

New Cloud Intelligent Society

José Pinto (Fujitsu)

José Pedro Abreu (Mainroad)

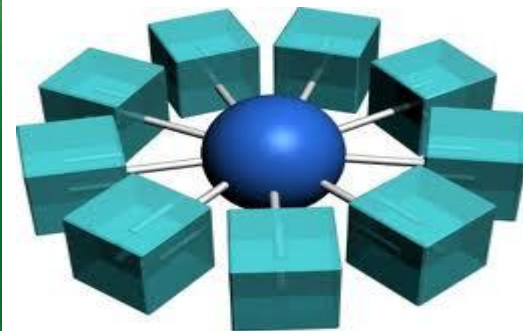
José Veiga (CiL)

FUJITSU

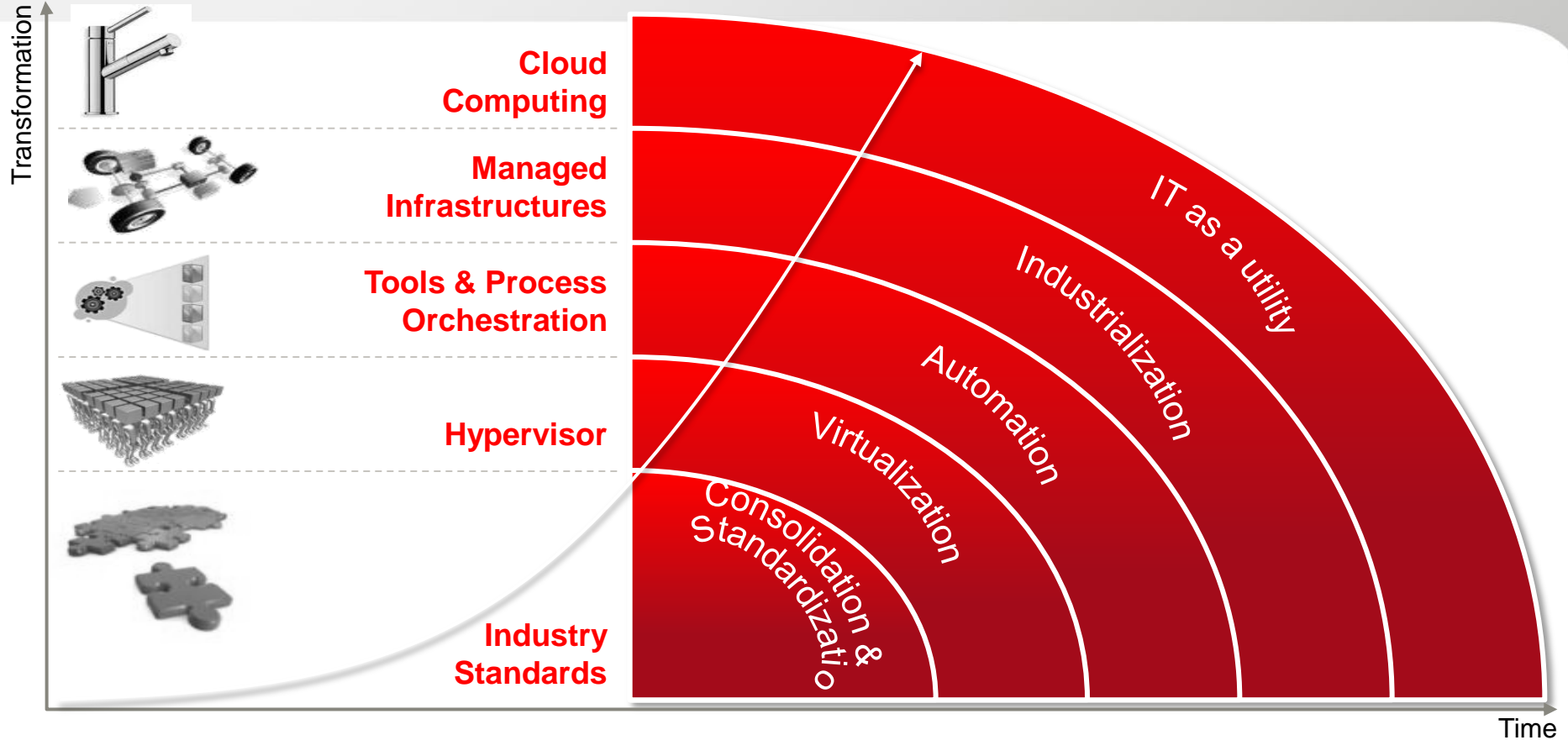
shaping tomorrow with you

A word cloud background with various terms related to cloud computing and business. The most prominent words are 'IT reshaping Business', 'Growth', 'Hybrid Cloud', 'Agility', 'Flexibility', 'On Demand', 'Efficiency', 'Capacity', 'Innovation', 'Shared', 'Virtualization', 'Dynamic', 'Infrastructure', 'Business Processes', 'Platform', 'Private Cloud', 'Application Services', 'Smart Sourcing', 'Trusted Cloud', 'Data backup', 'Hosting', 'Business Intelligence', 'Global Cloud', 'Collaboration', and 'Cloud'. The words are in various sizes and colors, mostly in shades of red and white.

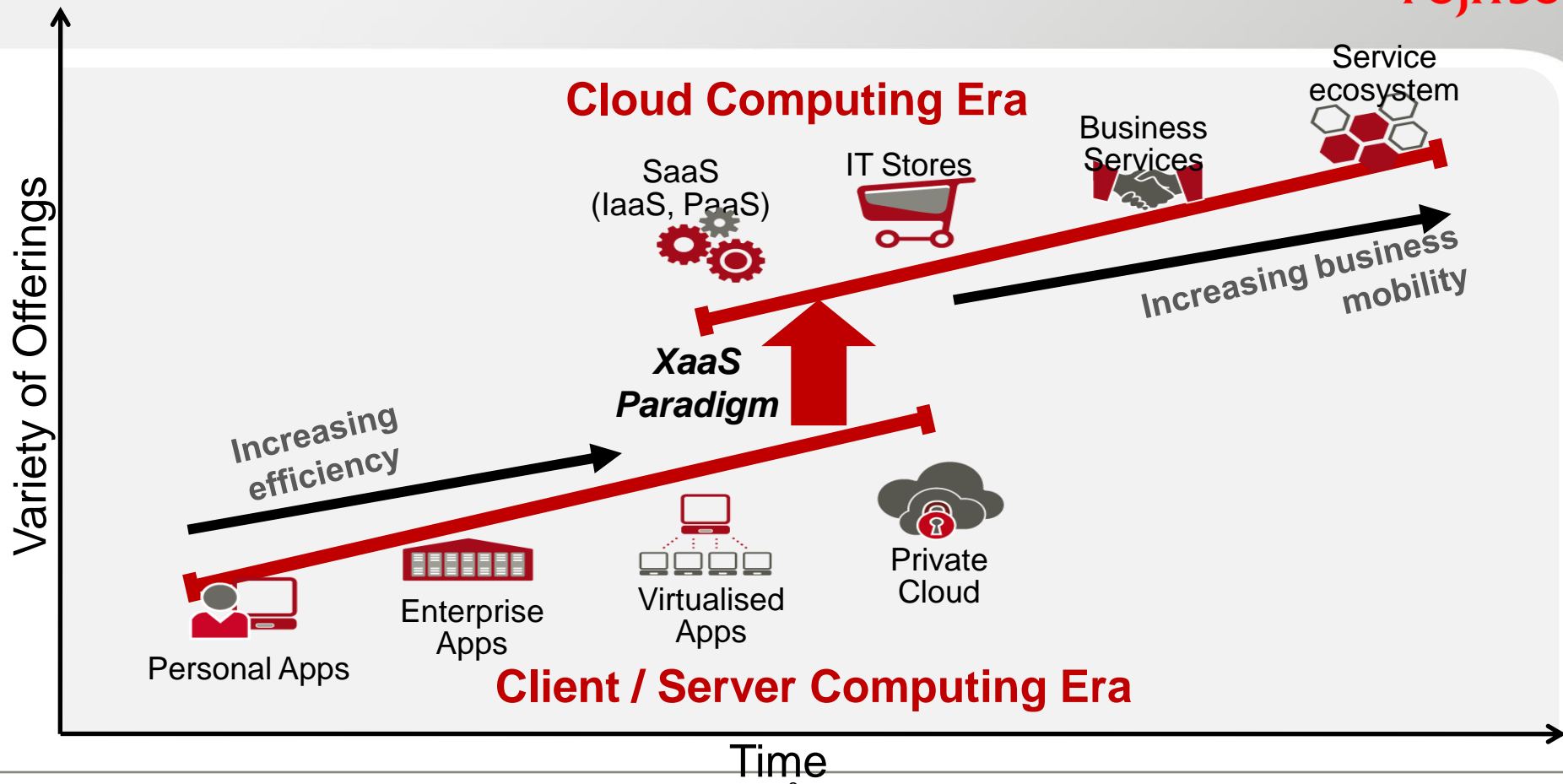
- **Cloud Evolution and the new e@commerce approach**
- **The Data Center and Communications Cloud role**
- **SaaS as vertical solutions**



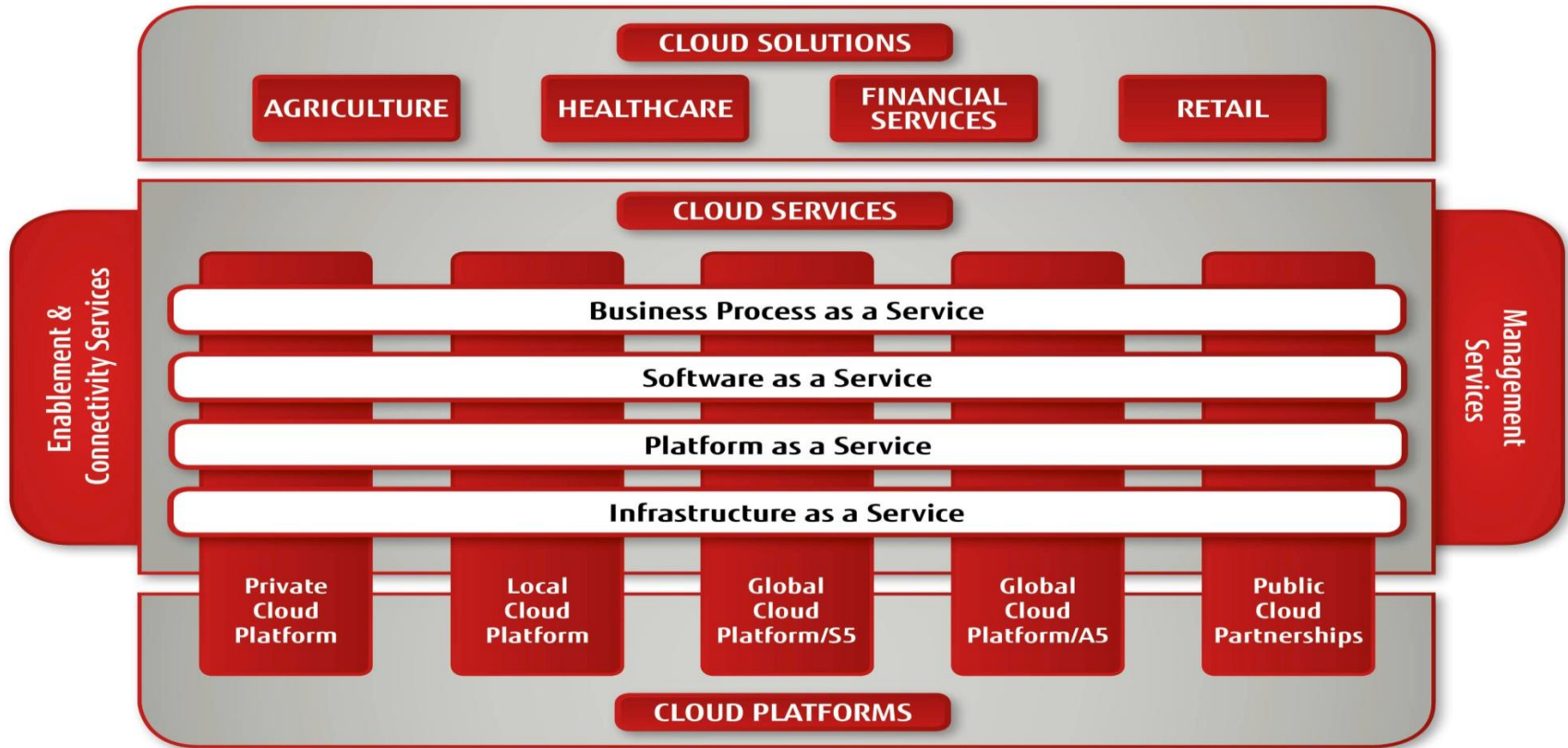
Cloud Computing: Evolution of IT



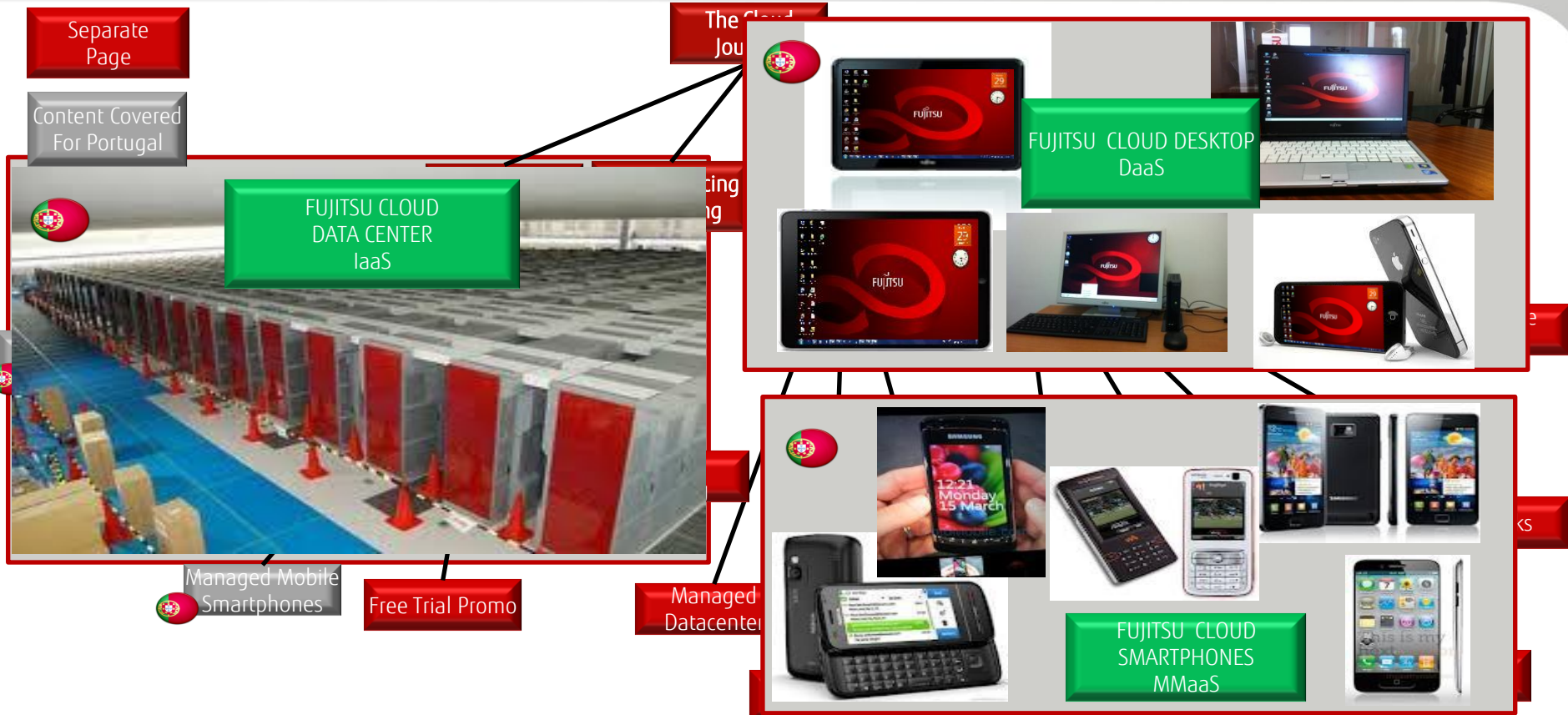
IT Stores: Consumer Portals for Cloud Services



Cloud Computing Models

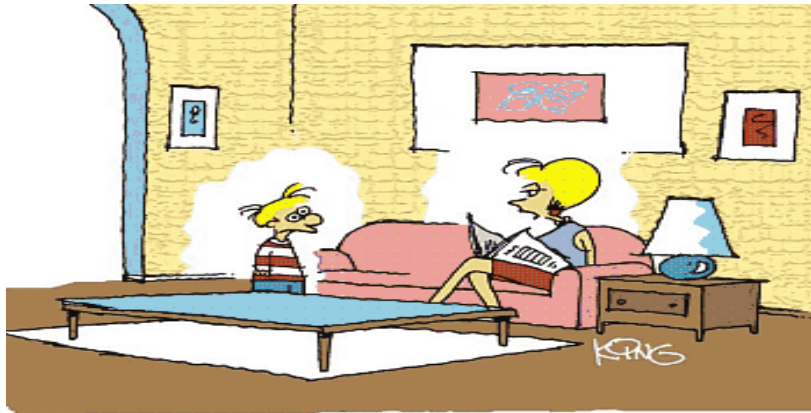


Cloud Computing: IaaS, DaaS, Manage Mobile XaaS



The new generation...

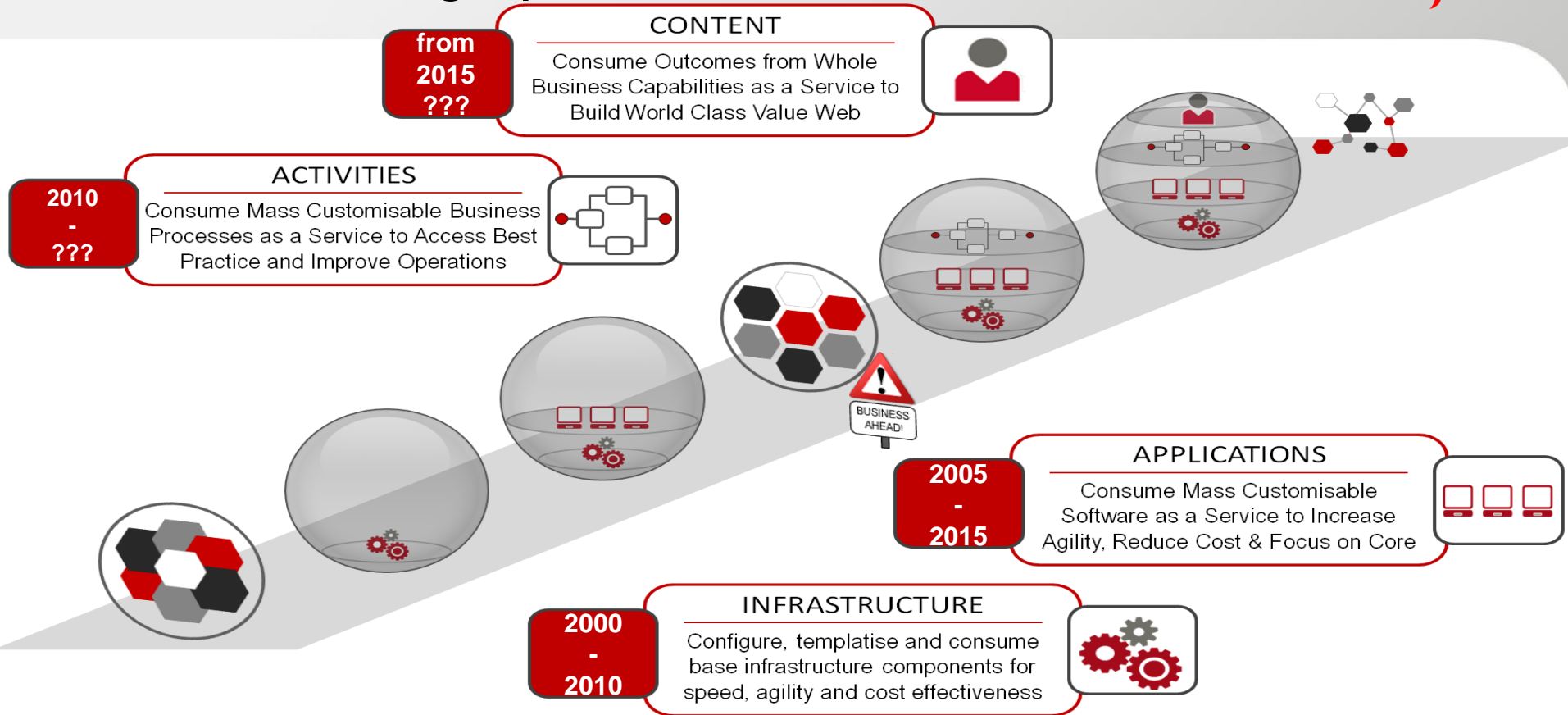
- Anytime -- anywhere -- any device
- Attractive IT workplace
- Consumerization...
 - Integration of social media
 - Consumer app's and services entering corporate space



"No, you weren't downloaded.
You were born."



XaaS is Moving up the Value Chain



How do IT Solutions Reach the Consumer?



BUSINESS PERSPECTIVE



- AGILITY
- FLEXIBILITY
- FUNCTIONALITY
- FINANCIAL



- ! BUSINESS MODEL
- ! TRANSITION
- ! SOURCING
- ! MANAGEMENT
- ! GOVERNANCE

CIO PERSPECTIVE



- SPECIALISATION
- REACH
- ADOPTION
- REVENUE



PROVIDER PERSPECTIVE



Introducing the IT Solution Store



BUSINESS PERSPECTIVE

AGILITY

FLEXIBILITY

FUNCTIONALITY

FINANCIAL



SOLUTION STORE

- ✓ BUSINESS MODEL
- ✓ TRANSITION
- ✓ SOURCING
- ✓ MANAGEMENT
- ✓ GOVERNANCE

CIO PERSPECTIVE



SPECIALISATION

REACH

ADOPTION

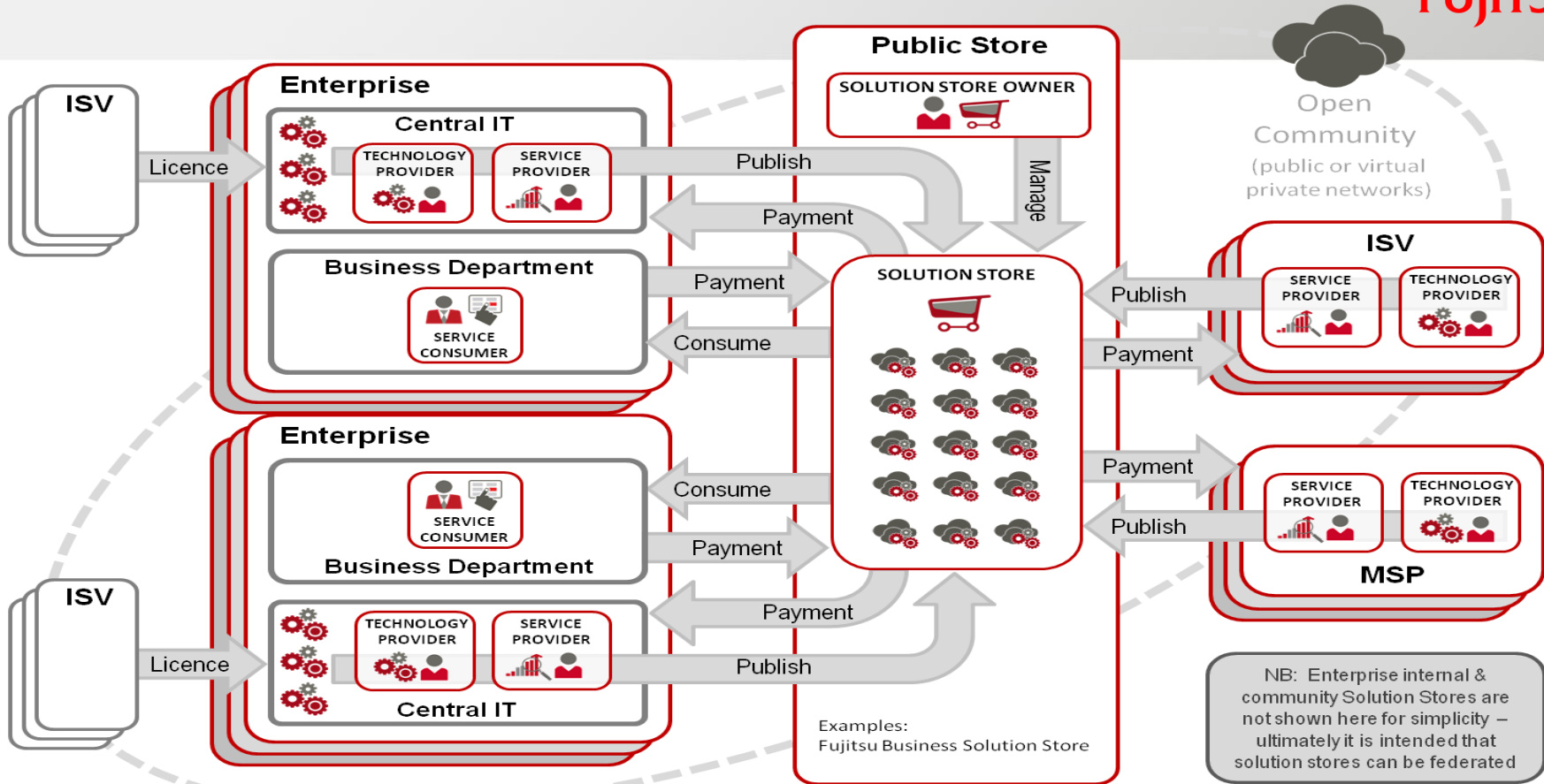
REVENUE



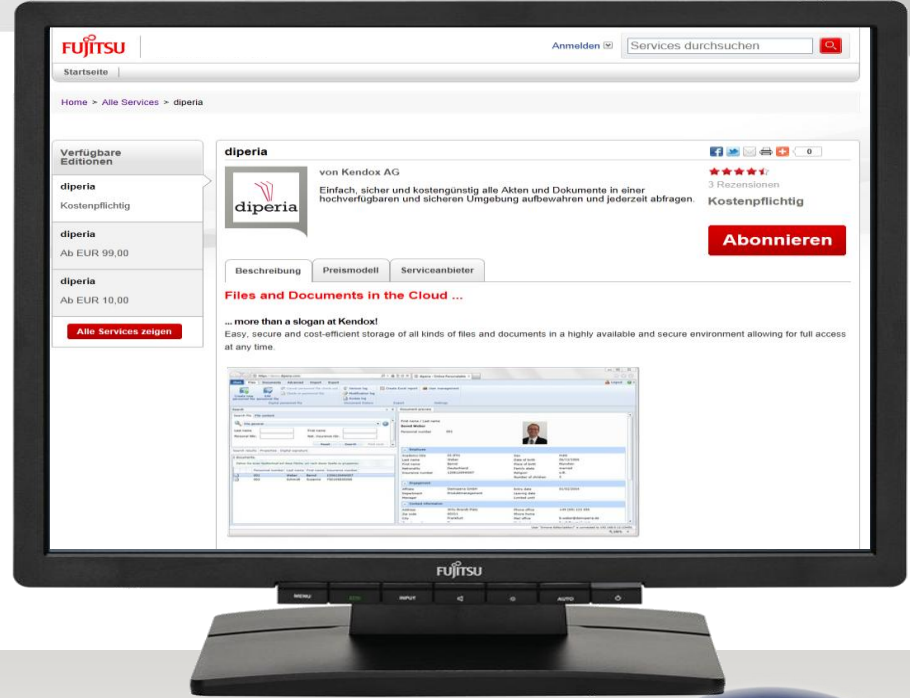
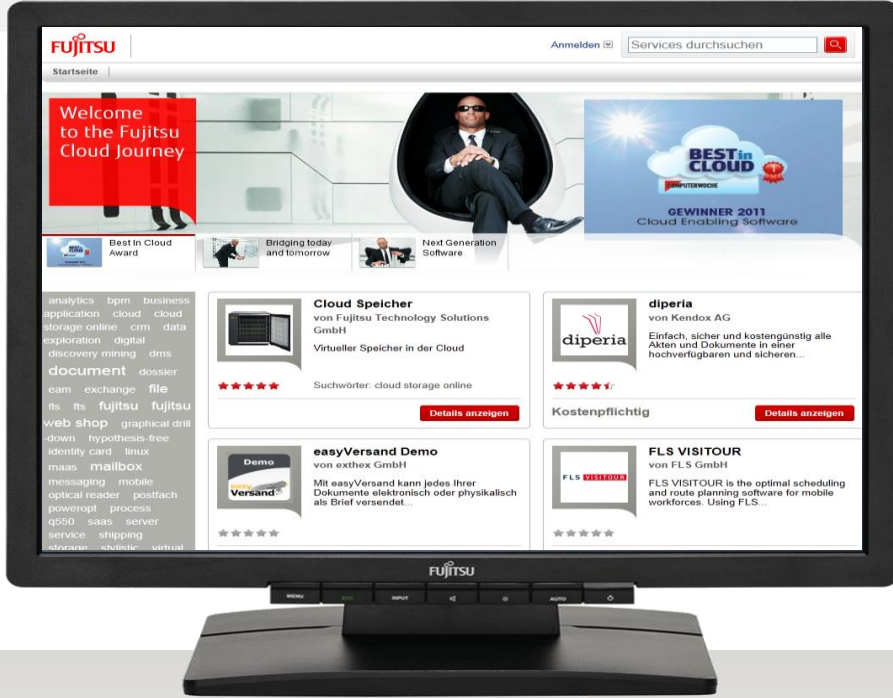
PROVIDER PERSPECTIVE



Public Cloud Business Solution Store



Business Solutions Store



 Visit our on-line Enterprise Software



SaaS - Software Catalogue

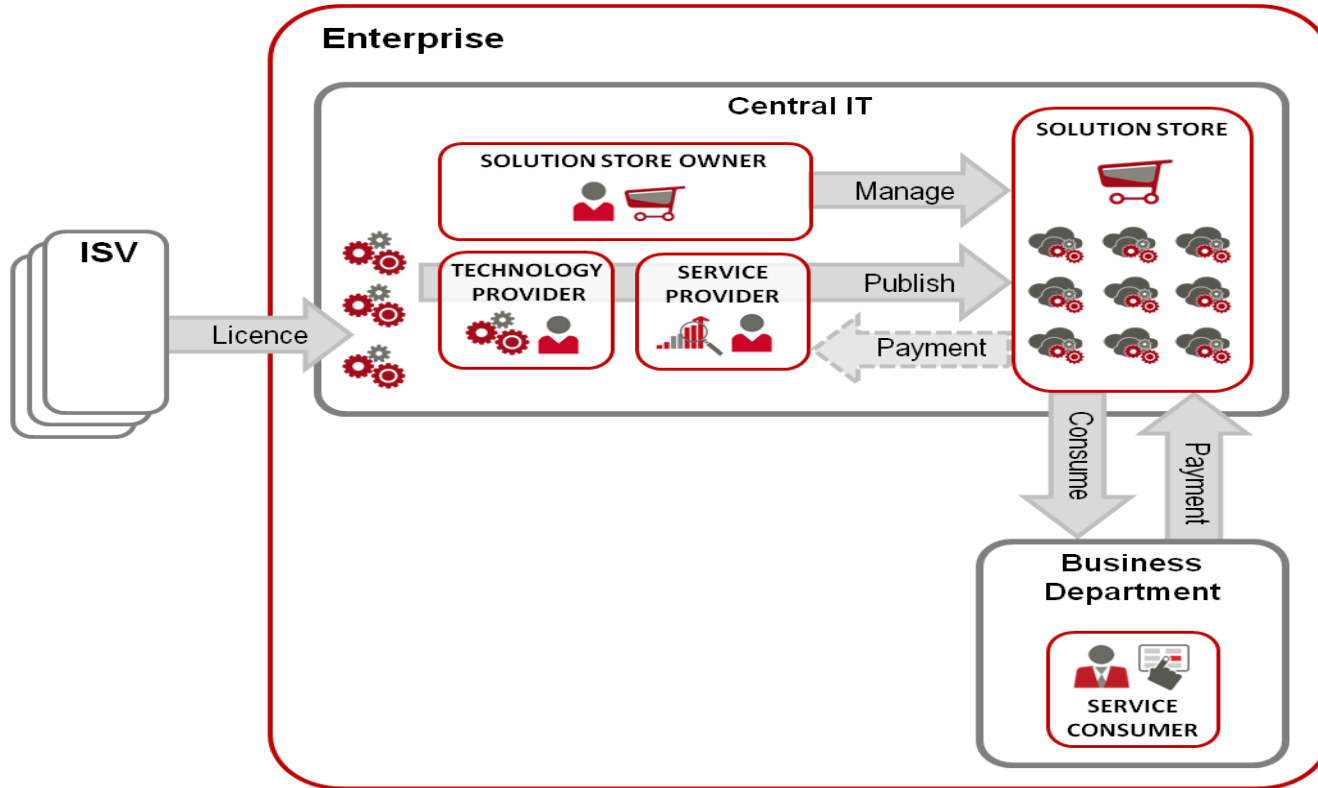
SaaS

FUJITSU



Self Service - Flexible - Pay per Use

Private Cloud Enterprise Solution Store



The Enterprise Portal is the desktop for a new age, the information age.

It is a single window onto the combined knowledge and processing power of the enterprise.

To enhance the experience of customers, employees, suppliers and partners the Enterprise Portal must provide a convergence of information, application and technology.

Source:
The Business Forum
Jan 2012

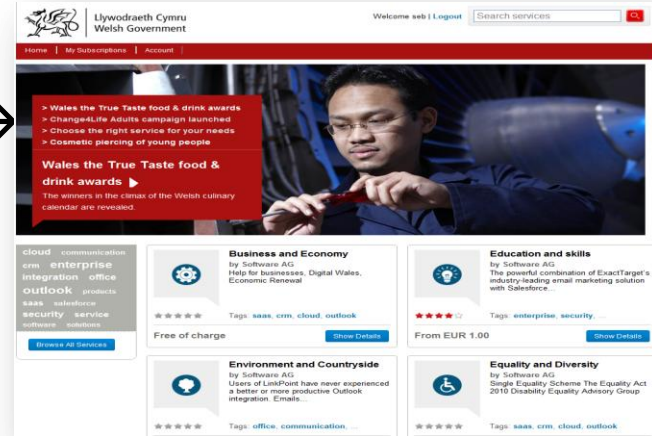
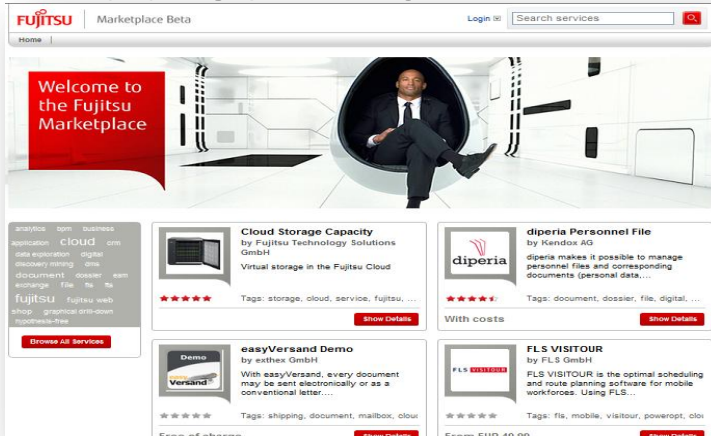
<http://www.bizforum.org/w/whitepapers/kanbay003.htm>

Private Cloud Enterprise Solution Store



- Public Cloud Focus
- Extension of ISV Cloud Program
- Presented at Fujitsu Forum 2011
- Live at CeBIT 2012

- Private Cloud Focus
- Target Market:
 - Corporate IT
 - Government IT





New Cloud Intelligent Society

Data Centers & Mobility

José Pedro Abreu

FLEXIBLE? →



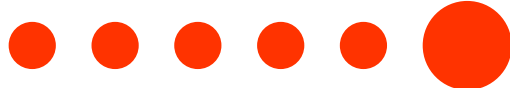
Infraestrutura Cloud & Mobilidade

Desafios que se colocam às empresas?

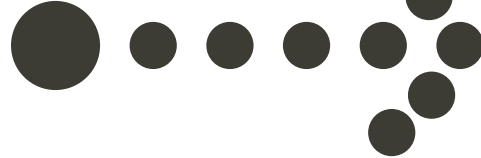
Desafios de Internacionalização



Desafios de Rentabilidade e Redução de Custos




Desafios de aquisição e retenção de Clientes



Segurança dos dados, eficiência e infraestrutura resiliente

Infra-estrutura Cloud & Mobilidade

IT 3.0 – desafios da cloud & mobilidade

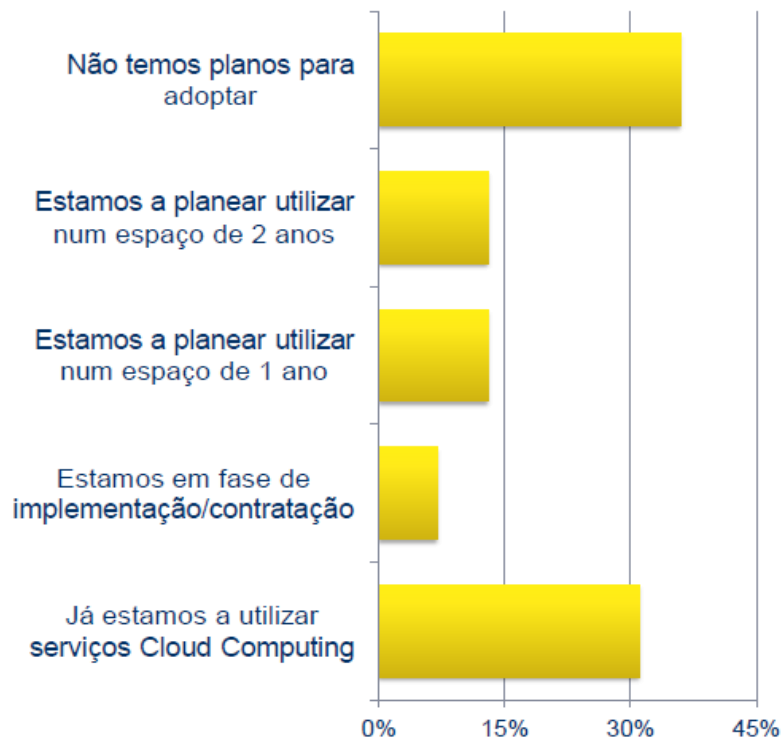


	IT 1.0	IT 2.0	IT 3.0
	PRE-INTERNET TECHNOLOGY	INTERNET PROCESS	CLOUD & SOCIAL PEOPLE
COMMUNICATION	Paper based	Email-based	Collaborative, Many 2 Many
TECHNOLOGY	Mainframe & Client/Server	Client/Server & Browser	Delivered as a Service
PEOPLE	Just got in the way	Learned from IT	Inspired IT
IT & BUSINESS	Separate	Aligned	Inseparable
PROCESS	Isolated	Enabled	Evolved

Infraestrutura Cloud & Mobilidade

IT 3.0 - Desafios na adoção da Cloud em Portugal

- Um terço das organizações já estão a utilizar serviços Cloud Computing
- 30% das organizações estão em fase de planeamento ou vão utilizar a curto prazo
- Apenas um terço não tem interesse

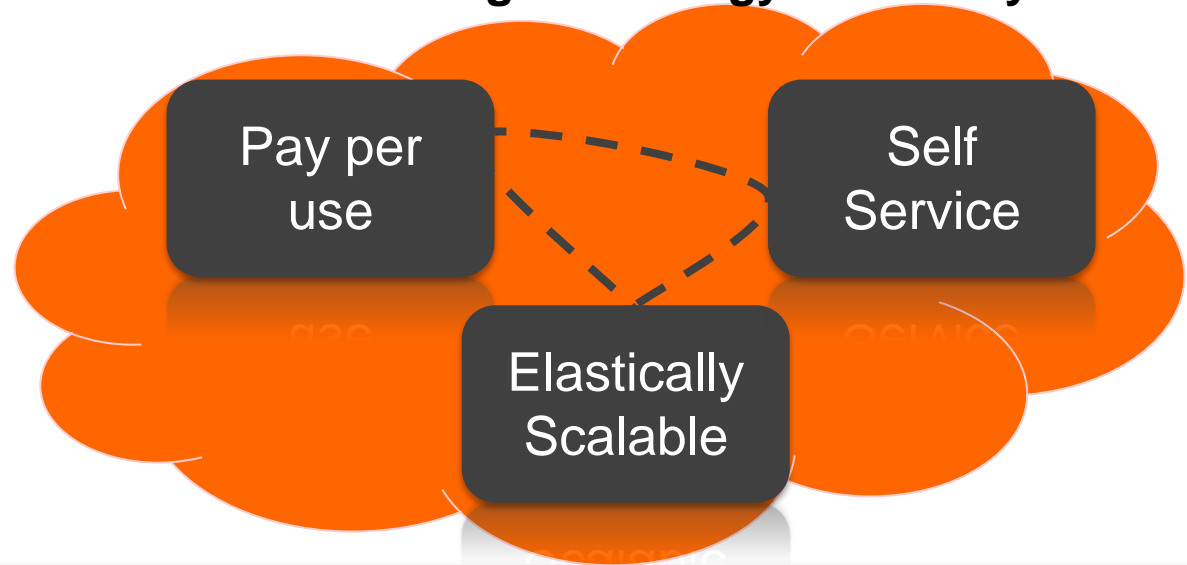


Infraestrutura Cloud & Mobilidade

IT 3.0 -> Opção Cloud?

Lots of confusing messages (**Cloud Washing**) but simply put....
The means of consuming technology as a utility

A **technology** or a **business process** delivered as a **service** in a way that is **elastic** and **scalable**, **pay per use** and **self service**.



Public
shared with anyone

Community (Trusted)
selectively shared

Private
just for you

Infraestrutura Cloud & Mobilidade

IT 3.0 - Crescimento da Mobilidade



O 4G é a próxima revolução nas tecnologias de informação

Infraestrutura Cloud & Mobilidade

Dispositivos, Cloud, Mobilidade -> Segurança?

Como se refletem os desafios nas empresas?



Dispositivos



Cloud



Acesso



“CIOs in Europe and the U.S. expect substantial increases in device diversity, and are exploring new management and funding models, such as employee-owned.”

“Through 2016, at least 25% of employees in the U.S. and Western Europe will not be permitted to use their own mobile devices for work because of the sensitivity of data they access.”

Source:Gartner - CIO Attitudes Toward Consumerization of Mobile Devices and Applications 25 May 2011

Infraestrutura Cloud & Mobilidade

Desafios IT 3.0 ? -> Infraestrutura resiliente

Uma solução de cloud com efetivo suporte de segurança a dispositivos móveis tem de ser suportada por:

- Uma infra-estrutura de Data Center próxima, segura e redundante
- Processos robustos e ferramentas de suporte e automação
- A qualidade da interligação do cliente à plataforma de cloud computing é chave para o sucesso da solução
- Apenas uma oferta integrada da componente de Data Center com a de telecomunicações garante o nível de serviço end-to-end (SLAs)
- Acesso à gama completa ICT

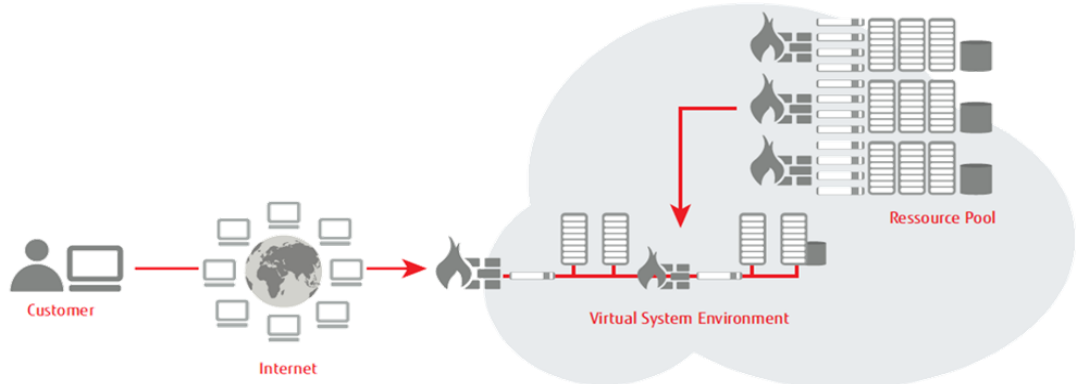


Infraestrutura Cloud & Mobilidade

Desafios IT 3.0 ? -> Trusted Cloud



- Plataforma alojada em Portugal acessada via Internet ou circuito dedicado
- Desenhada numa arquitetura de Cloud
- Orquestração e Automação das pools de recursos existentes
- Base das ofertas de PaaS e SaaS



A NOSSA VISÃO MOBILIDADE + CLOUD?

Vai desencadear:

- Consolidação de Data Centers
- Consolidação de Desktops
- Serviços Integrados de Segurança

Como resposta a:

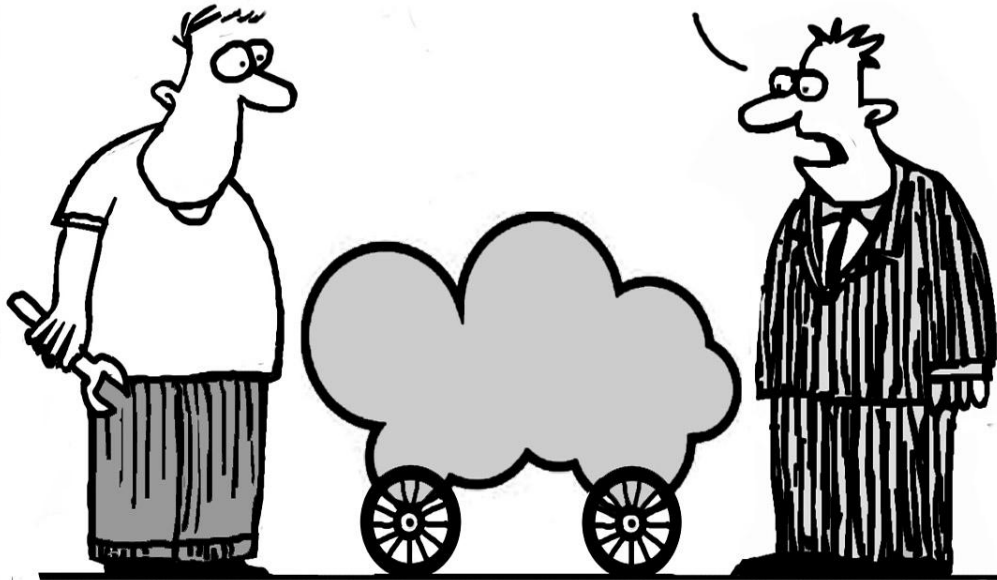
- Adoção pelas empresas de Soluções Cloud
- Desafios da Internacionalização
- Maior peso da mobilidade

Tendo como base os desafios das empresas:

- Rentabilidade
- Crescimento
- Satisfação e Retenção do Cliente



THAT WASN'T
QUITE WHAT I HAD
IN MIND WHEN I ASKED
YOU TO WORK ON MOBILE
CLOUD TECHNOLOGY!



How to do better with less?



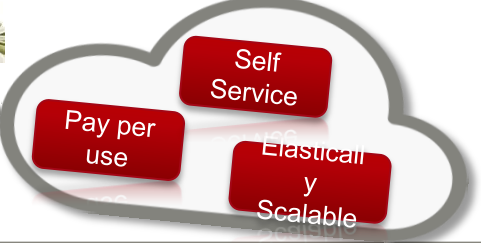
Business Services
Application Services
Dynamic Infrastructures



GOVERNO DE PORTUGAL



FUJITSU



Agriculture Sector

Assist to provide stable supply and safety of foods by visualizing farming activities

Background / Customer Issues

- Visualize tacit knowhow of experienced farmers by IT, contributing to stable supply and safety of foods



Case Study

Agriculture Sector

Assist with stable supply and safety of foods by visualizing farming activities



Farm Manager

Operation plan

Field management

SaaS Service

Farm field management

Inspection support



Field Worker

Sensing Data

Sensor DB
Field DB

Fujitsu Data Center

Knowledge database
Best practices DB

Knowledge management

Growth situation

Weather condition

Soil condition

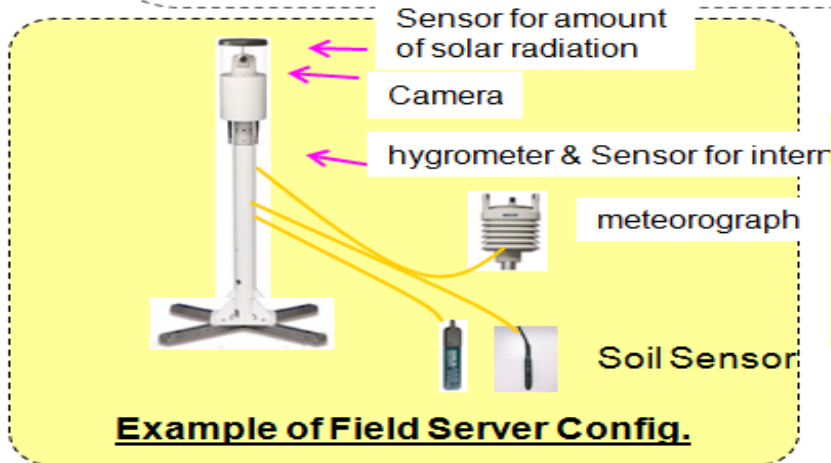
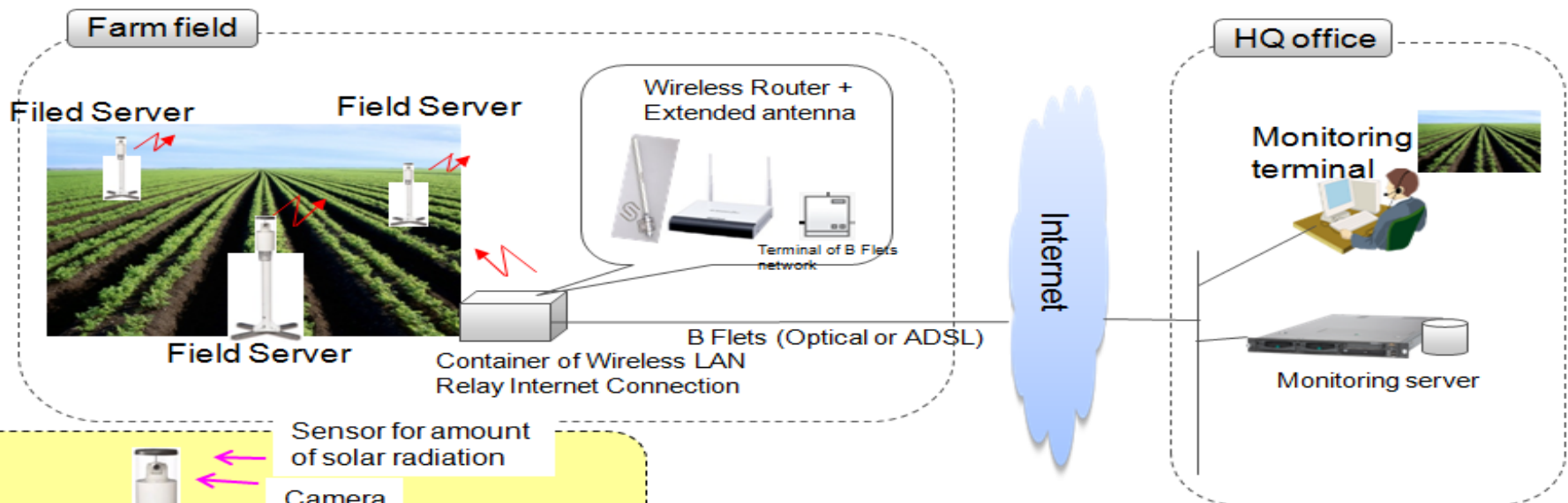
Market Information

Work record

Fertilization record

GPS terminal

[Farm Filed Sensor] Field sensing



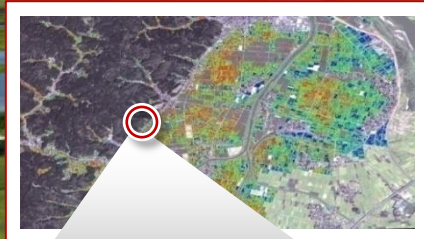
- ✓ **Field Monitoring:** Full picture and crops status are taken and under real-time monitoring. Camera has functionality of switching, tilt and zooming (Equiv. to live-camera)
- ✓ **Meteorological data:** Temperature, moisture, amount of solar radiation, wind velocity, atmospheric pressure, rainfall.
- ✓ **Soil data:** Soil temperature, soil moisture, fertilization condition (EC)
- ✓ **Other data:** Case-by-case

Note: Installation and electric supply works are additionally required. Relay network environ. is also necessary.

Fujitsu Solution for the quality management of rice



Satellite images show the protein value of the field



Optical Satellite
(GeoEye-1) USA
Groud grid : 50 cm
Monitored area 15 sq. km
Rhythm: every 2-3 days

650 km in orbit



Satellite SP

Reflexion data



sunlight



Chlorophyll



Seed (e.g. rice, corn)

Data



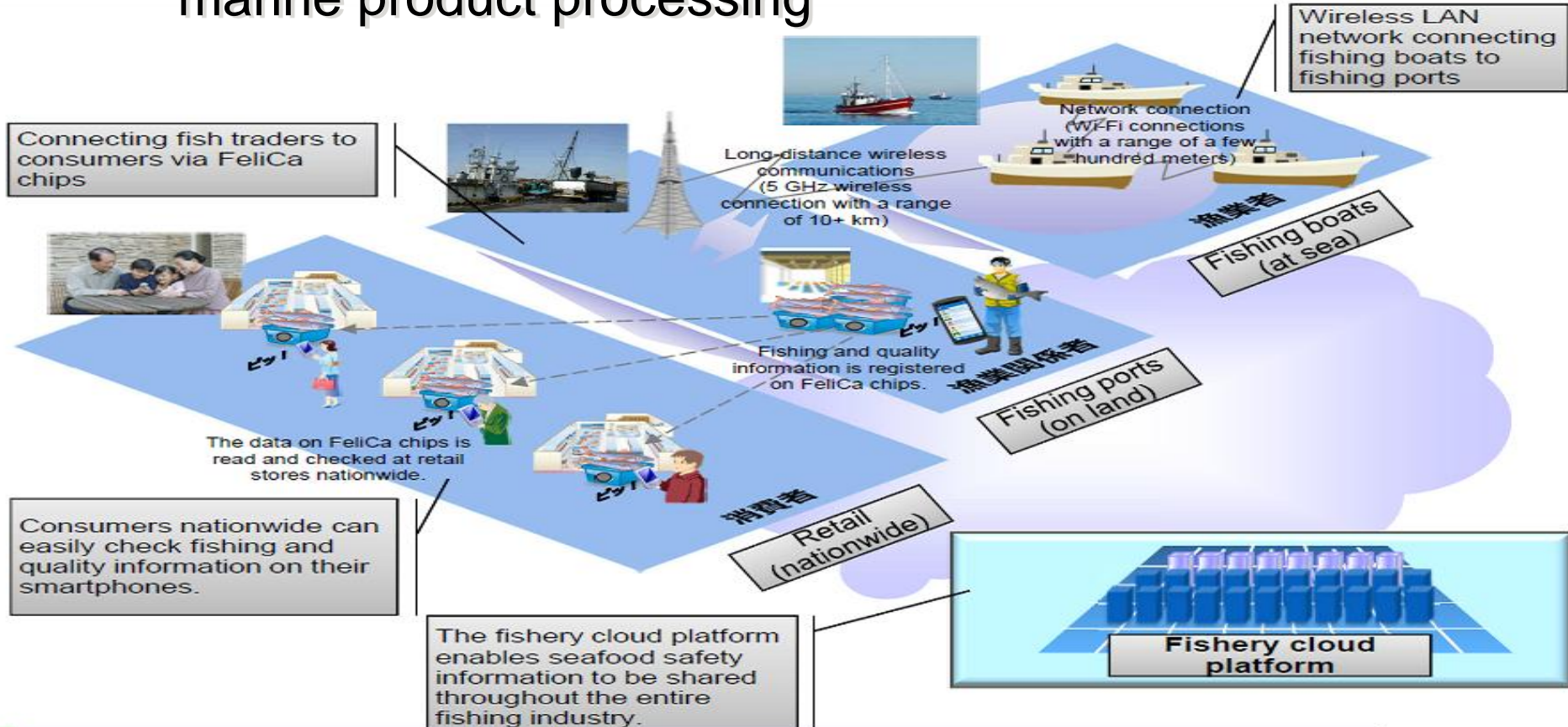
Analyse

Map or GPS Data



Fishing Sector

Connecting People Using ICT in fisheries and marine product processing



Background

(Condition of Bridge Maintenance)

- Aging Bridge is nation-wide issues, mostly un-inspected (about 90%).
 - Bridge with over-durable period will increase in the future
 - Ministry of Land, Infrastructure, Transport and Tourism distributes subsidies in a limited time period



Infrastructure Sector

Promotion of Social Infrastructure Protection by Bridge Checking Support System

Local Government

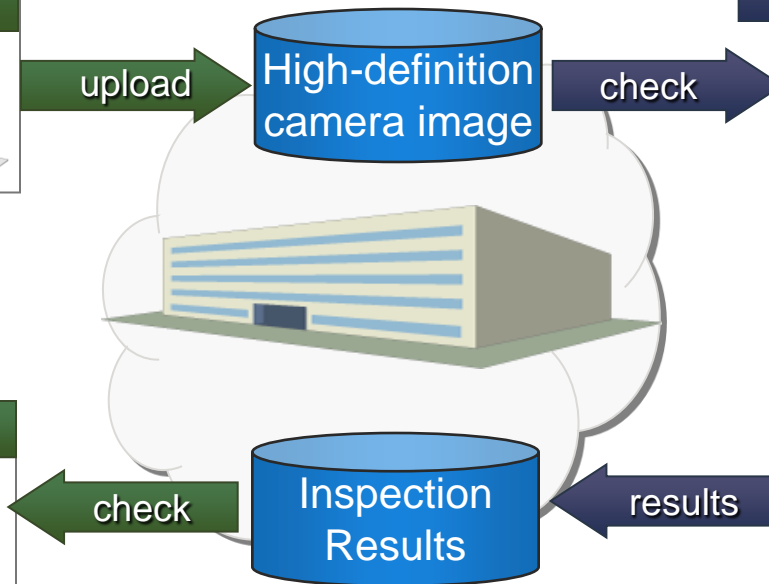
1. Shoot image & transfer video



3. Confirm result



Bridge Inspection Support System (Tentative name)



Construction consultant

2. Conduct inspections





HumanBridge EHR Solution

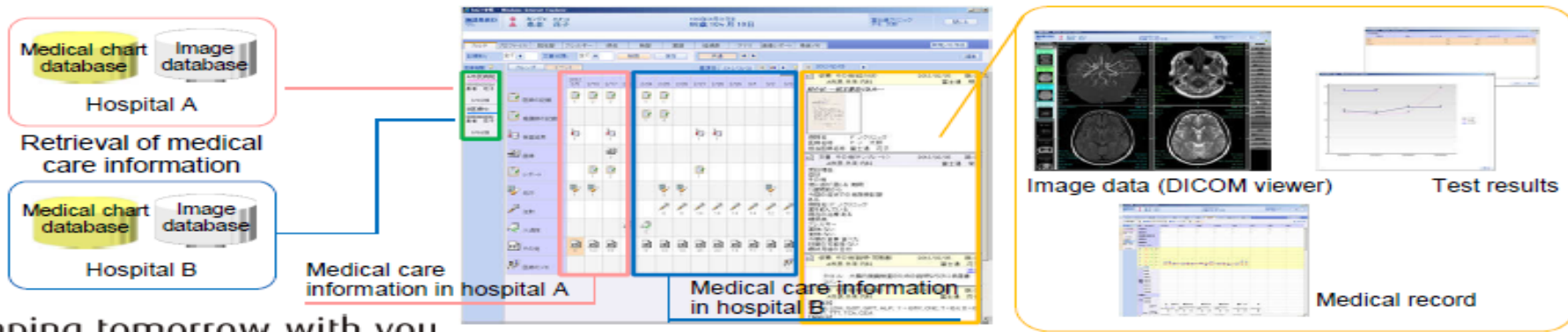
Customer Benefits

- Fujitsu's solutions promote the sharing and integration of medical care information and the development of two-way medical care networks.
- Users are provided with access to a variety of services through portal sites.
- Services are available via mobile terminals from any place and at any time.

Through HumanBridge services, Fujitsu's local medical care network services are creating bridges between people and helping to realize a society in which local community members can work together to support health, medical, and nursing care for community residents.

HumanBridge EHR Solution

- Fujitsu's HumanBridge EHR Solution enables multiple medical care institutions to share medical care information so as to create a single medical record for each patient within a single region.
- Fujitsu's solution provides a secure environment to encourage as many medical institutions as possible to join medical care networks.
- Fujitsu's solution is standardized to be used in combination with the electronic medical chart systems developed by other companies.





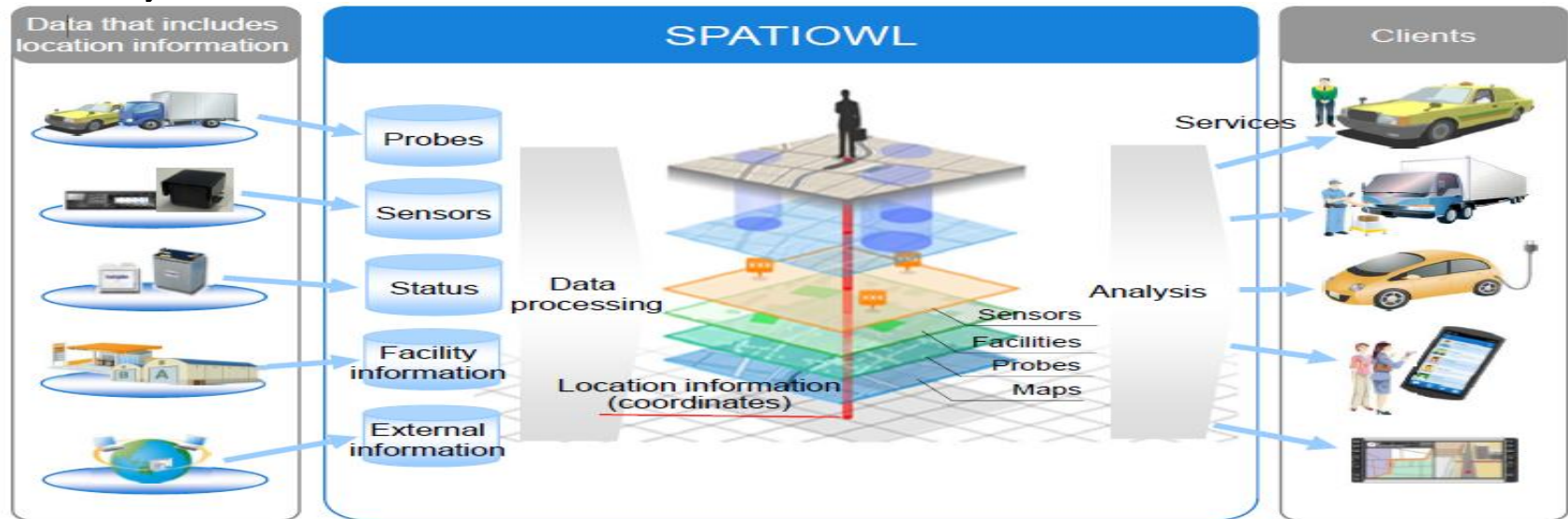
Background

- As a key IT strategy, Japanese government plans to provide Intelligent Transport System to prevent traffic accidents and congestions.
- ➔ Contribute to reduce CO2

Transport Sector

Solving traffic congestions by using Automobile Probe Information - SPATIOWL

- SPATIOWL uses probe data*1 generated by operating vehicles together with location information from a variety of sensors to analyze data sources in real time and provide functional groups linked to external information via cloud computing.
- For example, corporate clients and organizations can develop unique services using location information and create new forms of value such as real-time traffic information, urban planning proposals and new forms of local community services.





QCube
quantumcube

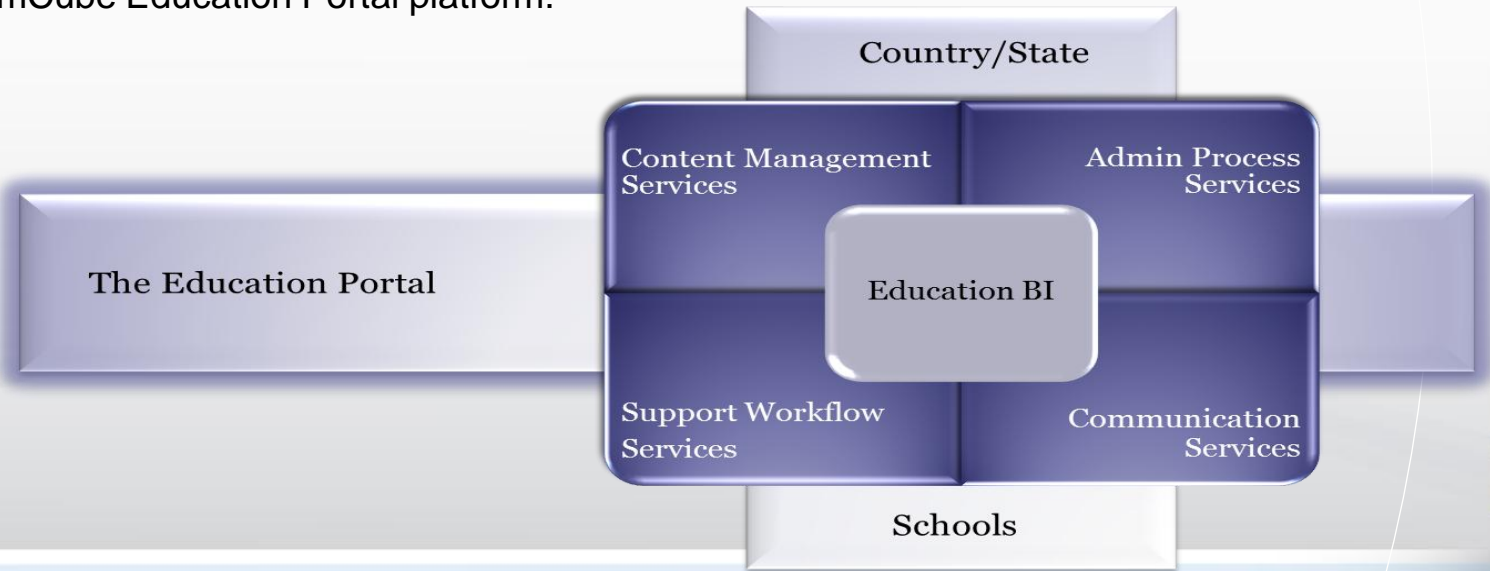


The Social Learning Ecosystem

Powered by **FUJITSU**

The Concept – The social learning ecosystem

- A suite of software solutions and services designed to deliver Content Management, Business Intelligence, Communication and Workflow functionalities to Education, based on the CIL QuantumCube Education Portal platform.



The Cloud enabled Social Learning

Education Workflow

Education Business Intelligence

School Information System



The Education Portal

Education Community

Education Management Organizations

Schools

The QuantumCube Education Portal

- A portal application architecture created for implementing and supporting Education Content and Communication management in a multi-layer School and Cluster of Schools connected

Why the QuantumCube Education Portal?

- To provide easy to use Content Management and Communication functionality for teachers, students, parents and education service providers.

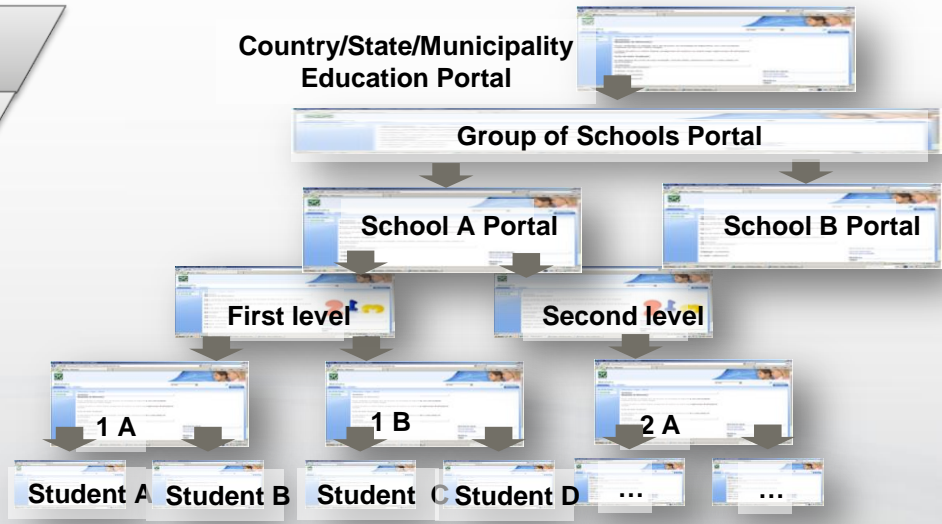
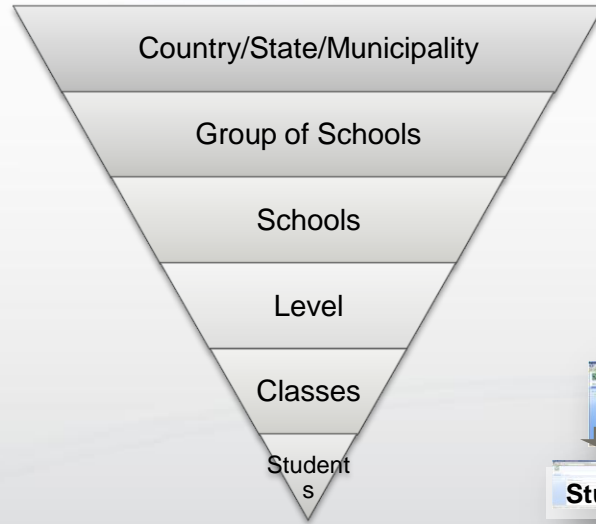
Create Multi-Layer Schools
Portal architecture

Build Country, States,
Municipalities, Colleges,
Schools and Classes
connected Education Portals

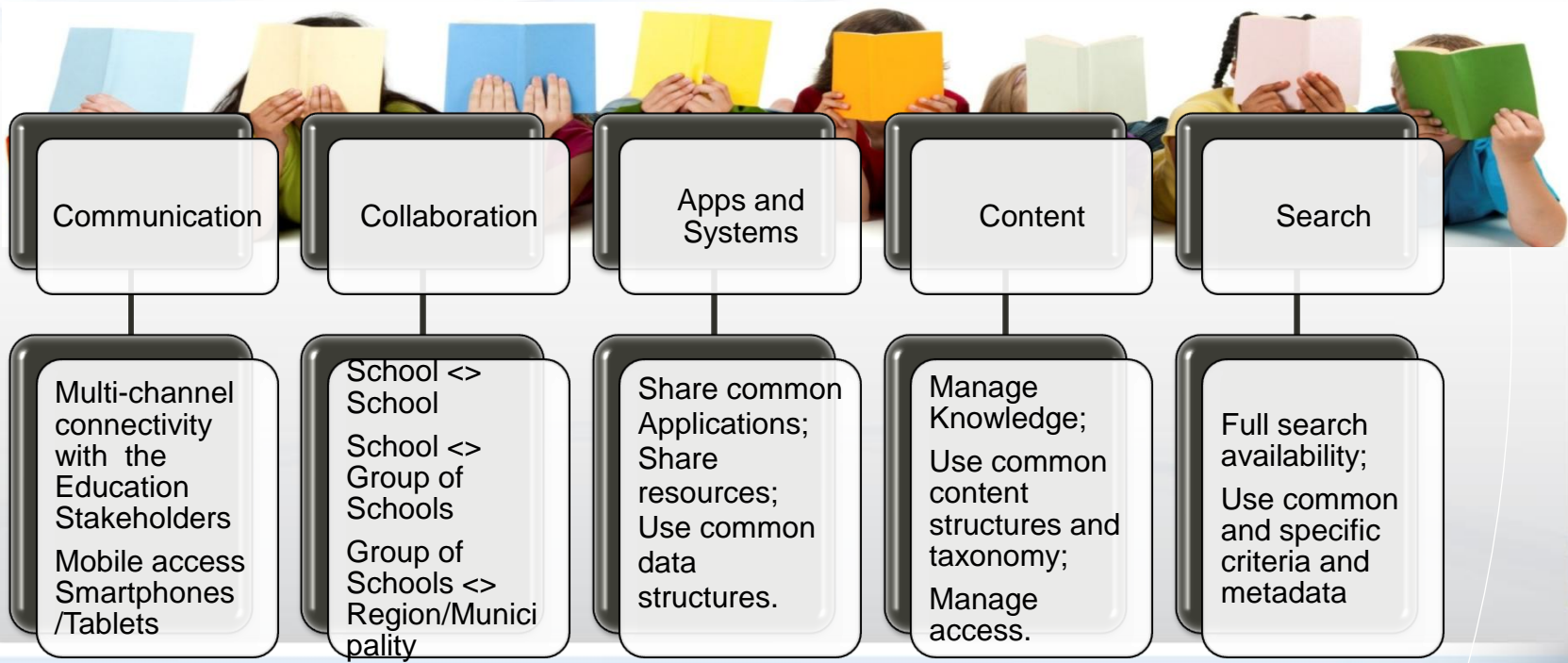
Use strong Communication
tools for Teachers, Parents
and Managers

Stay always On with mobile
access to your info

The Education Portal - Architecture



The Education Portal – Social learning



The QuantumCube Education Business Intelligence

- An application platform designed to support education decision makers to perform planning and analysis activities, based on education key performance indicators, in a simple, effective and

Why the QuantumCube Education Business Intelligence?

- Easy and flexible multi-dimension access to Key Performance Indicators related with the Education Context of a Country, State, Municipality or School.

Get Instant access to key information on Education

Use state of the art business intelligence data processing

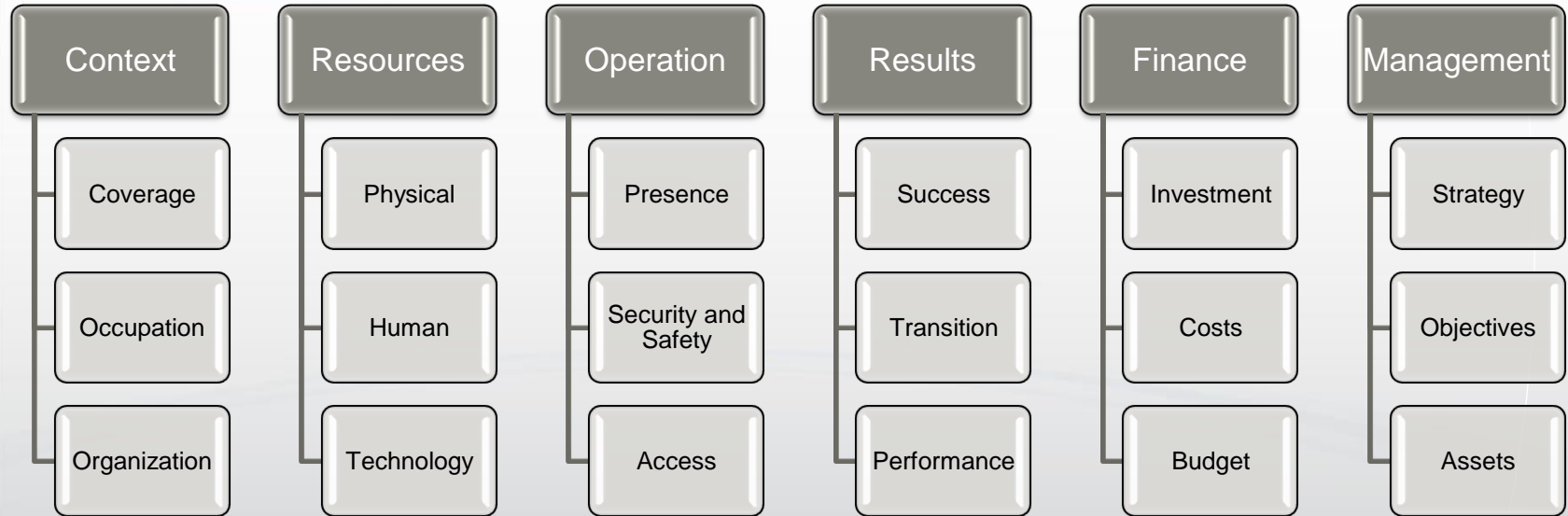
Build your own Indicators and Reports

Share ready to use CAF on Education Indicators and Reports

The Education Business Intelligence



The Education BI - Scope



The Education BI – Data views and reports



Rótulos de linha	Valor Execução
10 Janeiro de 2009	4.486.341,00 €
11 Associação Portuguesa do Pais e amigos de crianças deficientes mentais de Moura	318.422,00 €
12 Escola Básica 2-3 de Moura	363.463,00 €
13 Escola Básica do 1º Ciclo com Jardim de Infância de STª Amador	385.488,00 €
14 1319203 Conselho Executivo	31.615,00 €
15 1319202 Secretariado	35.492,00 €
16 1319212 Espaço Vendas	35.478,00 €
17 1319212 Infra-estruturas Desport	
18 1319213 Laboratórios e Salas de	
19 131920 Formação de Colaborat	
1319240 Refeitório Primário	
1319240 Bar Bloco A	
1319240 Bar Bloco C	

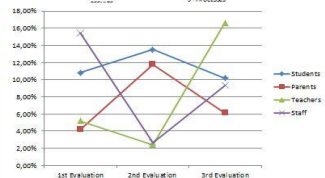
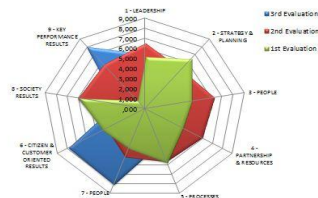


The Education BI - Information Architecture

CAF Score	3rd Evaluation	2nd Evaluation	1st Evaluation	Variation
1 - LEADERSHIP	5,43750	6,50250	5,17000	
2 - STRATEGY & PLANNING	2,99250	5,03500	6,47750	
3 - PEOPLE	4,43333	6,24667	4,02000	
4 - PARTNERSHIP & RESOURCES	4,91500	5,82000	3,88500	
5 - PROCESSES	3,80333	5,86333	5,73667	
7 - PEOPLE RESULTS	8,09000	5,12500	4,25500	
6 - CITIZEN & CUSTOMER ORIENTED RESULTS	7,84000	3,95500	4,33000	
8 - SOCIETY RESULTS	2,49000	6,06000	5,98500	
9 - KEY PERFORMANCE RESULTS	8,05000	5,71000	1,06000	
Grand Total	5,93071	5,65000	4,65821	

CAF Evaluation Participation Rate	Students	Parents	Teachers	Staff
1st Evaluation	10,80%	4,19%	5,22%	15,46%
2nd Evaluation	13,52%	11,79%	2,42%	2,68%
3rd Evaluation	10,15%	6,13%	16,83%	9,33%
Grand Total	11,18%	7,06%	10,22%	9,29%

- Management Unit Designation
- L. Torvalds Inst. of Technology
 - L. Wittgenstein Middle School
 - Le Corbusier Elementary
 - Leonardo da Vinci Educational Group**
 - P. Picasso School of Arts
 - R. Descartes High School
 - S. Botticelli Middle School
 - Vasco da Gama Arts & Music Schools
 - W. A. Mozart Music School



The QuantumCube Education Support Workflow

- An application platform for managing the operational support processes delivered to Schools, Schools Clusters or any Education organization enabling the optimization of service quality and

Why the QuantumCube Education Support Workflow?

- To provide a centralized and shared information tool designed to optimize School Support Service Management.

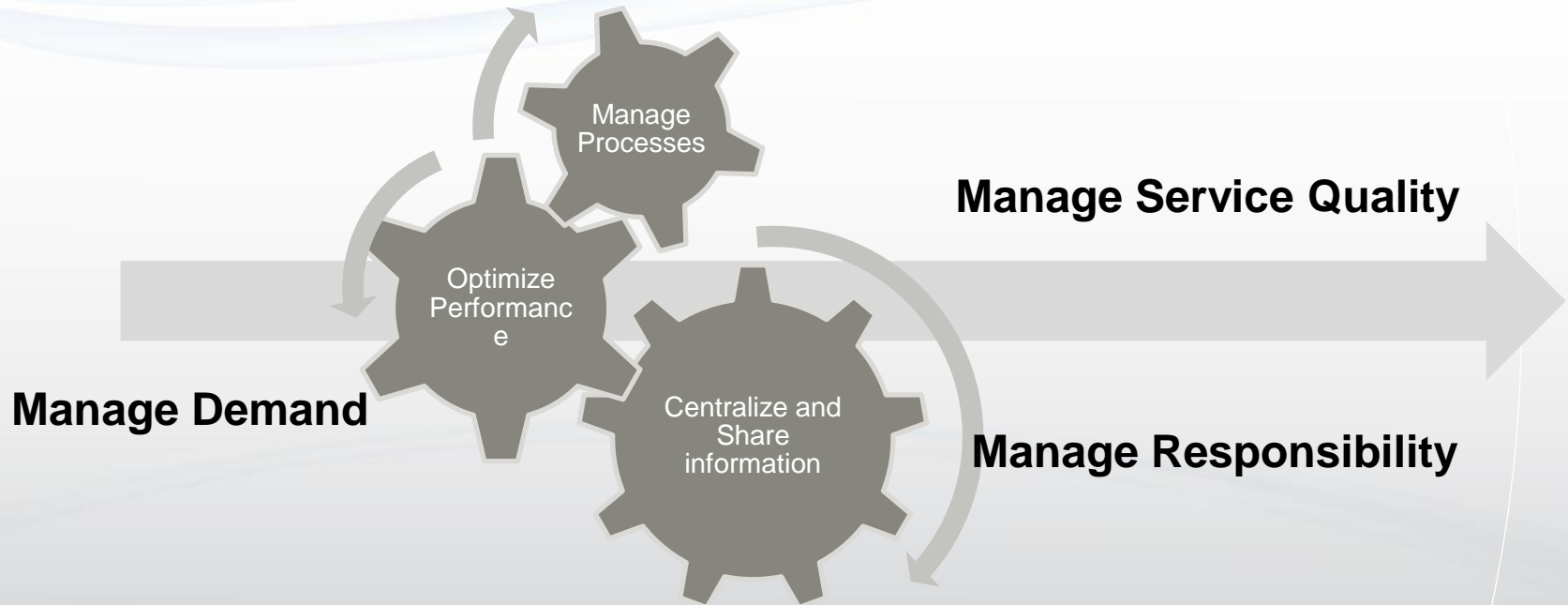
Get improved Service response quality by managing critical workflows

Easily define and implement new Process templates

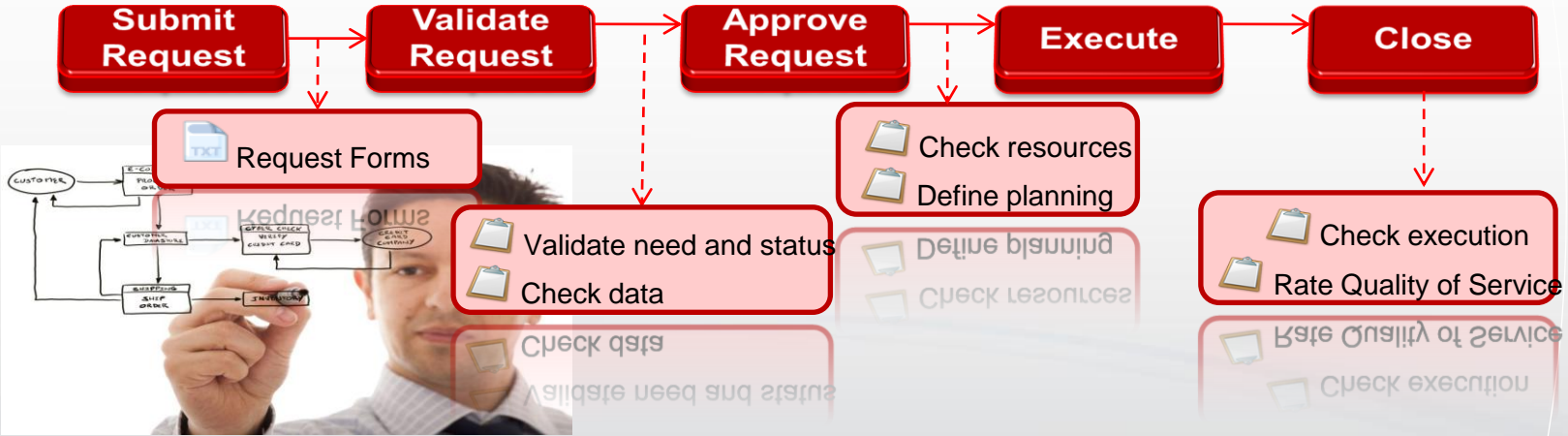
Ensure service Quality rating and Service Level Agreements

Enable access to Education Service Providers

The Education Support Workflow



Managing Service, SLA's and Quality



The QuantumCube School Information System

- An application platform for managing the operational School Information Processes delivered to Schools, Schools Clusters or any Education organization.

Why the QuantumCube School Information System?

- To provide a centralized and shared information set of integrated tools designed to optimize School Information Management.

Manage Students and
Teachers information

Manage Attendance and
Resource allocation

Create and Manage
Courses and Classes

Manage multiple information
on Scores and Performance

The Solution Value

For Society

- Enable Adaptive and Social Learning;
- Ensure Competencies for life long learning;
- Achieve Social Inclusion through digital literacy.


For Education

- Enable Education Strategy Business Intelligence;
- Get instant access to key information on Education;
- Provide standard Content Management ready to use tools;
- Optimize Communication in the Education Community
- Take full advantage of the Connected School Concept.

For Citizens

- Education Eco-System experience reflects non-school live (real world);
- Achieve better competitiveness on a global scale;
- Leverage equal opportunities for Education access.





FUJITSU

shaping tomorrow with you