Big Data: It’s Rocket Science
XLDB, Sept 11th, 2012

Joshua McKenty
CEO, Piston Cloud Computing
josh@openstack.org
tweet: @jmckenty
“It turns out that an eerie type of chaos can lurk just behind a facade of order - and yet, deep inside the chaos lurks an even eerier type of order.”

– Douglas Hofstadter
> curl http://nebula.nasa.gov
“The difference between effectiveness and efficiency is the same difference that you have between wisdom and knowledge. We need far more wisdom. We suffer from too much knowledge.”

– Russell Ackoff
KPIs of ‘Effective’

- Money
- Time
- Operations at Scale
- Application-specific Infrastructure
- Mobility Gap

Pain Points
- Language: Python
- Hardware: Commodity
- Architecture: No snowflakes

Early analysis
“Computers have enabled people to make more mistakes faster than almost any invention in history, with the possible exception of tequila and hand guns.”

– Mitch Ratcliffe
Extremely simple converged infrastructure model
Compute, storage & management on every server
Creates simple IT building blocks that are easy to scale
Commodity gear you can buy from any vendor
API first first first
"A committee is a creature with three or more legs and no brain."
- Robert Heinlein
“The RFC tradition of pragmatic, experience-driven, after-the-fact standards authorship accomplished by individuals or small working groups has important advantages over the more formal, committee-driven process typical of ISO and national standards bodies”