Fujitsu
IT Future 2013

Fujitsu Cluster-in-a-box
Miguel Maciel – Fujitsu
Paulo Mena – Microsoft

FUJITSU

Reshaping ICT
Reshaping Business

Why continuous operation is important?

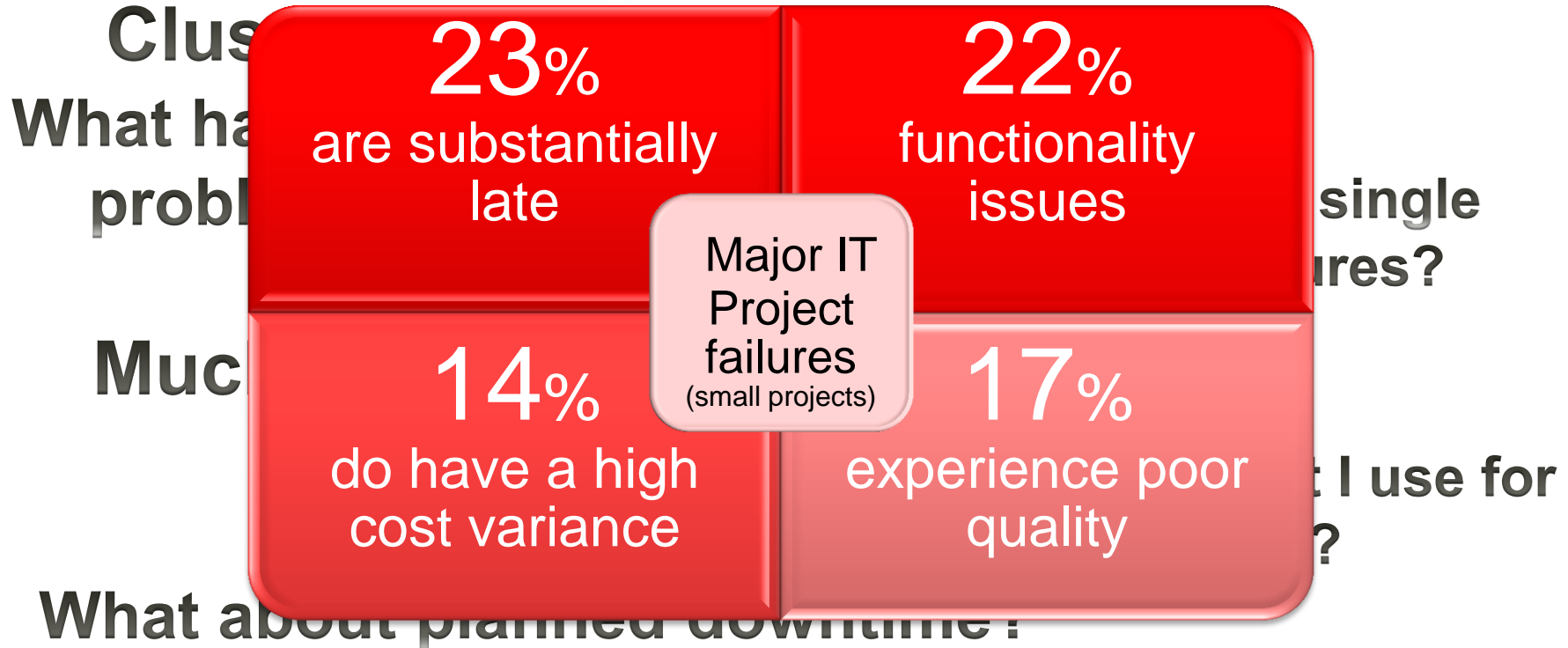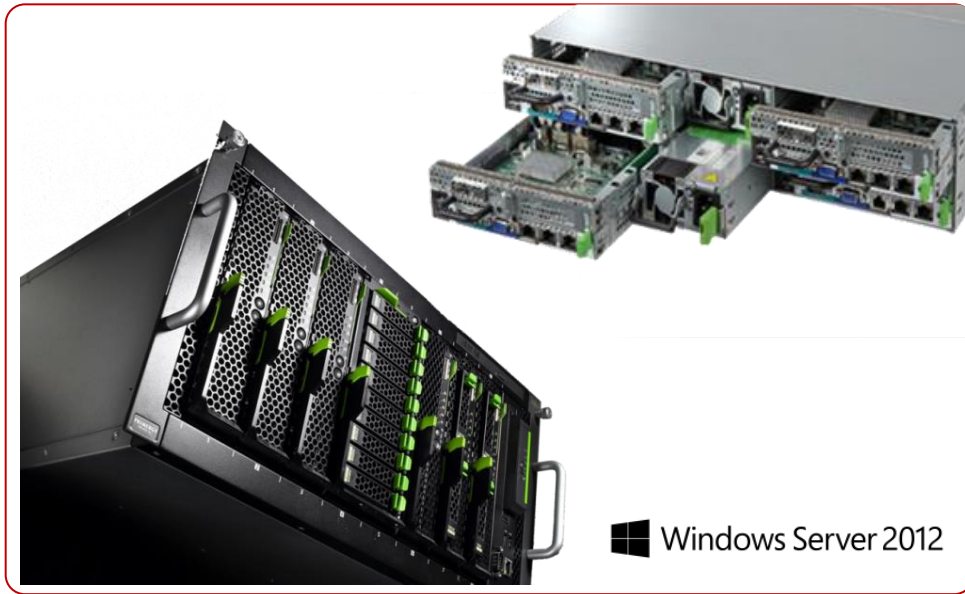| Downtime affects	Downtime results in
Administrator	Stress
User	Annoyance
Partner	Lost confidence
Customer	Lost revenue

Today, IT is one business enabling essential of your company!

Challenges with IT projects on high availability

Clus

What ha

probl   **single**

                                                                ures?

Muc

23% are substantially late	22% functionality issues
Major IT Project failures (small projects)	
14% do have a high cost variance	17% experience poor quality

t I use for

?

What about planned downtime?

*Source of figures: Gartner June 2012: Survey Shows Why Projects Fail

The solution: Fujitsu Cluster-in-a-box

Windows Server 2012

High available solution based on PRIMERGY servers and Microsoft Windows Server 2012
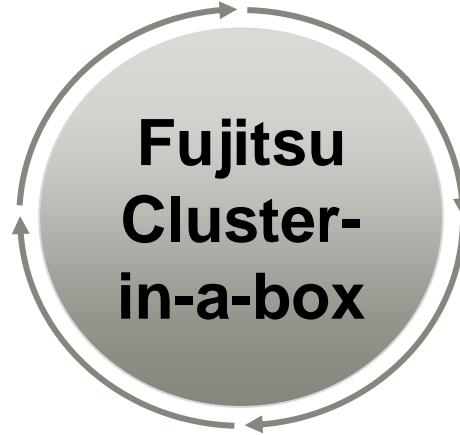
One box as your solution

- Continuous availability at affordable costs to protect important data and business services
- Automatic restart of failed services in a couple of minutes instead of hours and days of manual work
- All-in-one: pre-configured and pre-installed cluster for demanding IT requirements
- Everything redundant using latest technology with well synchronized components
- Covering either physical or virtualized IT environments

Fujitsu Cluster-in-a-box

What it provides

- Integrated availability mechanisms with failover clustering and redundant hardware components

- Single order code (SKU)

- Pre-configured, pre-installed configuration

- Pre-tested configuration

- Optional server virtualization with Microsoft Hyper-V

Your benefits

- Business continuity with nearly no downtimes

- Easy buying

- Ready-to work a few minutes after receipt

- No implementation risk

- Leverage the benefits of virtualization

Fujitsu Cluster-in-a-box

2 steps to continuous operation

Logistics

Step 1: Receive your compact, pre-configured and pre-installed solution and turn it on

Wizard

Step 2: Run the configuration wizard – it just takes a few minutes

Ready

Enjoy your high available IT environment

Based on PRIMERGY BX400

What it provides

- Smart enclosure equipped with all necessary components of a datacenter: server, storage and network

- Fully-featured blade system

- Entire management of all components with Fujitsu ServerView

- Purely based on industry standards

Your benefits

- All components are optimized to each other

  - Up to 70% less space than traditional servers
  - Reduced complexity and costs for cabling and deployment of network connections

- Easy scalability of server and storage resources to protect your investments

- Easy management of your IT

- Seamless integration

Based on PRIMERGY CX420

What it provides

- One enclosure for two servers with shared power and cooling

- Shared storage with up to 12 x 3.5" hot plug NL-SAS drives

- No sharing of fabrics, I/O or management components

- Purely based on industry standards

Your benefits

- Up to 50% less space than traditional servers, all components are optimized to each other

- Easy scalability of storage resources

- Lowered complexity vs. blade servers

- Seamless integration

And Windows Server 2012

What it provides

- Hyper-V Network Virtualization

- Single Root I/O Virtualization (SRIOV)

- Hyper-V Replica

- SMB3.0

- Storage Spaces

Your benefits

- Data security & compliance, move VMs without reconfiguration

- Easy to handle connection of virtual machines to physical networks

- Easy setup of DR scenarios

- Live migration without SAN

- Cost effective and reliable usage of storage

Windows Server 2012

Optional virtualization with Hyper-V

The physical world

Better utilization of physical resources
- Lower IT costs (servers, energy, space, …)

A homogeneous separation layer
- E.g. old services can be used on new hardware

Many automation options
- Standardize routine jobs

Easy deployment
- E.g. "offline" software deployment

Easy scalability
- New services are available in minutes

Easy to implement availability solutions
- Uniform SLA's

Your fast track to continuous operation

Fujitsu Cluster-in-a-box

- **Business continuity with nearly no downtime**

- **Easy buying**

- **Ready-to work a few minutes after receipt**

- **No implementation risk**

- **Leverage the benefits of virtualization**

Based on PRIMERGY BX

- **Smart enclosure equipped with all components of a datacenter: server, storage and network**

Based on PRIMERGY CX

- **Scale out smart with a consolidated 2U rack enclosure**