Vision and Mission: Bring digital to every person, home and organization for a fully connected, intelligent world

Forum PA 2019

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In Italy, For Italy: Huawei Journey for 15 Years

Supplier
2004-2007

• 2004 Huawei Italia registered in Italy
• 2006 Won WDM project with TIM
• 2006 Huawei Device started in Italy market, main product is USB data dongle

Partner
2008-2012

• 2009 3G Roll Out
• 2008 1st Overseas R&D center established in Milan
• 2011 First Huawei Phone in Italy market
• 1 Joint Innovation Center with TIM in CT

Strategic Partner
2013-2015

• LTE Roll Out
• NGA Rollout
• Started Enterprise Business
• 2014: 1 M Huawei Smart Phones in Italy

Business Innovation Partner
2016 – Present

• 2016 1 Joint NB-IoT Lab with TIM in Torino
• 2016 1 Joint Innovation Center in Sardinia on Smart City
• Main technology partner for National 5G trials (Milan VDF, Bari-Matera TIM/Fastweb/HW)
• 2018 Joint research projects with 12 Universities, total investment 4.5M
• 2017 1st Customer Experience Center in Milano City Life

USD 1.7B Sales revenue 2018
USD 503M Procurement in 2018
800+ employees Local hires account for 85%

1 Global R&D Center in Milan 1 Wireless Competency Center

4 Innovation Centers
Mobile in Turin, Network in Rome, Core in Milan, Smart Cities R&D Projects with Sardinia Region and CRS4 in Pula

1 IoT Business Innovation Center in Catania
Collaboration with the Italian Top Universities

In 2017, Huawei Technologies started Research contracts with 13 universities

Huawei collaborates with the Italian universities in the fields of: Telecommunications, RF Technology, Antennas, Optics, Cloud, Automotive, Big Data, Energy, RF Devices and Reliability
Once Only: Information silos and Slow service response

Digital by default, digital identity only

Cope with High maintenance and licenses costs, Low resource usage, high power consumption

Cloud First and interoperability (no lock-in)

Network and information security challenges

Key drivers for the eGov Cloud

AGID Piano Triennale per l’informatica nella PA 2019-2021 – Strategia per la trasformazione digitale
Huawei solution for “Poli Strategici Nazionali” Private Cloud: SDDC, Multi-cloud, Hybrid

National/Ministerial level

- **SDDC** (Software Defined Data Center) SW defined including networking for an E2E automation

- **One Cloud Multi-Pool**
  - Unified management of resource pools in different phases and regions, facilitates resource reuse by enterprises.
  - Unified access of heterogeneous resource pools providing consistent experience.

- **Unified Configuration Operation Center**
  - One-stop configuration of multiple resource pools and cloud services
  - Scenario-based configuration process

Regional level

- **Hybrid Cloud**
  - Unified provisioning of public and private cloud resources
  - Unified multi-cloud monitoring
  - Monitoring the resource usage of multiple clouds centrally

**NCE** (Unified Cloud Engine) for Network automation
Huawei Private Cloud: Italy reference case

Overall value for Customer over 5 years TCO = 40%

CAPEX
- Transformation Program: 7%
- Operation Automation: 30%
- Maintenance and licenses: 55%
- Data Centers: 70%

OPEX
- Ability to Meet SLA: 99.99%
- Time to Deploy: Months → week

Transformations
- Partnerships
- Integrations

Golden Rules
- AS-IS «Best of Breed»
- Transformation Integration
- TO-BE «Open and Integrated E2E»

Understanding the Technology
- ITSM: Remedy, NTW, GIS, +10
- ITOM: Remedy, OST, IDM, ZenOSS, Nagios
- Virtualization: VMWare, Hyper-V, RedHat, PowerVM

Infrastructures
- Compute: HP, IBM, SUN, Huawei
- Storage: HP, EMC, NetApp, IBM, Hitachi
- Network: CISCO, JUNIPER, HP, BROCADE
- Security: FORTINET, CHECKPOINT

Services Management
- ITSM: ServiceNow
- ITOM: ServiceNow (L1), CMP (L2)
- CLOUD: Huawei CMP

Virtualization
- VMWare, fusionsphere (KVM), PowerVM

Clouds
- Huawei CMP

Data Centers
- Huawei Private Cloud: Italy reference case

Overall Value with Customer over 5 years TCO = 40%

- Operation Automation: 30%
- Maintenance and licenses: 55%
- Data Centers: 70%

Benefits
- Ability to Meet SLA: 99.99%
- Time to Deploy: Months → week
Huawei Private Cloud: eGov reference case

Jiaxing Government pain points

- High costs: High investment, 38 sites, Costly O&M
- Data Silos: Industry & Commerce, Social security, Police
- Low efficiency

Government Zone

Applications:
- Gov.Service Platform
- Audit bureau website
- River way Video surveillance
- OA/DR/Data Exchange
- Tourist Gateway website

Gov. Departments:
- Department Transportation
- Public health bureau
- Department Human Social Council
- Bureau of Civil Affairs
- Travel bureau
- Bureau of construction and housing

Internet Zone

CAPEX
- Number of Data Centers: 38→3
- IT Investment: 50%

OPEX
- Operating Cost: 75%
- IT Resource Utilization Rate: 80%
- Energy Consumption: 20%

APPS
- Ability to Meet SLA: 99.99%
- Time to Deploy: Months→week

50+ Bureaus (+200 applications) migrated to cloud in 2Years

Jiaxing Government

Population 4.5M
GDP $58.6B
Area 4000 km²

“One Cloud”
80+ Countries, 330+ Projects, No.1 in Market Share in China
Our Vision: A leading Enabler for Italy’s Digital Transformation

**Simplification**: reduce bureaucracy for citizen

**Organization transformation**: from “as is” to “to be digital”

**Phase I**
- Building an internal network for government for Interconnection and interoperability
- Build up the Cloud Data Center
- Migrate the first Applications and set up the Golden Rules and benchmark process

**Phase II**
- Keep developing the government Apps
- Migrate the other apps to the cloud

**Phase III**
- DB construction
- Big Data Platform Development
- Data exchange and sharing

Driving Telecom Digitalization via 5G, IoT

Enriching Smart Living via Smart City

Enabling Industry Digitalization via NCE, Cloud and Big Data
Grazie
Focusing on Smart Devices, Connectivity, Computing and Cloud; Providing Products and Solutions for 3 Customer Groups – 2018 rev USD 100B, 15% reinvested in R&D

- Consumer Products & Services: Iconic global technology brand
- Carrier Products & Services: Best strategic partner for carriers
- Enterprise Products & Services: Enabler and preferred partner for digital transformation

Cloud Products & Services:
- Cloud partner with reliable, trusted, evolvable services, pushing to achieve the affordable, effective, and reliable inclusive AI.

Global carriers: ~40%
Carrier Networks: ~1.2%
Enterprise: 30.4%

Information Transmission

Smart devices: Provide intelligent terminals with iconic global technology brand
Connection: Only provide network equipment, do not operate the network, nor do we own customer information
Computing and cloud: Provide cloud platform and public cloud services

- Global enterprises, governments and industries
- Hundreds millions of consumers

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