# Engineering for Data Protection and Accountability

Michelle Finneran Dennedy

Sun Microsystems, Inc.

michelle.dennedy@sun.com

www.sun.com

# Agenda

- Basic Considerations- Where should technology fit?

- The Dynamic Data Environment

- Business/ Organization Goals for Data Protection

- Engineering Goals for Data Protection

- Tools and Techniques for Data Governance and Accountability

- Final Comments

# Basic Considerations- Where should technology fit?

- What information does a company need to protect?

- What do I need my systems to do for my organization?

- How is the information being used?

- Who will the users be?

- What happens to information after it is no longer necessary for a business purpose?

Organizations tasked with data protection must have the tools they need to fulfil privacy promises

# The Dynamic Data Environment

- Data and applications are built to invite two way participation by users and systems owners

- Increased data creation and movement create both risk and opportunity

- Protection of data becomes the foundation of control

- A foundation of control creates the possibility for governance

- Good governance creates a culture of accountability

# Participation on the Network Drives Governance and Accountability Challenges
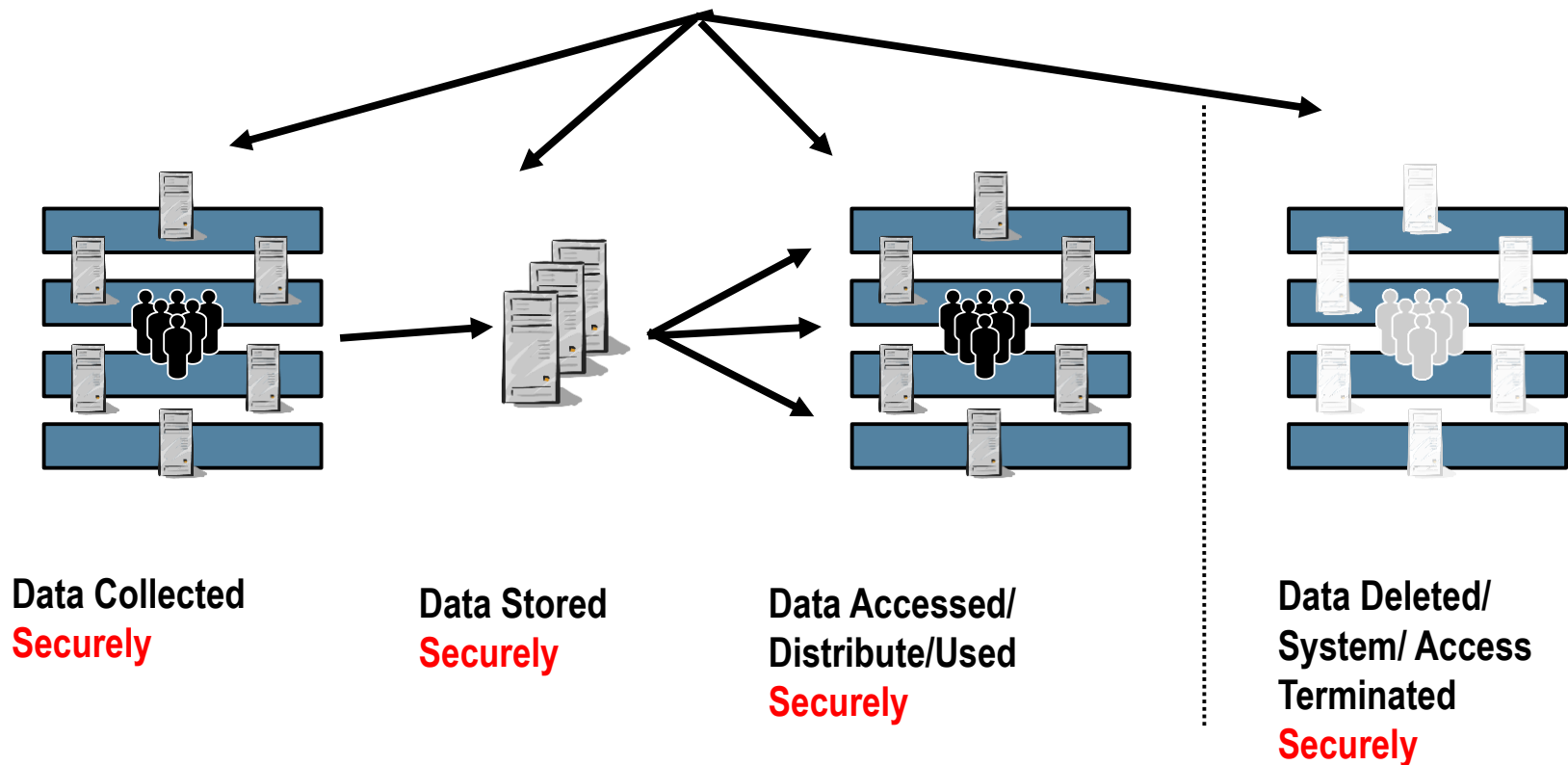
# Business Goals for Data Protection

- **What information does a company need to protect?**

- **What do I need my systems to do for my organization?**

- **How is the information being used?**

- **Who will the users be?**

- **What happens to information after it is no longer necessary for a business purpose?**

- **How much will this cost?**

# Engineering Goals for Data Protection

- How will the company plan to protect information?

- How will systems adapt to changing business requirements?

- How is the information being used?

- Who will the users be?

- How will the business begin to shape this system?

- How much do I have to spend?

# Governance Requires a Systemic View

Secure from unauthorized access and use



**Data Collected**
**Securely**

**Data Stored**
**Securely**

**Data Accessed/**
**Distribute/Used**
**Securely**

**Data Deleted/**
**System/ Access**
**Terminated**
**Securely**

# Tools & Techniques for Data Governance and Accountability

- **Confidentiality/ Classification of data**

- **Systemic Security – A layered approach**

- **Information Lifecycle Management**

- **Data Stewardship**

- **Standards**

- **Identity Management**

- **Data Minimization**

- **Secure Storage and Encryption**

# Final Comments

- **Increased data flows accompany economic growth**

- **Data flows will continue to expand and become more complex**

- **Tools and techniques exist to manage data flows**

- **A systemic approach that considers the entire life cycle of data can help create governance and accountability**

- **That one begins the process to build governance systems and culture is more important than where one begins.**

Thank You

Michelle Dennedy
michelle.dennedy@sun.com