Predictions

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- PREDICTIONS FROM 2009 FOR 2015
  - InfiniBand and Fiber Channel will be dead.
  - Ethernet will rule

- PREDICTIONS FROM 2010 FOR 2015
  - We will have phase change memory
  - We will have very primitive quantum computing (not sure this was mine)
  - There will be a major loss of important digital data

- PREDICTIONS FROM 2012 FOR 2015
  - Security will be an on-going challenge.
  - Storage reliability will NOT increase with storage densities

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- **InfiniBand and Fiber Channel will be dead (Henry was wrong here)**
  - For InfiniBand there is a lack of RDMA (remote direct memory addressing) communications stack which is needed for latency
  - Intel has announced OmniPath with on chip communications to replace InfiniBand
  - Fibre channel slowly moving out of the market but surely not by the end of the year

- **Ethernet will rule**
  - Moving that way but not yet and big question with Intel

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- We will have phase change memory
  - Non-volitial storage announced from Intel/Micron not phase change but not sure what it is
- We will have very primitive quantum computing
  - We have DWave
- There will be a major loss of important digital data
  - Lots of them
    - Most recent big 1 documented was Google and Europe
      - http://www.datacenterknowledge.com/archives/2015/08/19/lightning-strikes-google-data-center-disrupts-cloud-services/

- Security will be an on-going challenge
  - Do we have a security problem ☺
- Storage reliability will NOT increase with storage densities
  - Sort of, per device reliability has not increased but we have declustered RAID and easure coded storage now

- More object storage sold than POSIX storage
  - Huge up tick this year
- Auto tiering will be part of object storage formats
  - Standards will come with objects that were elusive for POSIX
- The world will not have all storage replaced by flash
  - Disk drives will still be with us
- Dialable storage reliability with erasure codes will be available from all vendors
  - A few have it today