PITAC SW Problems

Reliability

Scalability

Predictability

Interoperability

Friendliness

SW Engineering Grand Challenges

Formal reasoning about SW, bodies of knowledge

Predictable quality of service

Heterogeneous, 1 billion element access

Smart, collaborative SW/System environments

SW/System Grand Challenges

Reconciling system rules & requirements

Improved infrastructure

Personal empowerment

Smart, collaborative enterprise environments

PITAC Goals

Transforming the way we:

• Do commerce
• Do gov't
• Do health care
• Do research
• Communicate
• Deal w/ info
• Learn
• work

Concurrent Trends

• Net-base operations
• Faster rates of change
• Systems of systems