### Chapter 2

# **Information Security for Managers**

Workman, Phelps, Gathegi

Corporations are legal entities with Rights and Duties

Recall Citizens United v. Federal Election Commission, 2010

**CEO** Chief Executive Officer
Responsible for entire corporation (SOX)

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- CIO Chief Information Officer

  Entire information infrastructure (IT, operations, support, strategy)

- **CEO** Chief Executive Officer Responsible for entire corporation (SOX)
- CFO Chief Financial Officer Responsible for financial transactions (SOX)
- CIO Chief Information Officer Entire information infrastructure (IT, operations, support, strategy)
- CTO Chief Technology Officer  $\approx$  CIO but in an IT provider company

COS Chief Security Officer

Policies, procedures, practices related to information security

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CISO Chief Information Security Officer
Another name used for COS

### **Projects Should Use Standards**

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**COBIT** Control Objectives for Info. and Related Technologies

A framework created by ISACA for IT management

and governance

ISACA Information Systems Audit and Control Association

## **Project Considerations**

### Projects must consider

- Unfamiliarity
- Uncertainty
- Complexity
- Stakeholder identification and buy-in
- Custom vs. COTS
- In-house vs. Vendor

### **Prioritizing Competing Stakes**

```
Q1: It is most important to leverage:

Open Systems::

1 2 3 4 5 6 7 ::Proprietary Systems

Q2: It is most important to buy from:

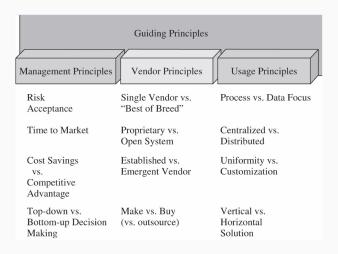
Established Vendors:: 1 2 3 4 5 6 7 ::Emerging Vendors

Q3: It is most important that we compete based on:

Lower Costs:: 1 2 3 4 5 6 7 ::Feature Richness

Q4: ...
```

### **Prioritizing Competing Stakes**



### **Effect of Organizational Structure**

Identify who has power

- Positional power
- Expert power
- Referent power (charisma)

The project needs a Champion to navigate the power structure

#### **Policies**

#### Policies . . .

- Must be enforceable and enforced
- Not too specific yet not too general
- Should no devolve into procedures (no step-by-step)
- Can be codified as policies
- can be codified in software (timed password changes)
- Should cover automated systems
- Should cover behaviors (people are the "weakest link")