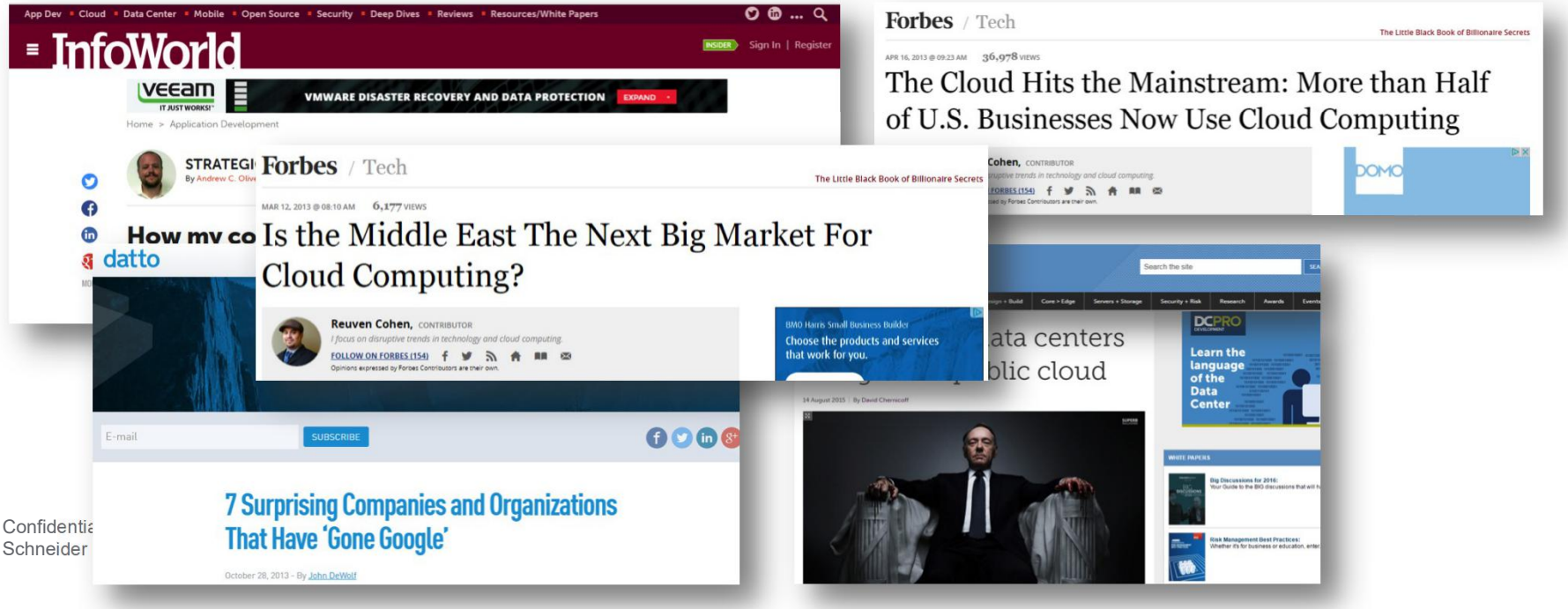
云计算开源产业联盟
IT大咖说 知识分享平台
Life Is On Schneider Electric

Data Center
In the Cloud and at the Edge
数据中心在云也在边

Life Is On Schneider Electric

Life Is On Schneider Electric

Not too long ago, our industry believed all computing would eventually centralize to the cloud



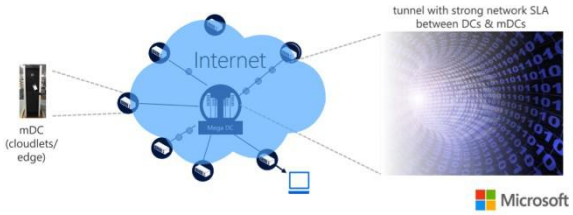
Confidentia
Schneider

Recent industry moves showing a pendulum shift back, creating a decentralized, hybrid computing ecosystem

is building hyper-scale data centers enough?

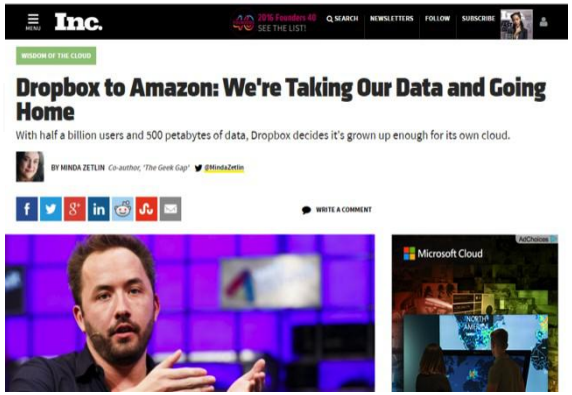
no, it's capital intensive and expensive to operate

smarter approach: build an extensive infrastructure of micro DCs (1-10s of servers with several TBs of storage, $20K-$200K/mDC) and place them everywhere



May 15, 2015

Microsoft

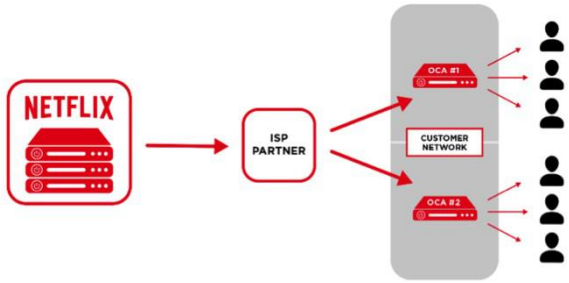


March 15, 2016

Dropbox

Basic architectures

The following diagram shows an example of OCAs that are embedded in a partner network, in conjunction with SFI peering which is used to provide additional resiliency and to enable nightly content fills and updates. Each site is served by a separate OCA or a set of OCAs, depending on your specific requirements.

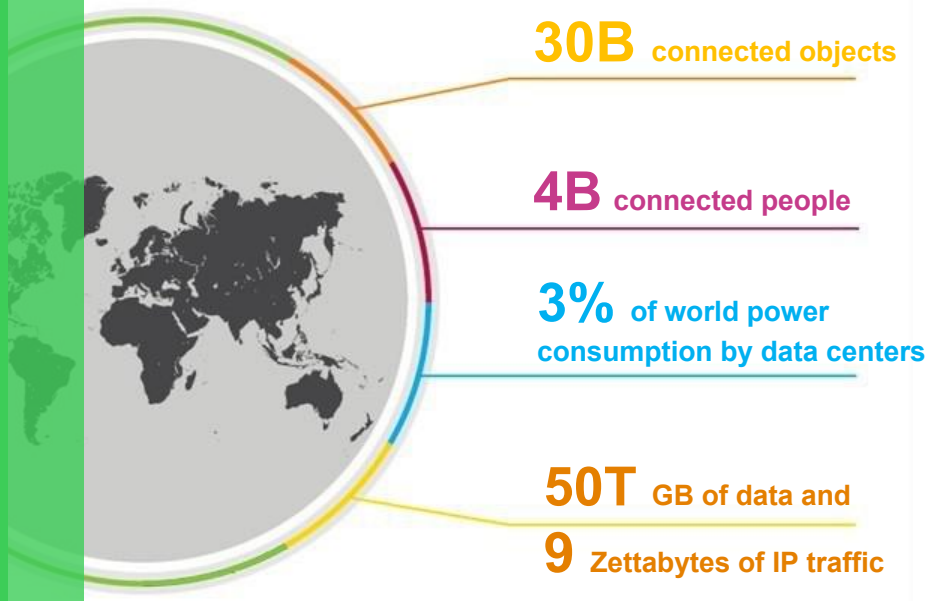


NETFLIX

By 2020, the world will be a different place…

…it is undergoing profound transformation to support the enormous data volumes and processing demands that are being generated by the Internet of Things (IoT).

The world in 2020…



Sources: Gartner, IDC, Uptime Institute, Cisco

Life Is On Schneider Electric

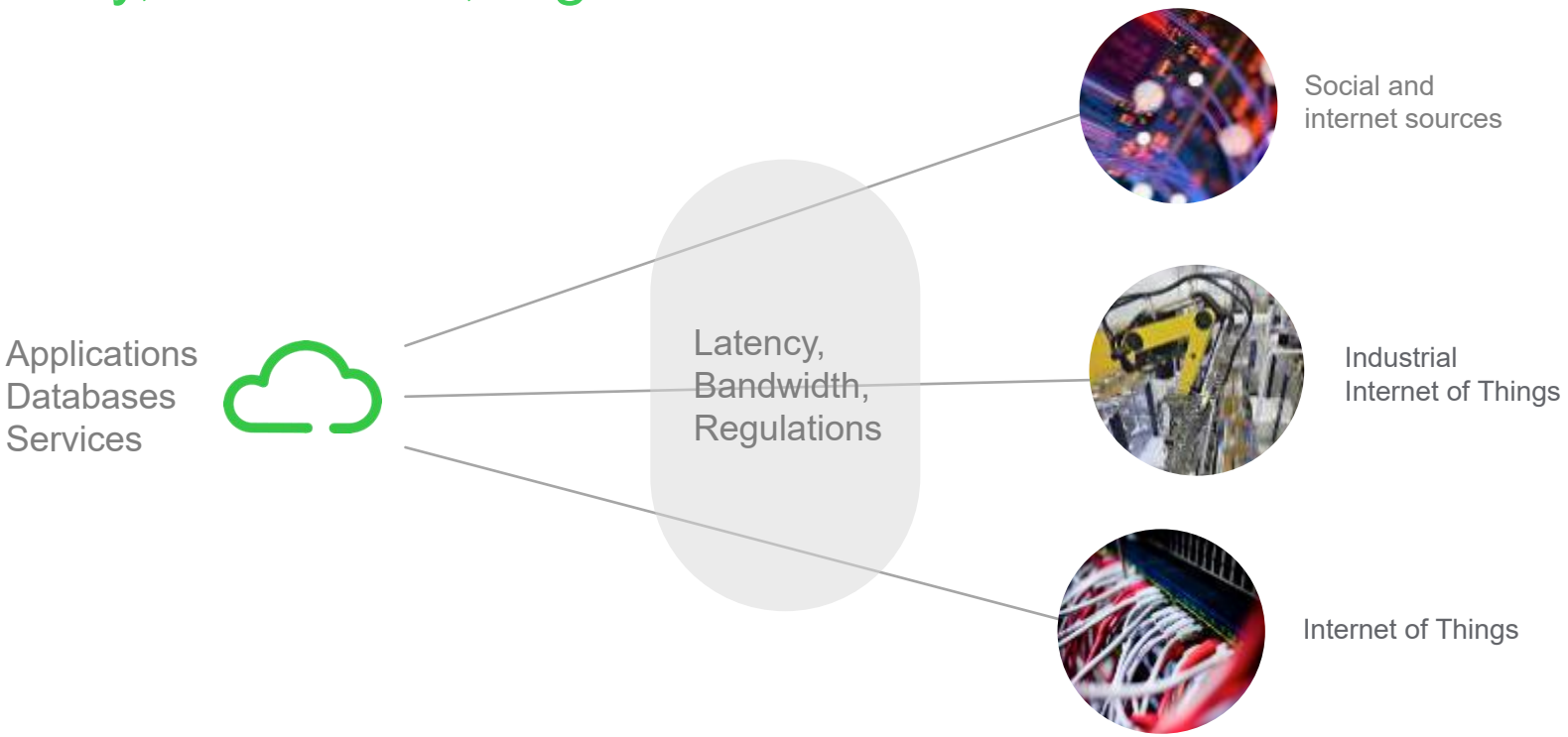
Why is there a massive move to the cloud?

- Speed
- Scale
- Cost

…the main building block of clouds are centralized hyperscale data centers…

Life Is On
Schneider Electric

The typical cloud network architecture has shortfalls: latency, bandwidth, regulations



Edge solutions address these issues by putting applications and services closer to users and “things”

Industrial
Internet of Things

Internet of Things

Social and
internet sources

Edge data center
Applications
Service

Edge data center
Applications
Service

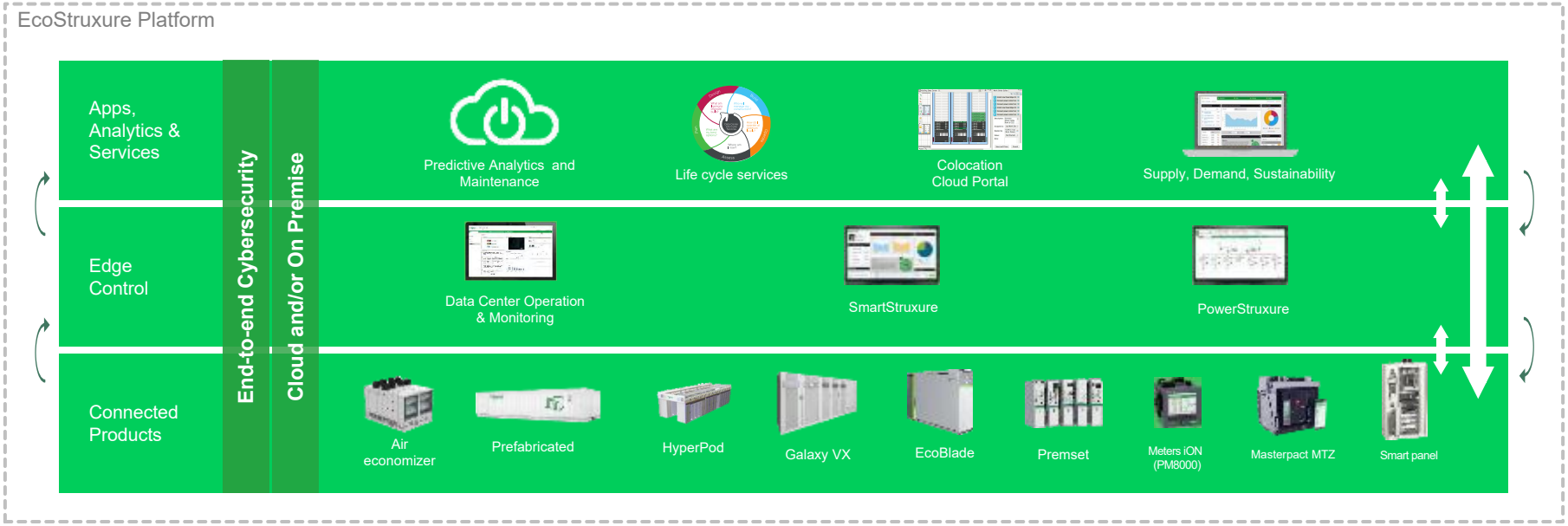
Edge data center
Applications
Service

Cloud
Applications | Databases |
Services

Confidential P
Schneider Elec

Life Is On Schneider Electric

EcoStruxure™ Innovation At Every Level Data Center



The Internet of Things and analytics will enable a more effective way to manage and maintain these data centers

Traditional data collection

Monitoring & analytics
in the cloud

Smart connected “Things”
at the edge

Confidential Property of
Schneider Electric |

The future is moving to a cloud architecture of centralized, regional, and localized edge data centers

Centralized cloud data centers (Public or Private)

Augmented with localized 'edge' data centers

Leveraging IoT-enabled data center management

Data Center

In the Cloud and at the Edge

Ensuring
Life Is On
through data center
infrastructure innovation

Life Is On | Schneider Electric

Sandra Ng
Group Vice President
Practice Group
IDC Asia/Pacific

IDC Analyze the Future

Heng Wai Mun
Head of Hosting and Cloud
Services Business Products
Group Enterprise
Singtel

Singtel

Adrian McPaul
Senior Vice President
Regional Head of
Critical Services, Asia
Citibank

citi

Mark Bidinger
President
Cloud & Service Provider
Segment

Schneider Electric

Tung Meng Fai
Director Infocomms
& Media Division
Economic
Development Board
Singapore, EDB

EDB

David Johnson
Executive Vice President
IT Division

Schneider Electric

Moderator / Presenter

云计算开源产业联盟
IT大咖说 知识分享平台
Life Is On Schneider Electric