

The Business Case for a Public Key Infrastructure

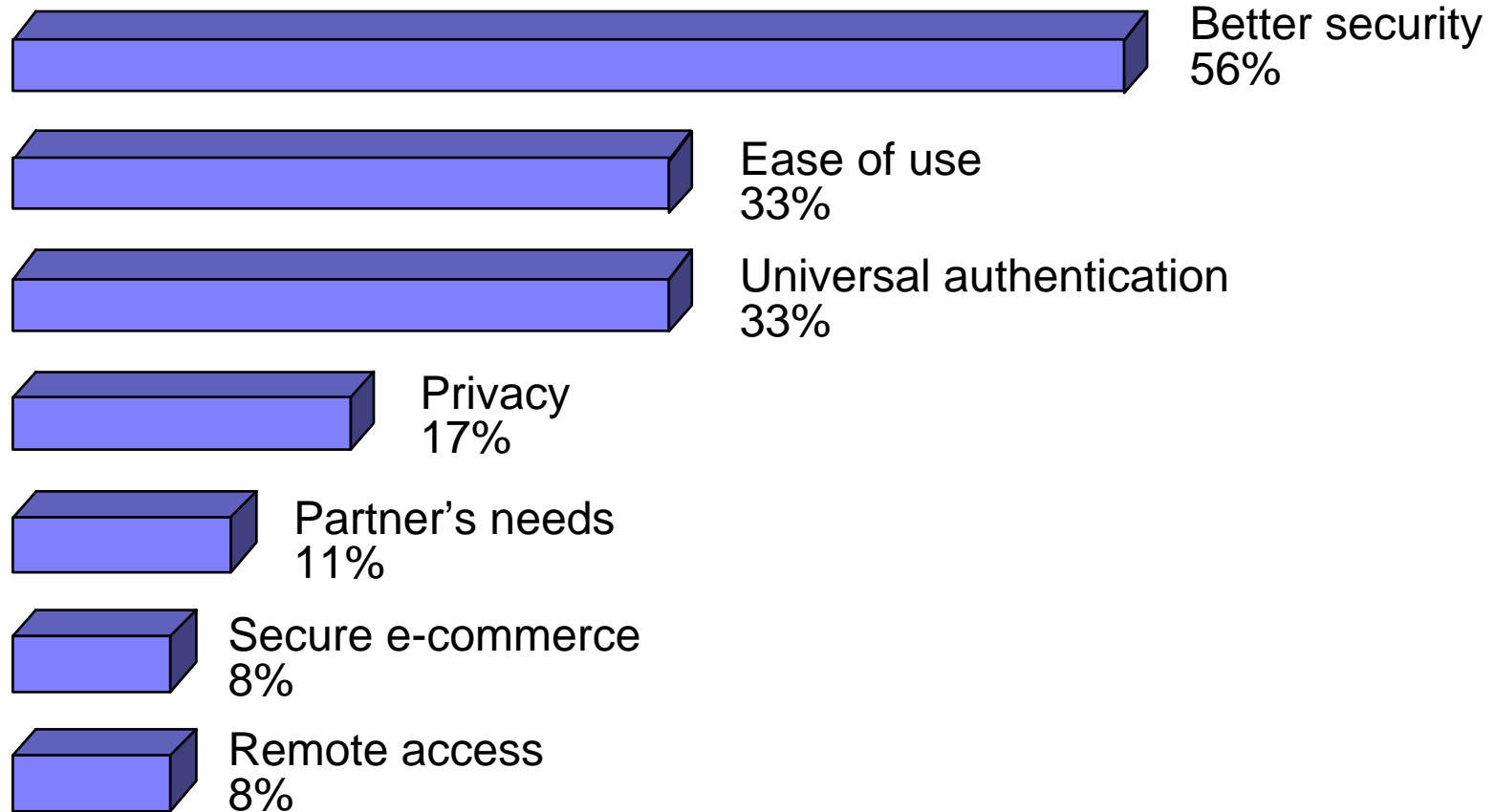


PKI Return on Investment

- ❖ Deploying a PKI is a significant investment
 - Increased security
 - Legal/regulatory compliance
 - Staying ahead of competition
 - Extend market reach
 - Bring products to market faster
 - Lower operating costs
- ❖ Entrust PKI products, technologies and services enable positive ROI



Why Use Certificates?



Source: Forrester Research survey of 36 F1000 firms, September, 1997

“The Economics of Security”

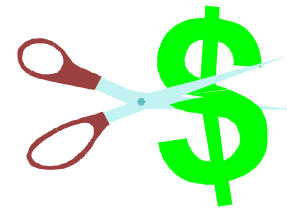
Forrester Research, Feb. 1998

- ❖ Security incident costs:
 - Financial Services Industry: thieves wire money from 1,000 accounts
\$106,100,100 total cost to company
 - Auto manufacture: hackers divert one large order
\$21,424,000 total cost to company
 - Legal firm: industrial espionage steals information on large merger
\$34,700,000 total cost to company
- ❖ Security investment shows a ROI of 60% for company with 20,000 employees



Building a Business Case

- ❖ Typical PKI usage scenarios:
 - Secure email
 - File encryption
 - Remote access
 - Password reduction
 - Customer service
 - Electronic document management
- ❖ Need to show cost reduction
 - Hard vs. soft savings
 - Payback period



Business Case: Remote Access

❖ Employee dial-in:

- 800 number costs \$.07 - \$.12 per minute per employee - \$168 per employee per month
- Internet Service Provider and VPN: \$21.95 per employee per month

	Dial-in	Secure Internet
Cost per year: 1,000 users	\$806,400	\$110,400
Secure Internet Access savings: 1,000 users		\$696,000



Business Case: Password Management

- ❖ Forrester Group: Password reset issues account for up to 40% of help desk costs
- ❖ Reducing number of passwords by 50% can reduce help desk costs by 20%

	Password Support Cost Reduction (1000 users)
5 passwords per user	\$304,000/year
10 passwords per user	\$668,800/year



Business Case: Customer Service

- ❖ Customer account self service: replace 800 number calls to service with Web access
- ❖ Customer transactions: reduce people time and paper handling

	Yearly Customer Service Cost Reduction (1000 users)
Account info self service	\$70,000
Customer transactions	\$276,000



Business Case: Electronic Document Management

- ❖ Digital signatures enable the “less paper” office
- ❖ Largest opportunity for efficiency
- ❖ Bell South presentation at Secure Summit

	High-touch	Average	Low-touch	E-form
Cost per form	\$71.06	\$51.41	\$35.53	\$7.18
Cost per year: 1,000 users	\$5,116,320	\$3,701,808	\$2,558,160	\$517,104
E-form savings: 1,000 users	\$4,599,216	\$3,184,704	\$2,041,056	



Bottom Line

- ❖ A PKI investment will generally have a payback period of less than one year, as measured by hard cost savings
- ❖ Additional business applications and processes can be added at near zero incremental PKI cost
- ❖ This return on Investment comes on top of the benefits of protecting customer data, meeting privacy regulations and preventing loss of intellectual property

