

#### Topics to be covered

- •Introduction- Has Rizvi, PMP, CBAP, PMI-ACP, PMI-RMP, PMI-PBA, PMI-SP, CSP, CSM, CSPO, CISA, CISM, CRISC, CSSGB, CSSBB, CMBB, CPCU, CITP, FBCS, SFC, SDC, SMC, SAMC, SPOC, ESM, CDIA+, Project+, OPM3 Certified Consultant, PhD
- Risk Management Principles
- "Complicated" versus "Complex" Projects
- Risks and Uncertainties
- The "Cure"
- Wrap Up/Questions









#### Brief History of Project Management

- Ancient era
  - o Great pyramid Giza, Great Wall of China
- 1950s: US Navy
  - o Polaris missile system project
- 1960s-70s: DoD, NASA and construction companies o Large budget, schedule-driven projects
- 1980s: Manufacturing and software development sectors
- 1990s: Multiple-industry adoption, "birth" of **Agile** methodologies





# "Project Management and Business Analysis is Challenged by Business Strategy" - Dr. Pierre Daniel



- 25% of the World Bank projects are long term failures, leading to operational outputs but..... *no long-term benefit* (source: World Bank)
- 70% of top managers states that they are *not able to assess the success* of a project effectively (source: Best Practices Systèmes d'information)
- Only one IT project out of 40 reach the initial objectives and significantly contribute to improve the organizational performance (source: Price Waterhouse Coopers)
- An outstanding 97% of organizations believe project management is *critical to business performance* and organizational success *(source: Price Waterhouse Coopers)*

RIZ IS.



"There is a growing concern for the performance of projects as they grow in scale and complexity"-

Dr. Rodney Turner



RIZ VIS.



### Sargut & Mc Grath: 'Learning to live with complexity'

- Harvard Business Review, October 2011
- SIMPLE SYSTEMS

Few interactions ... very predictable



The same action produces the same result every time.

RIZ VIS.



# Sargut & Mc Grath: 'Learning to live with complexity'

- Harvard Business Review, October 2011
- COMPLICATED SYSTEMS

Many moving parts...

but they operate in patterned ways.

It's possible to make accurate predictions about how a complicated system will behave.



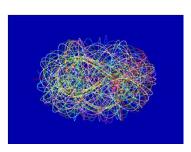


## Sargut & Mc Grath: 'Learning to live with complexity'

- · Harvard Business Review, October 2011
- COMPLEX SYSTEMS

May operate in patterned ways

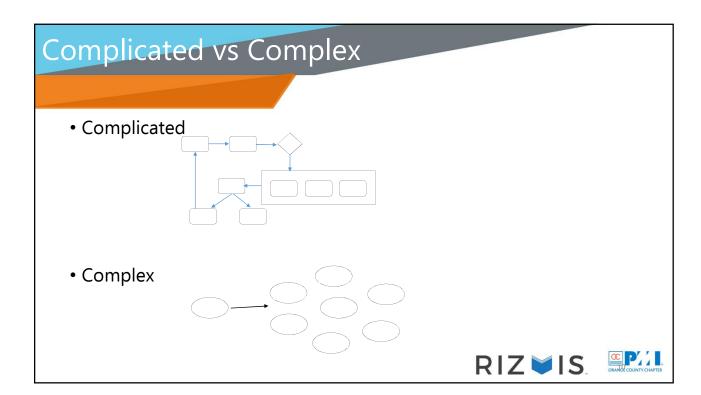
... but interactions are continually changing.



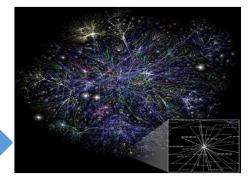
The same starting conditions can produce different outcomes, depending on the interactions in the system.

RIZ IS.





### Complex System or Just Complicat



the internet



a single computer VS.







### Complex System or Just Complicate



A single car



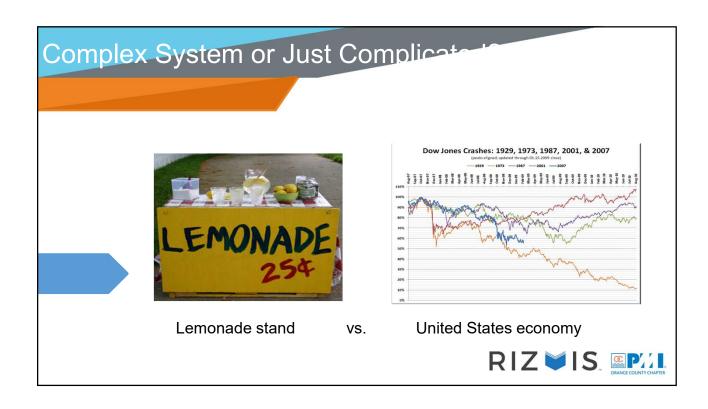
VS.













# Hurricane Igor in Newfoundland and Labrador







### Risk vs. Uncertainty



- Risk
  - Must make a decision for which the outcome is not known with certainty
  - Can list all possible outcomes & assign probabilities to the outcomes
- Uncertainty
  - Cannot list all possible outcomes
  - Cannot assign probabilities to the outcomes







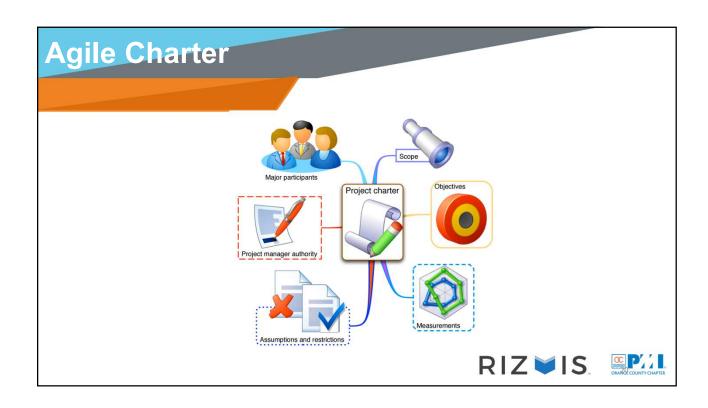


# Agile Manifesto- Four Paired Core Values



- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan











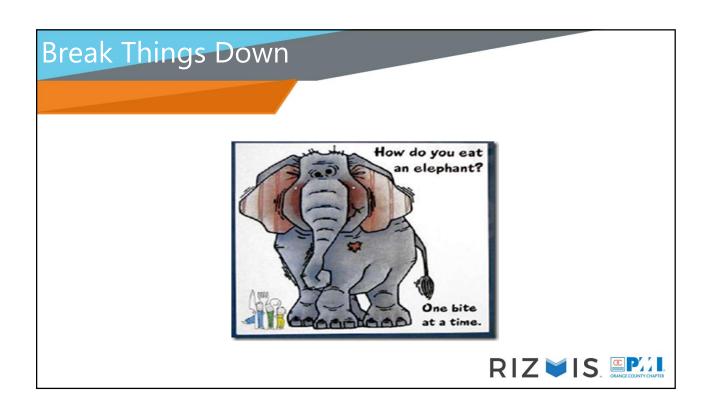


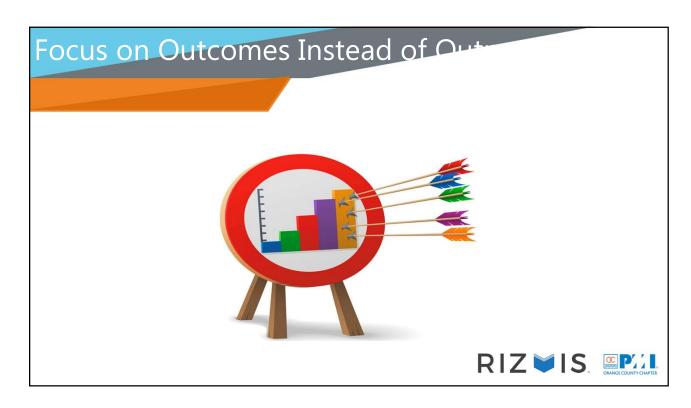


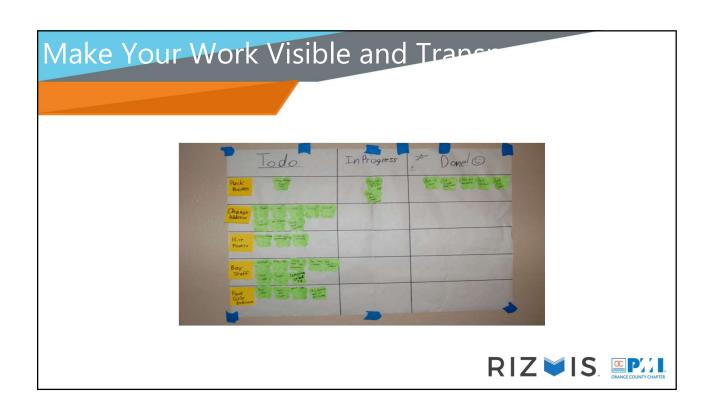












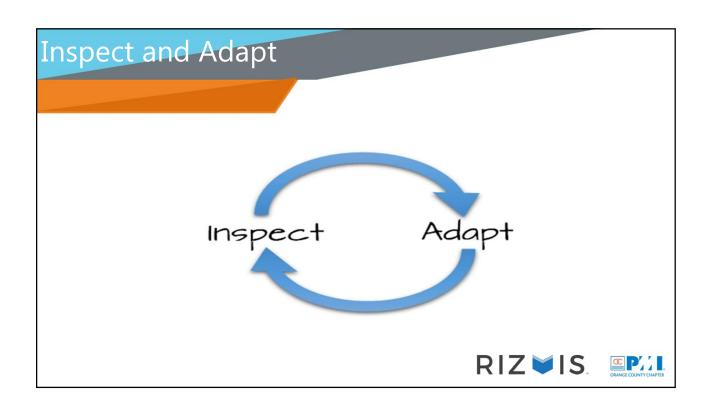


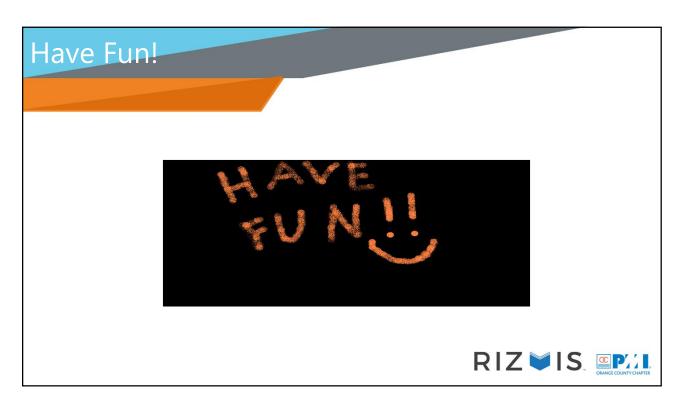












#### Why do we need Risk Managem

The only alternative to risk management is crisis management --- and crisis management is much more expensive, time consuming and embarrassing.

JAMES LAM, Enterprise Risk Management, Wiley Finance © 2015

Without good risk management practices, government cannot manage its resources effectively. Risk management means more than preparing for the worst; it also means taking advantage of opportunities to improve services or lower costs.

Sheila Fraser, Auditor General of Canada





