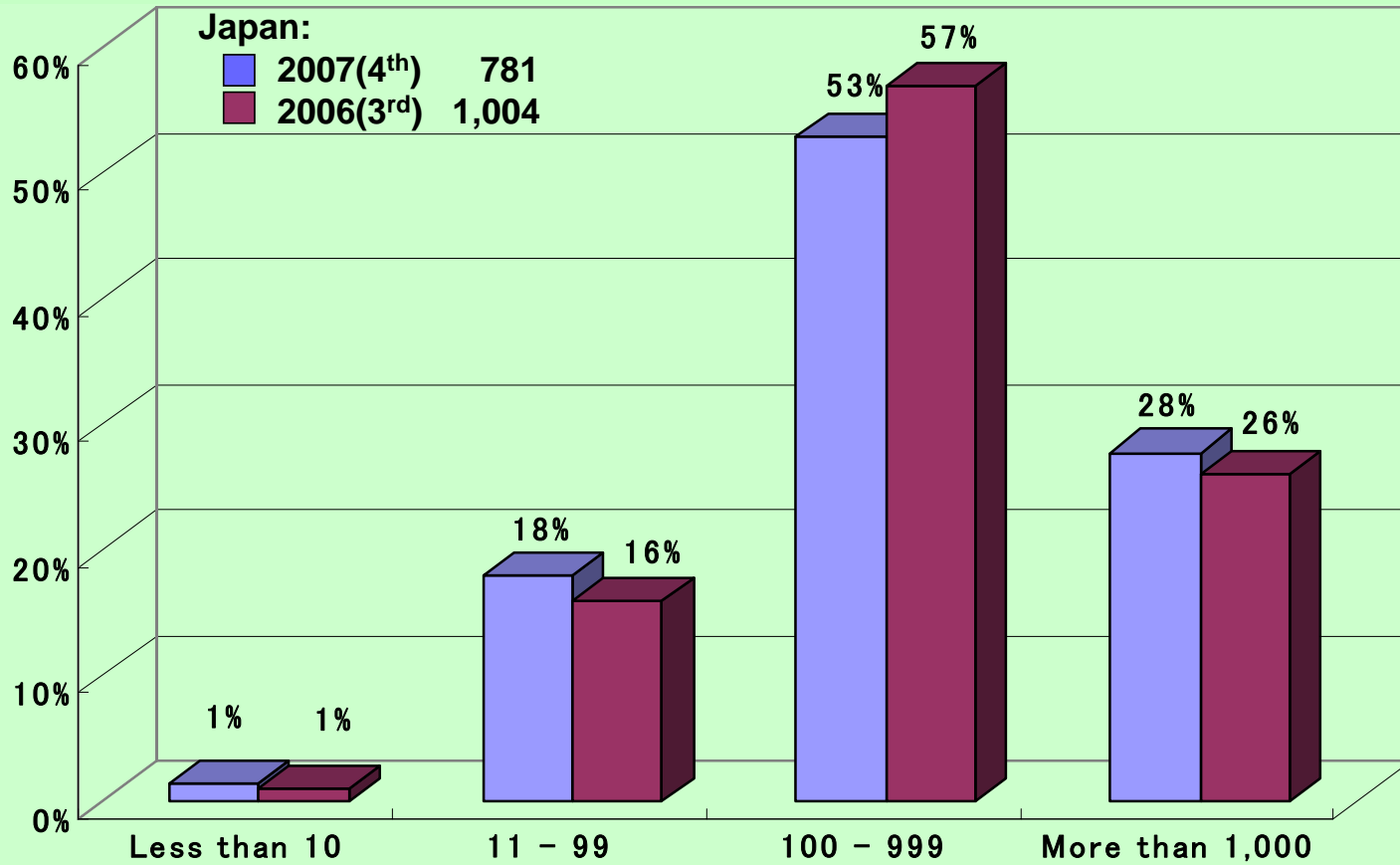2006   614
2005   690

Respondents: CSI: 2006=615,   2005= 690   Japan: 2007=739, 2006=1,004

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

Number of PCs

Japan:
- ■ 2007(4th)   781
- ■ 2006(3rd) 1,004

Less than 10: 1% / 1%
11 – 99: 18% / 16%
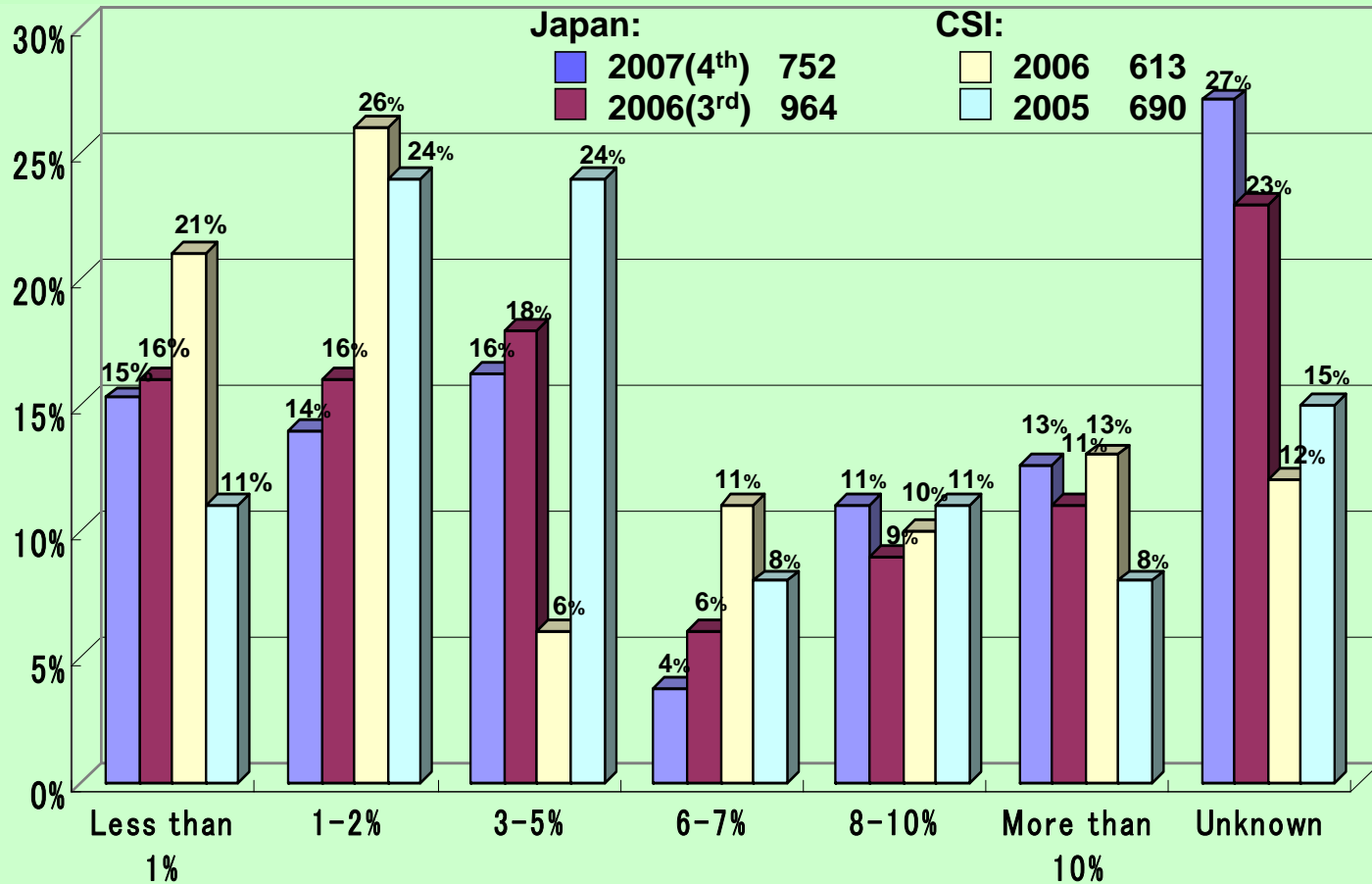**100 – 999:** 53% / 57%
More than 1,000: 28% / 26%

Respondents: Japan: 2007=781   2006=1,004

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

5

Percentage of IT Budget Spent on Security
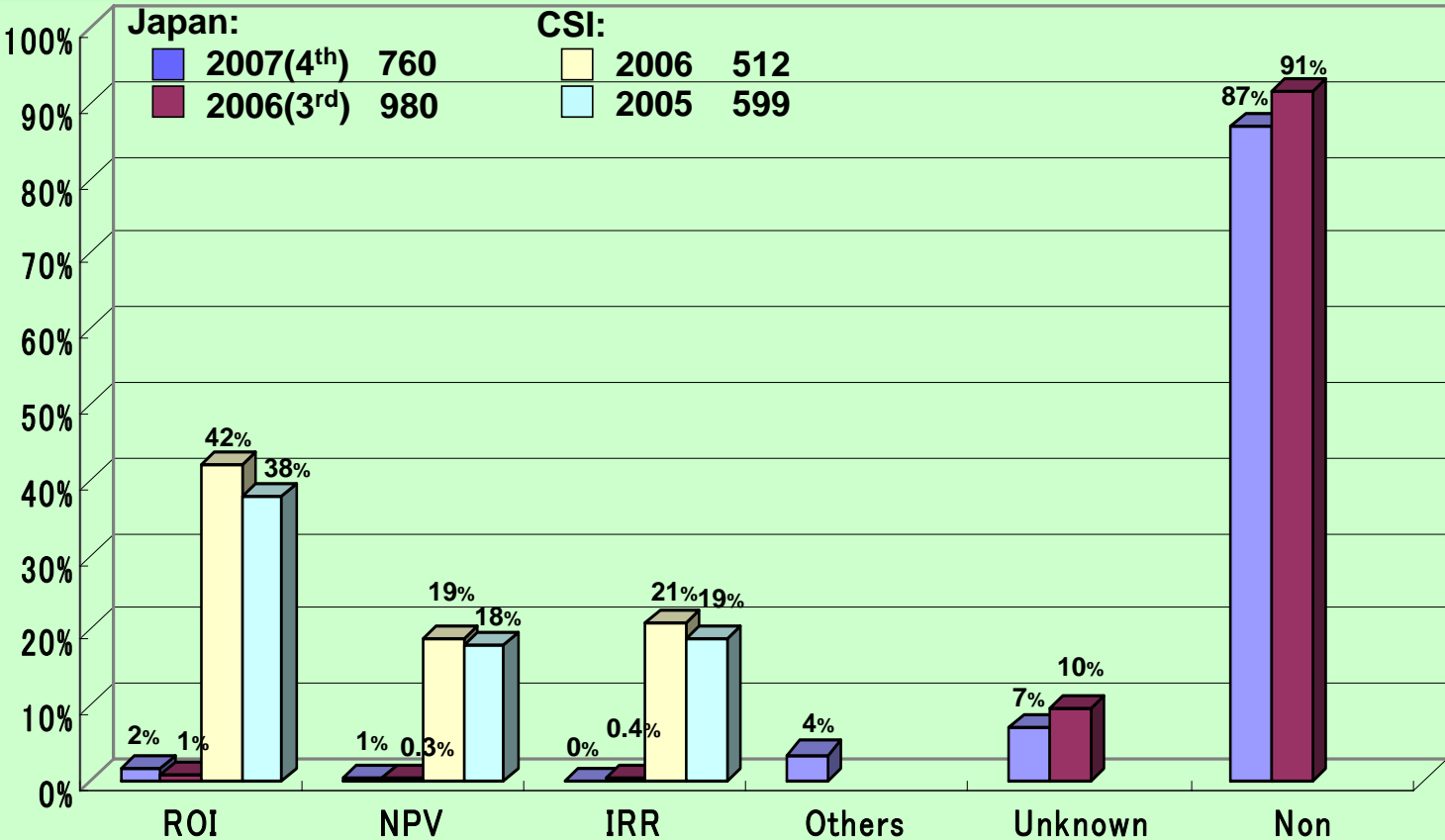
Respondents: CSI: 2006=613,   2005= 690   Japan: 2007=752, 2006=964

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

6

Percentage of Organizations
Using ROI, NPV and IRR Metrics

Japan:
2007(4th) 760
2006(3rd) 980

CSI:
2006 512
2005 599

	ROI	NPV	IRR	Others	Unknown	Non
Japan 2007(4th)	2%	1%	0%	4%	7%	87%
Japan 2006(3rd)	1%	0.3%	0.4%		10%	91%
CSI 2006	42%	19%	21%			
CSI 2005	38%	18%	19%			

Respondents: CSI: 2006=512,   2005= 599   Japan: 2007=760, 2006=980

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

7

Organizations with External
Insurance Against Cybersecurity Risks

Japan:
- 2007(4th) 767
- 2006(3rd) 997

CSI:
- 2006 571
- 2005 652

Insurance: 11%, 8%, 29%, 25%

No Insurance: 89%, 92%, 71%, 75%

Respondents: CSI: 2006=571,   2005= 652   Japan: 2007=767, 2006=997

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)
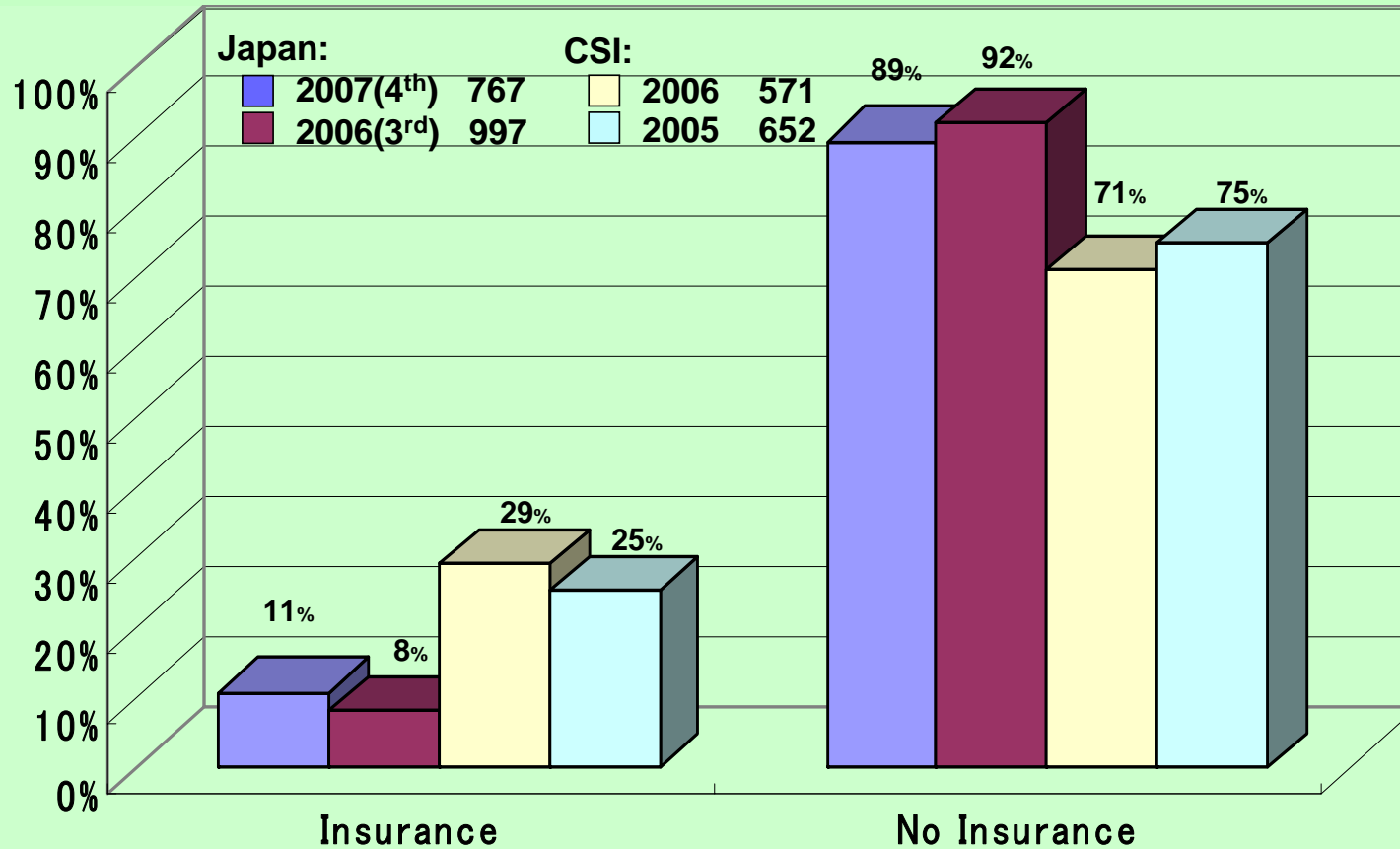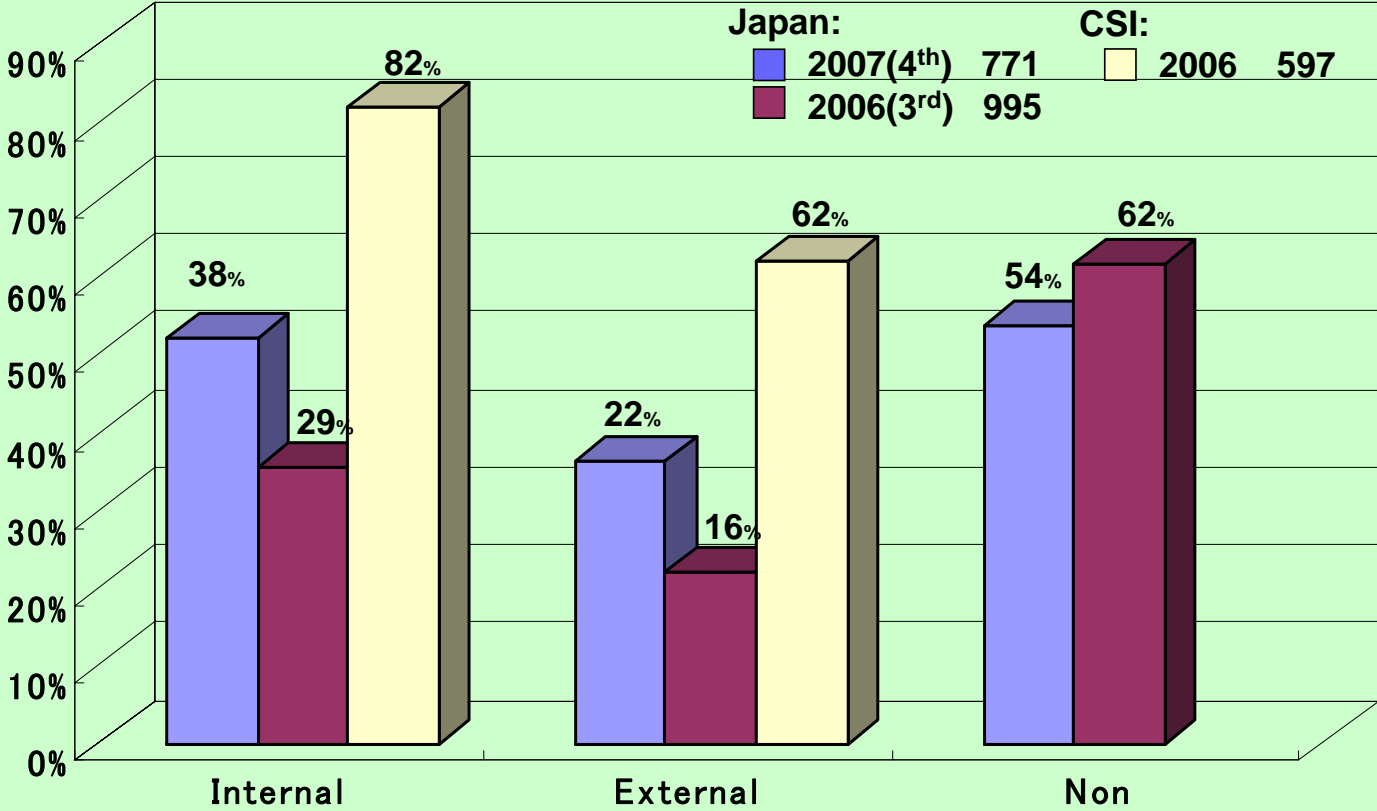
8

Organizations Conducting Security Audits
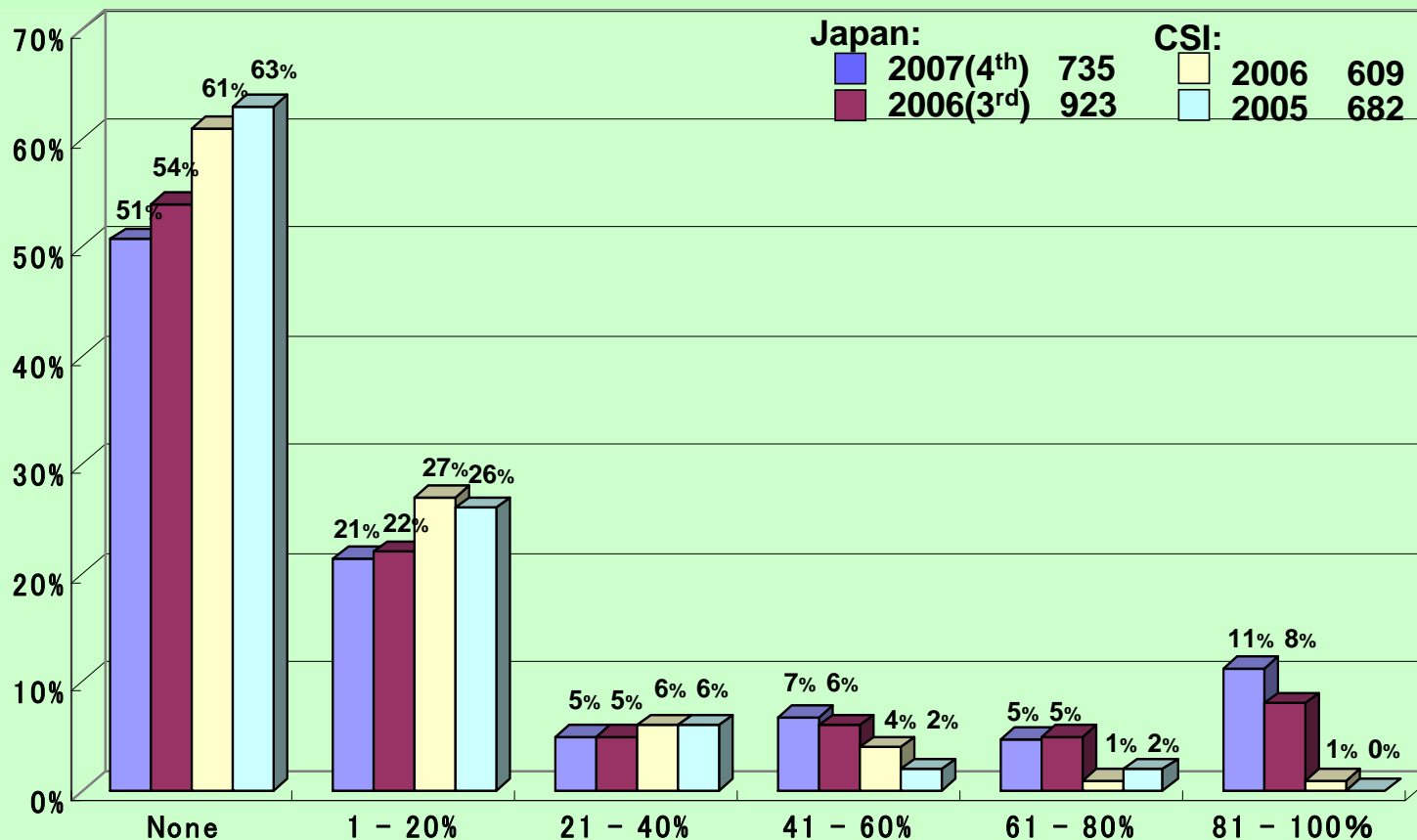
Respondents: CSI: 2006=597   Japan: 2007=771, 2006=995

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

Percentage of Security Function Outsourced

Japan:
2007(4th)   735
2006(3rd)   923

CSI:
2006   609
2005   682

Respondents: CSI: 2006=609,   2005= 682   Japan: 2007=735, 2006=923

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)
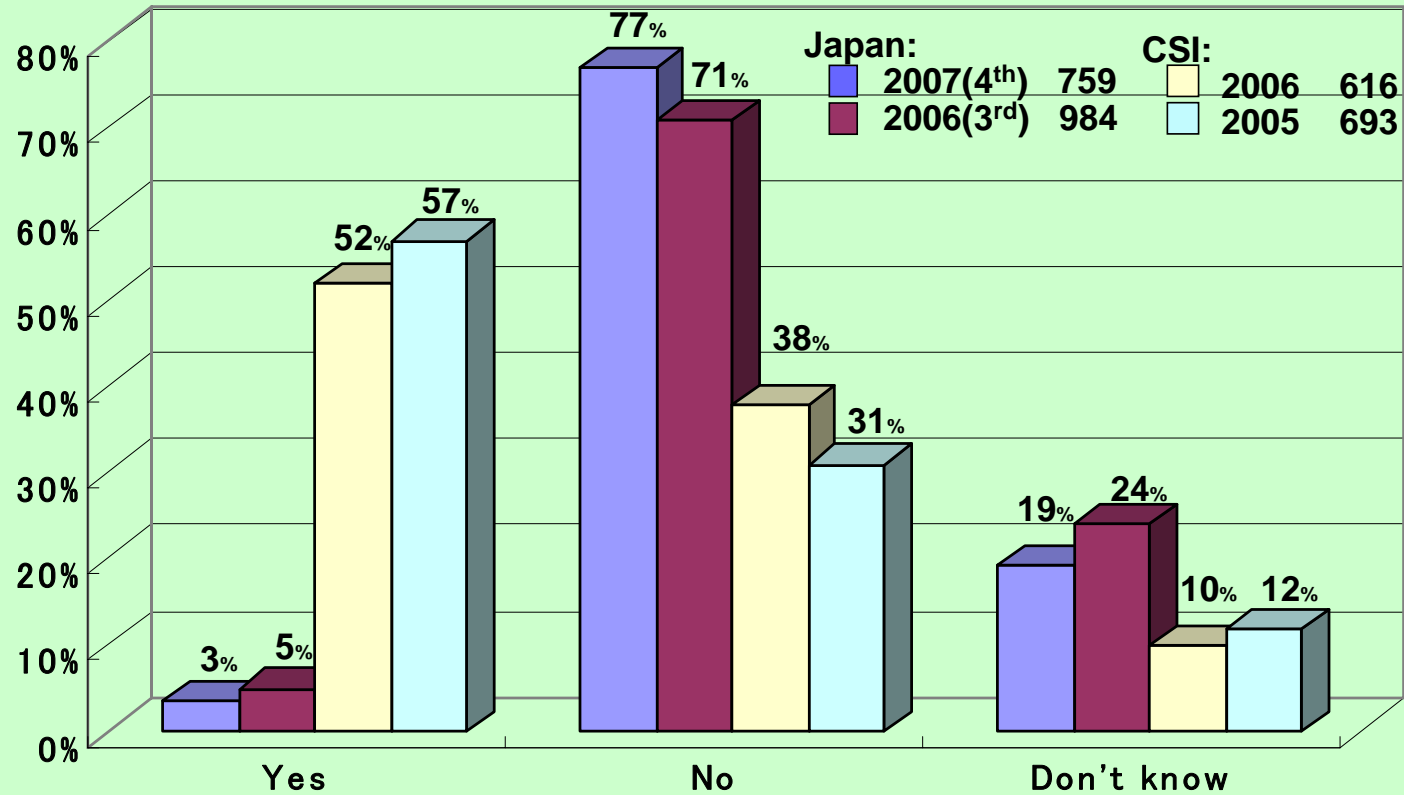
10

Security Technologies Used

	CSI		JPN	
	2006	**2005**	**2007**	**2006**
Anti-Virus Software	97%	96%	95%	94%
Firewall	98%	97%	92%	91%
Reusable account/login passwords	46%	52%	82%	83%
Server-based Access Control Lists	70%	70%	69%	75%
Anti-Spyware	79%		47%	
Log Management Software	41%		37%	
Encryption for data in transit	63%	68%	35%	32%
Intrusion Detection System : IDS	69%	72%	24%	21%
Encryption for data in Storage	48%	46%	19%	27%
Smart cards/Other one-time password tokens	38%	42%	18%	15%
One time passwords			8%	11%
Application-level Firewall	39%		17%	-
Intrusion Prevention System : IPS	43%	35%	15%	10%
Specialized wireless security system	32%		12%	-
Public Key Infrastructure	36%	35%	9%	10%
Biometrics	20%	15%	9%	9%
Forensics tools	38%		2%	-
Endpoint security clinent software	31%	-	-	-
Others	4%	-	4%	5%

Respondents: CSI: 2006=616,   2005= 687   Japan: 2007=769, 2006=987

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

Unauthorized Use of Computer Systems within the Last 12 Months

Japan:
2007(4th) 759
2006(3rd) 984

CSI:
2006 616
2005 693

	Yes	No	Don't know
2007(4th)	3%	77%	19%
2006(3rd)	5%	71%	24%
CSI 2006	52%	38%	10%
CSI 2005	57%	31%	12%

Respondents: CSI: 2006=616,   2005=693   Japan: 2007=759, 2006=984

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

Types of Attacks or Misuse
Detected in the Last 12 Months

	C S I			Japan		
	2006		2005	2007		2006
Virus	65%	1	32 %	84 %	1	67 %
Laptop/Mobile Theft	47%	2	75 %	30 %	2	23 %
Insider Abuse of Net Access	42%	3	9 %	22 %	3	18 %
Denial of Service	25%	5	48 %	14 %	4	11 %
Unauthorized access to Information	32 %	4	32 %	5 %	5	5 %
Web Site Defacement	6 %	12	5 %	5 %	6	-
System Penetration	15 %	6	10 %	4 %	7	4 %
Theft of Proprietary Information	9 %	8	2 %	3 %	8	2 %
Sabotage	3 %	13	7 %	2 %	9	1 %
Abuse of Wireless Network	14 %	7	16 %	2 %	10	3 %
Telecom fraud	8 %	10	48 %	1 %	11	0 %
Financial fraud	9 %	9	7 %	0 %	12	0 %
Misuse of Public Web Application	6 %	11	5 %		13	3 %
Other	-		-	4 %		2 %
No attack / Misuse	-		-	43 %		23 %

Note: Percentages of CSI 2005 is calculated from Fig. 14 in 2005 CSI/FBI survey

Respondents: CSI: 2006=616,   2005=700   Japan: 2007=533, 2006=984

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

How Many Incidents?
From the Outside? From the Inside?

			1 - 5	6 – 10	11 – 30	31 -	Don't Know	None
CSI	Inside	2005	46 %	7 %	3 %		44 %	-
	Outside	2005	47 %	10 %	8 %		35 %	-
	2006		48 %	15 %	9 %		28 %	-
Japan	Inside	2007	19 %	3 %	1 %	0 %	12 %	65 %
		2006	31 %	3 %	1 %	1 %	12 %	52 %
	Outside	2007	30 %	2 %	2 %	1 %	10 %	56 %
		2006	42 %	4 %	3 %	1 %	9 %	41 %

Respondents: CSI: 2006=341,   2005=453   Japan: 2007=686, 2006=887

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)

Dollar Amount Losses by Type

Unit: $(=¥100)

	CSI			Japan		
	2006		**2005**	**2007**		**2006**
Virus	15,691,460	1	42,787,767	2,916,042	1	5,029,847
Laptop Theft	6,642,660	3	4,107,300	636,707	2	3,769,338
Telecom Fraud	1,262,410	8	242,000	509,960	3	20,000
Theft of proprietary Info	6,034,000	4	30,933,000	229,260	4	230,382
Insider Net Abuse	1,849,810	7	6,856,450	224,178	5	579,987
Unauthorized Access	10,617,000	2	31,233,100	222,637	6	213,200
Denial of Service	2,922,000	5	7,310,725	140,202	7	258,132
Bots within the organ.	923,700	9	-	108,860	8	-
Financial Fraud	2,556,900	6	2,565,000	100,160	9	50,000
System Penetration	758,000	10	841,400	35,260	10	64,310
Web site defacement	162,500	16	115,000	27,552	11	38,585
Sabotage	260,000	15	340,600	20,160	12	12,200
Password sniffing	161,210	17	-	17,460	13	-
Phishing in which your org.	647,510	11	-	5,010	14	-
Abuse of wireless net	469,010	12	544,700	1,160	15	11,300
Exploit of DNS Server	90,100	18	-	360	16	-
Instant Msg misuse	291,510	13	-	160	17	-
Misuse of public Web App	269,500	14	2,227,500	-		12,100
Other	885,000			113,800		1,231,160
Total Losses	52,494,290		130,104,542	5,308,928		11,520,541
Avarage of Losses/Resp	167,713		203,606	21,581		53,335

Respondents: CSI: 2006=313, 2005=639   Japan: 2007=246, 2006=216

Katusya Uchida, Ph. D.   Professor,   Institute of Information Security (Japan)