Agility, the Cloud, and Accountability: What you can't know can kill you

Friday, April 1, 2011

Trenton Computer Festival
College of New Jersey
Ewing, New Jersey

Robert Gezelter Software Consultant
35 – 20 167th Street, Suite 215
Flushing, New York 11358 – 1731
United States of America

+1 (718) 463 1079
gezelter@rlgsc.com
http://www.rlgsc.com

If it makes a sound, SET IT ON SILENT (e.g., mobiles, pagers, PDA, smartphone)

"Cloud" Computing:

- Infinitely expandable
- Always available
- Agile
- No worries

Is this reality?

- First: I am "cloud" agnostic.
- Who is reponsible?
- What gives rise to this?
- What are the dependencies?
- What are the risks?

Do you believe in "magic"?

- Physics/math is different
- Underpinnings may be unstated
- The unstated is merely shorthand
- Other fields are not always so careful
  - Don't worry
  - It has never failed -- yet
  - Unstated/unexplicable presumptions

Infinity Presumption

- demand << capacity
- The "Efficient Market"
- Demand excursions – "Bank Run"
- Is this a valid presumption?
    - Victoria's Secret Fashion Show

Upon what does "The Cloud" presume?

- CPU Demand (always) << Capacity
- Bandwidth Demand << Capacity
- Software presumptions
- Connectivity
  - End-users
  - Provider
  - Intra-provider

CPU Capacity

- Triggers?
- Cycles guaranteed/"as available"
- Tremendous cost difference
- Is utilization disclosed?
- Multiplier effect

Bandwidth

- Hosting providers aggregate
- Spike demand
- Individual usage << capacity
- Incentive to match expected demand and capacity
    - utilization presumption
    - similar to "fractional reserve banking"
    - "Bank Runs" -- liquidity crisis

Software

- What software is required?
- What versions?
- Dependencies
- Update schedules

Connectivity

- Degree of connectivity
- Routing
- Bandwidth
- When problems happen –
    - Red Sea cables
    - 9/11 Lower Manhattan AT&T switching center
    - Hinsdale/Second Avenue fires

Is "Cloud" Computing useful?

- Undoubtedly
- Establish responsibility
- Are risks aligned
- Seductiveness of underprovisioning
    - overbooking
    - overselling
    - economic incentives

Questions?

Robert Gezelter Software Consultant
35 – 20 167th Street, Suite 215   +1 (718) 463 1079
Flushing, New York 11358 – 1731   gezelter@rlgsc.com
United States of America   http://www.rlgsc.com

Session Notes & Materials:
    http://www.rlgsc.com/trentoncomputerfestival/2011/index.html