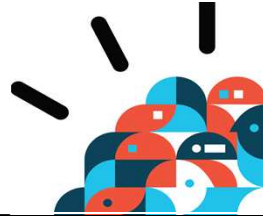


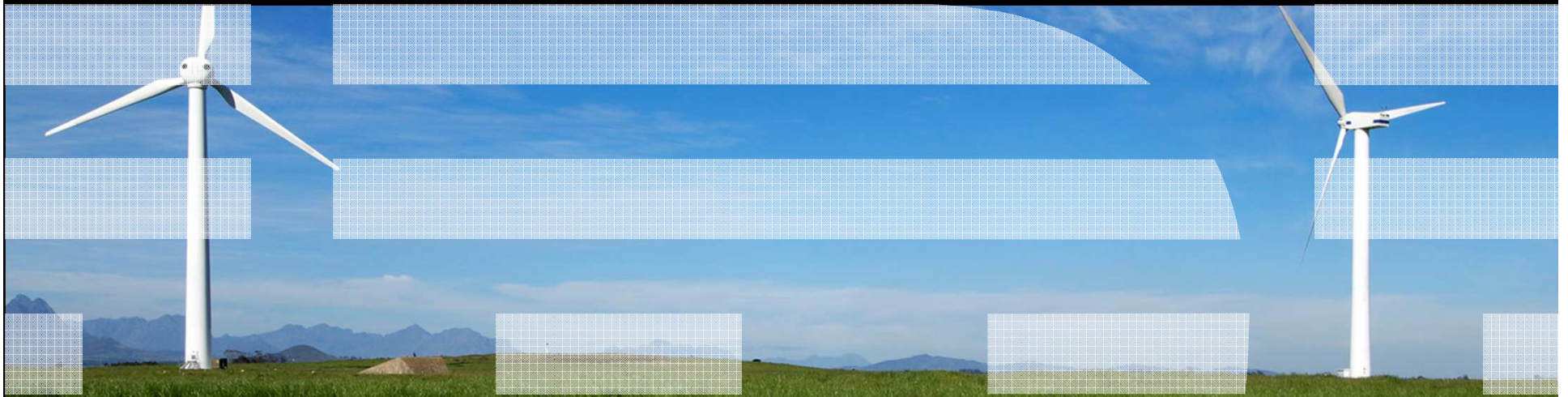
Rethink IT.
Reinvent Business.
Smart, Secure and Ready for Business



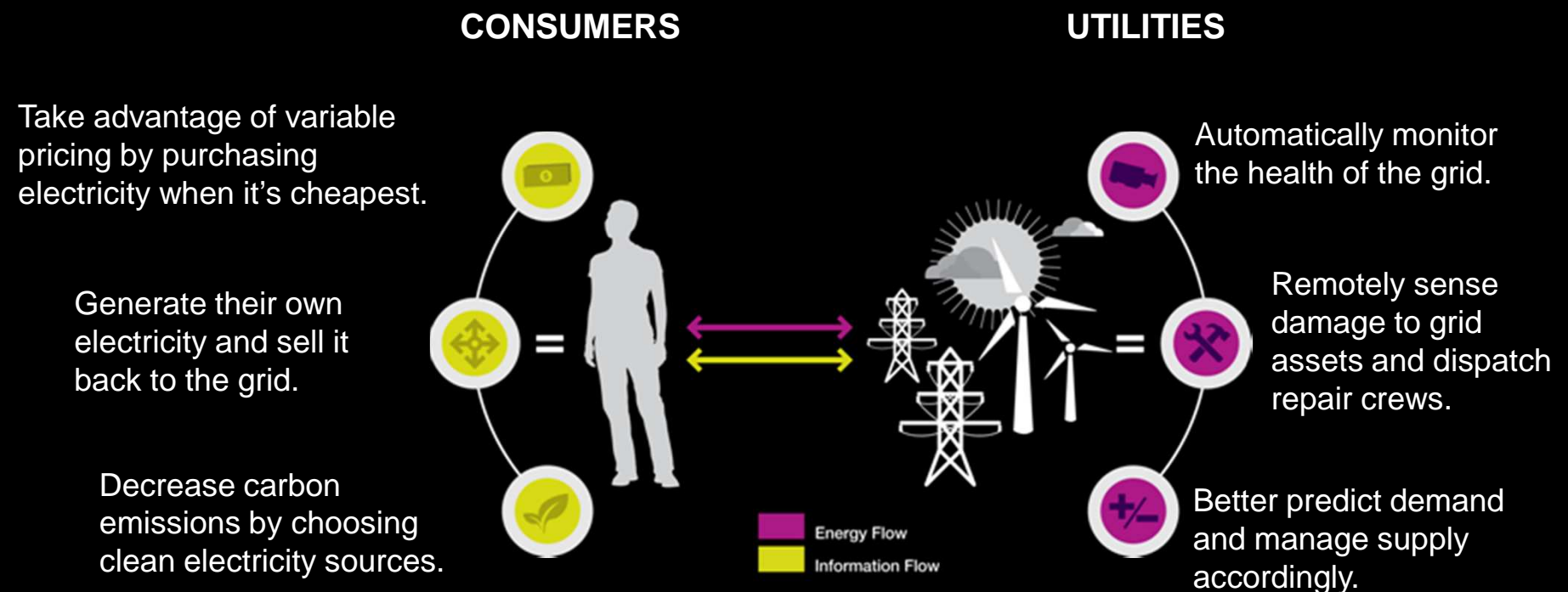
IBM

Building a Cloud Enabled Future in Energy

Rich Lechner
Vice President, IBM
25 April 2011

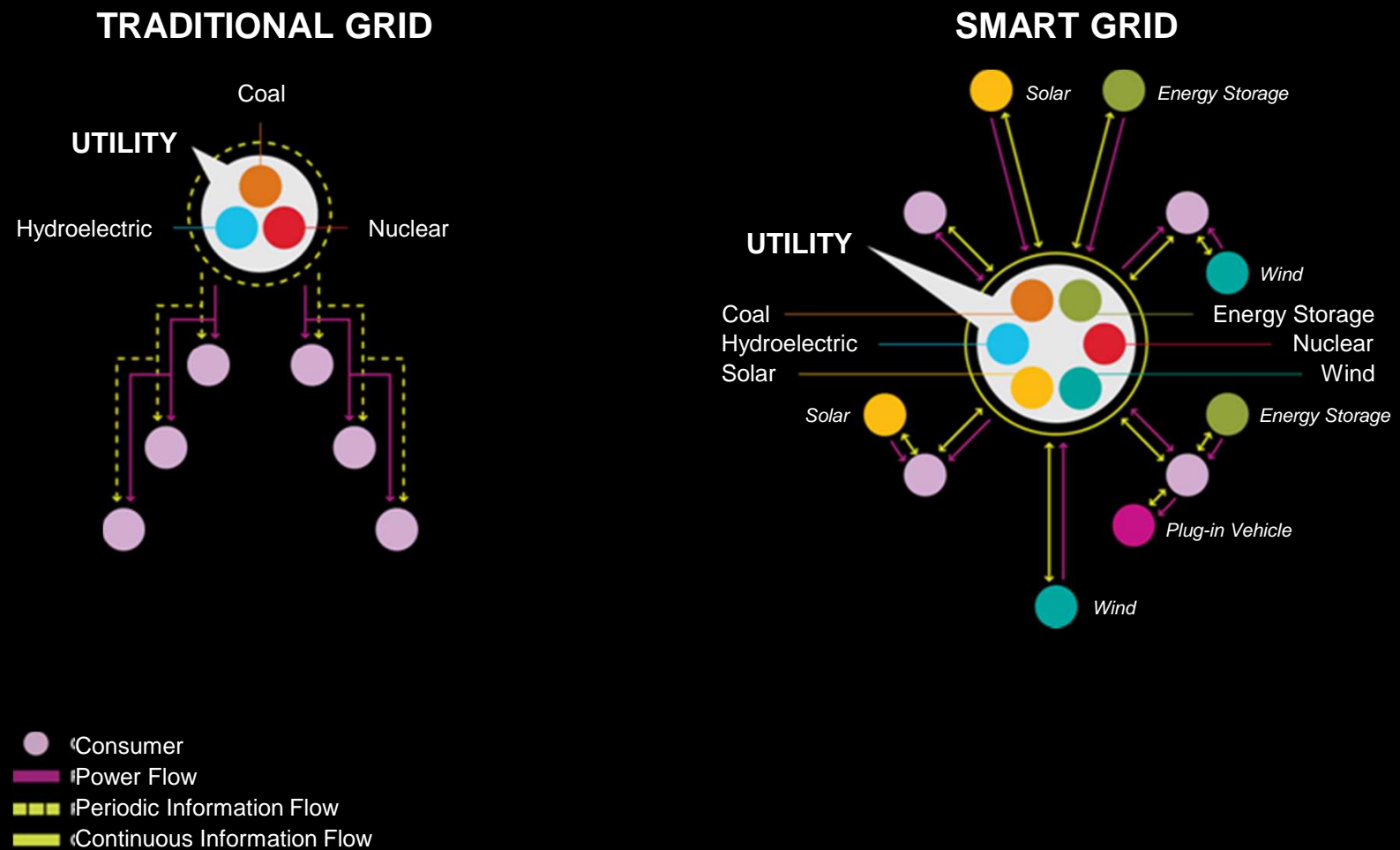


Providing access to real-time information about the flow of energy in the grid enables utilities & consumers to make better choices.



Smart Energy Grid projects are seeing reduced energy use by 15% - 40%

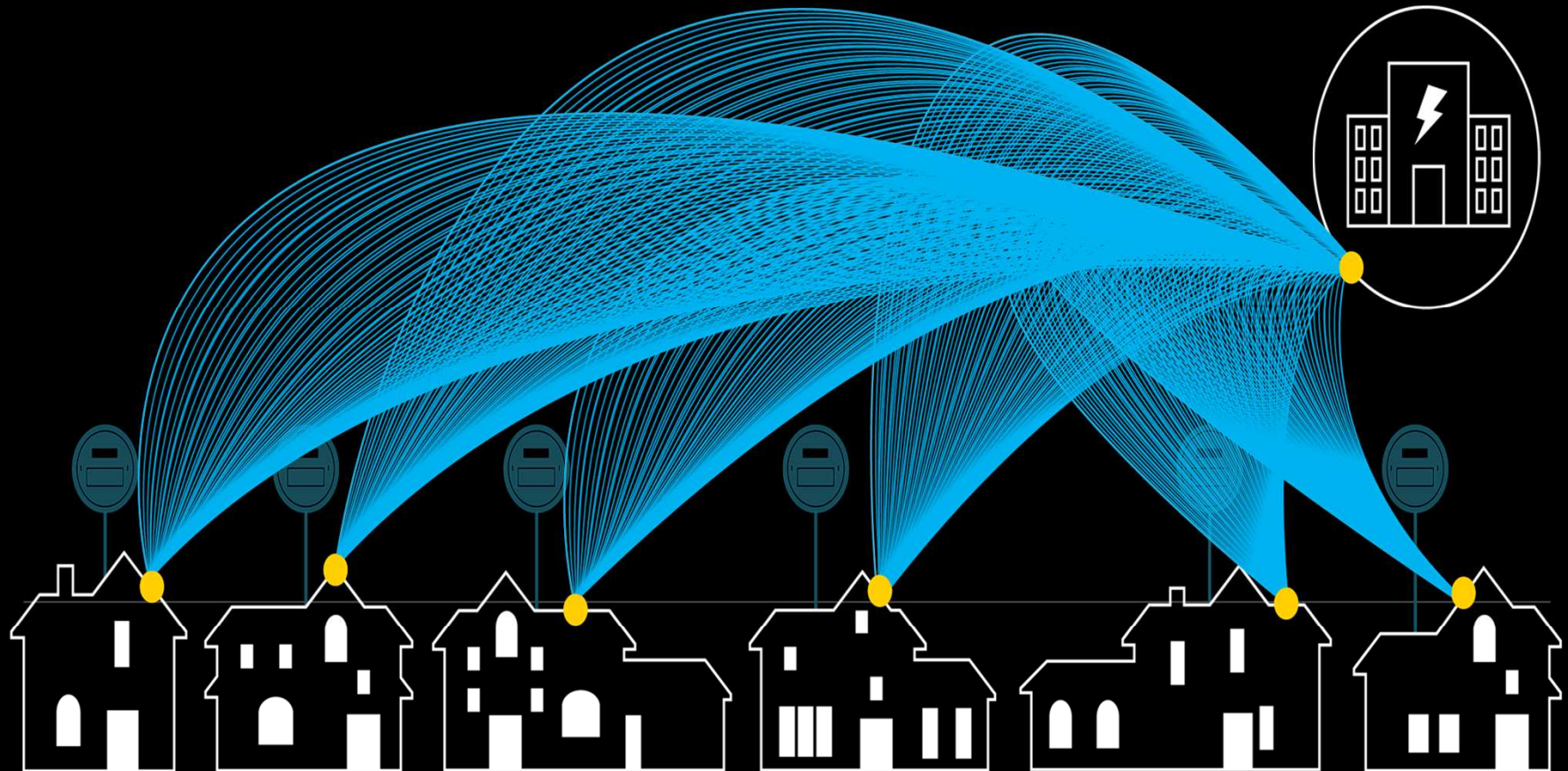
A 'smart grid' is fundamentally transformed in several ways



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By 2015, the amount of data created every 15 minutes =
the amount of data created in a year.



Cloud Computing

Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.

- NIST Definition

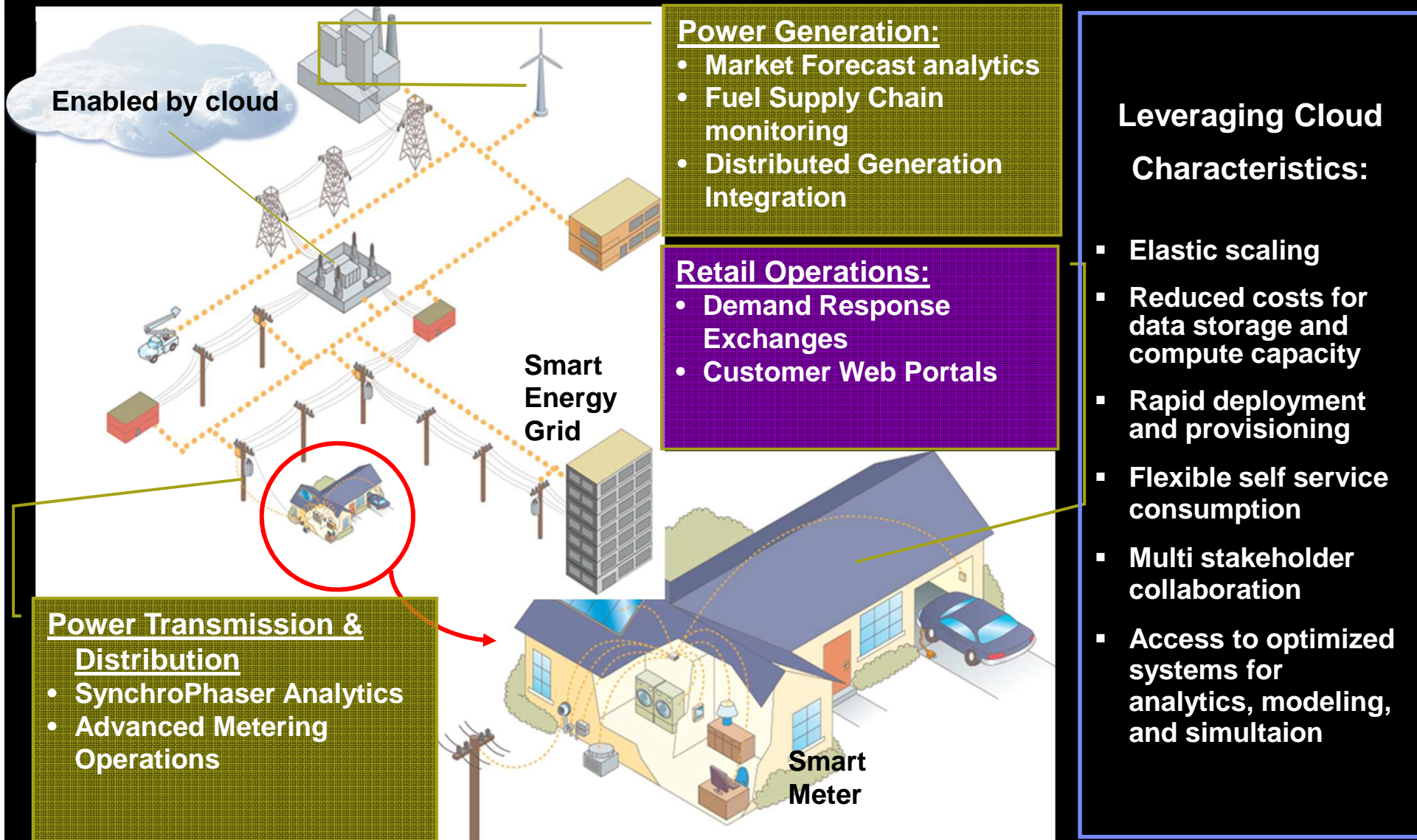
Organizations in every industry, regardless of size or geography, are embracing cloud as a way to reduce the complexity and costs associated with traditional IT approaches

Cloud Computing – Rethink IT. Reinvent business.

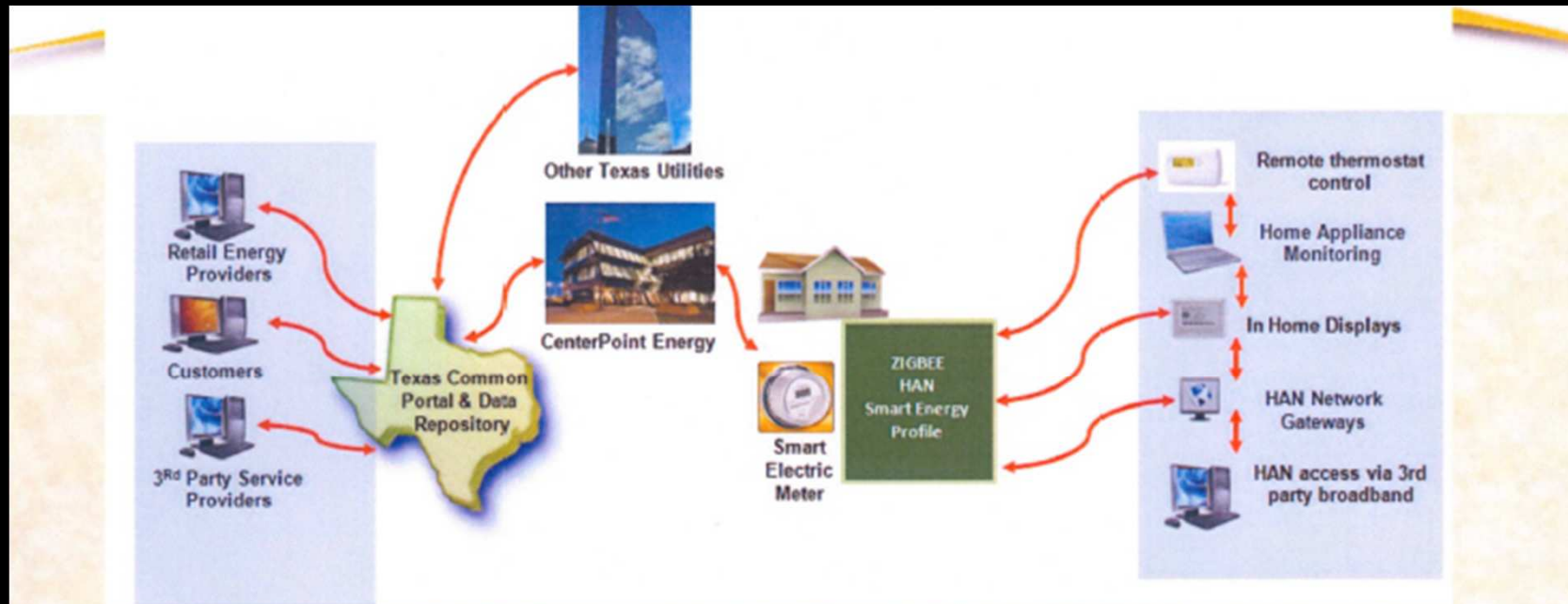
The most forward thinking companies will apply the transformative power of cloud to reinvent the way they do business:

Transformation through standardization and automation
Empower employees, partners & customers with real time insights
Unleash business model innovation

Cloud enabled Smart Energy Grid



Smart Meter Texas Consumer Portal



SMT Portal Functionality in March 2010 Release

- My Account profile updates
- Add / remove ESI IDs
- View meter lists
- Retrieve interval usage reports
- Retrieve daily meter read reports
- Print & export reports
- Add / remove HAN devices
- View HAN device status, details & history
- Retrieve HAN device message log
- Execute API & FTP interfaces
 - ◆ Extract of LSE files from SMT FTP site
 - ◆ Request for Ad-hoc usage via web service calls
 - ◆ Extract of LSE/CSV Ad-hoc usage response files
 - ◆ Add / Remove HAN Devices
 - ◆ HAN Messaging

UK Smart Energy Cloud



- UK Smart Energy Cloud solution can gather rich data, many times a day, from any of the planned 10 million smart meters in the country
- Enable changes in consumption patterns, manage & reduce overall and peak demand.
- Secure, fully integrated solution which will link with existing industry systems.

Rethink IT. Reinvent Business.
Smart, Secure and Ready for Business



ibm.com/smarterplanet
ibm.com/smartcloud