Preparing for the Unpredictable
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Providence: An Overview

- $6.5 billion annual revenue
- 50,000 employees and 15,000 accredited physicians
- 27 hospitals located in 5 western states
  - Alaska, California, Oregon, Montana, Washington
  - Unique cultural and geographic differences
- 4 Strategic Business Units, 160 facilities
- 3 unique business verticals in one organization
  - Healthcare, education and daycare
- 150 year legacy of not for profit community service

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"*We meet at a college noted for knowledge, in a city noted for progress, in a State noted for strength, and we stand in need of all three, for we meet in an hour of change and challenge, in a decade of hope and fear, in an age of both knowledge and ignorance. The greater our knowledge increases, the greater our ignorance unfolds.*"

Address at Rice University on the Nation's Space Effort
President John F. Kennedy
Houston, Texas

September 12, 1962

This is not your Father's World

- Dramatic Change Unfolding
  - Globalization
  - Asymmetrical conflict
  - The "millennial world"

Globalization

- **The human work force is more mobile than ever**
  - Telecommuting globally
  - Globally located "virtual teams"

- **Globalization is not just "bad"**
  - Tapping the resources of the entire world
  - A massive wealth expansion is taking place

- **New realities are emerging**
  - Jobs and markets are moving globally, not just regionally
  - Globalization will mean disruptive change

Asymmetrical Conflict

- **The "powers that be" are unassailable directly**

- **Rather than confront directly, the weaknesses will be sought out and attacked asymmetrically**

- **The Information Age equalizes an individual with an idea and a nation-state**

- **And it equalizes an individual with an idea and a Fortune 500 company**

The "Millenial Landscape"

- **More change will occur between 2009 and 2020 than in all of human history prior to today.**

    - By 2030 change will be so rapid and explosive that we cannot see beyond the "event horizon" and understand the changes

- **The "Digital Generation" begins to come of age in 2011**

    - Used to rapid, mass communication

    - Accustomed to internet based computing

- **Computing power will grow dramatically by 2020:**

    - In 2012 a laptop will be comparable to a cat's brain

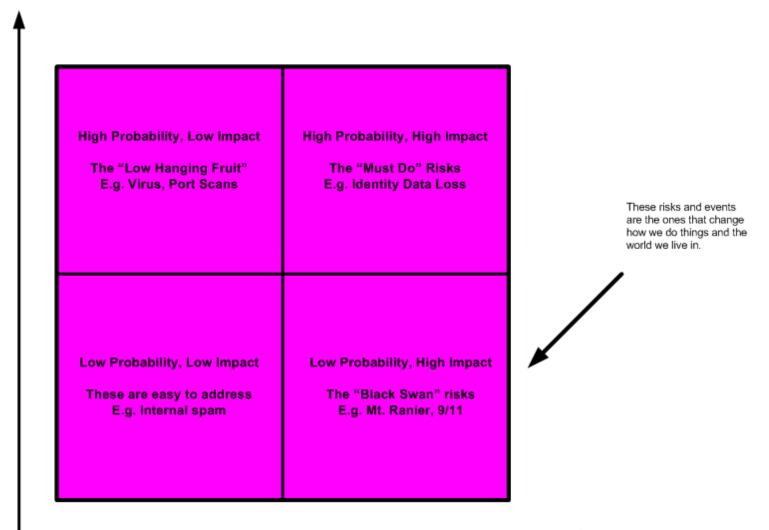   - In 2020 a laptop will be comparable to a human brain

Recognizing The Security Challenges

- **Dramatically increased threats for security**

- **Undisclosed Zero Day vulnerabilities**
  - Bad guys hire vulnerability researchers

- **New laws and regulations unforeseen today**
  - Remember California's SB1386 in 2003?

- **Consumer demands for increased security**
  - Protect identity data

- **"Black Swan" Events**
  - 9/11, Choicepoint, TJ Maxx, Virginia Tech

Risk Management & Security Events

Probablility

High Probability, Low Impact The "Low Hanging Fruit" E.g. Virus, Port Scans	**High Probability, High Impact** The "Must Do" Risks E.g. Identity Data Loss
Low Probability, Low Impact These are easy to address E.g. Internal spam	**Low Probability, High Impact** The "Black Swan" risks E.g. Mt. Ranier, 9/11

These risks and events are the ones that change how we do things and the world we live in.

Impact

Thinking About Unpredictable Events

- **Most risks are predictable and can be mitigated**
    - High Impact, Low Likelihood risks are outliers
- **Black Swan events are generated by these risks**
- **They *will* occur and they *will* catch us by surprise**
    - ChoicePoint, Veteran's Affairs, TJ Maxx
    - In hindsight, they were predictable, even preventable
- **All is not lost**
    - Solid planning, sound operations capabilities and preparing for the unknown

Why We Can't Prevent the Black Swan

- **Large, centralized organizations are good at …**

  – Dealing with predictable risk

  – Preparing for an understood future

  – Preventing past surprises from re-occurring

- **But …**

  – They don't innovate

  – They aren't agile

  – And, most critically, they don't invest against Black Swans

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But, What About Risk Management?

- **We get a false sense of security from "risk management"**

  – Risk management addresses the predictable, known problems

  – It does not provide a means to address the "black swan" events

  – Risk management depends on reducing risk, but the black swan events have high impact no matter how low the risk

  – Remember, we can't manage the risk until we know that it exists

Preparing for the Unpredictable

- **Solid Planning is the key**

  – We don't know what will happen, but we know something will

  – The military spends a huge amount of time thinking about risk, adopt their model

  – Knowing how to respond when the bad thing happens is half the battle

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What Does It Take?

- **Organizations that have responded well have this in common ….**

  – Competent business leadership

  – Knowledgeable, trained security staff

  – Sound planning – Have some idea of what to do

  – Agility – You will need to retake the initiative