

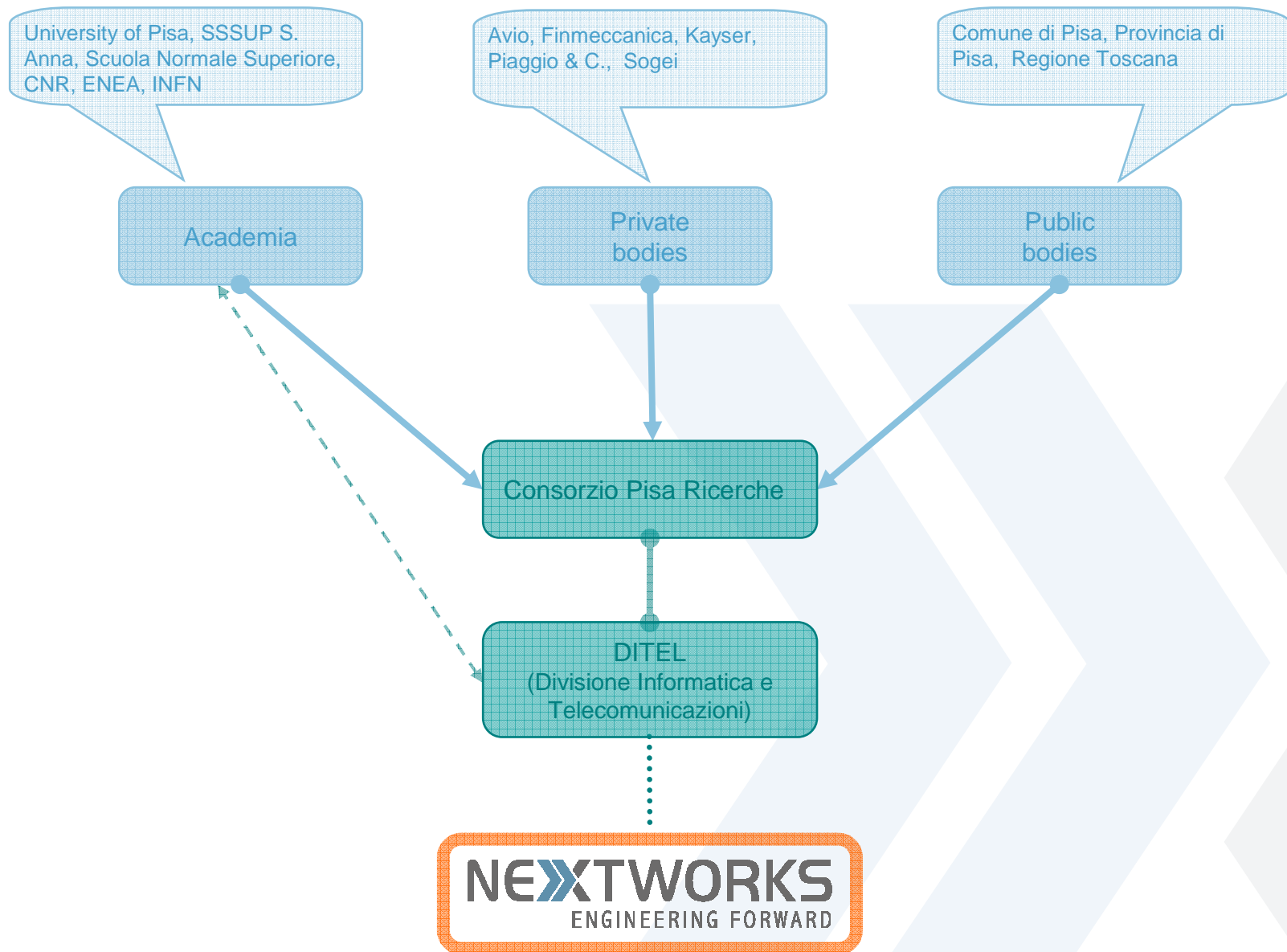
NEXTWORKS
ENGINEERING FORWARD

Nextworks

Brief company profile

www.nextworks.it

Genesis of Nextworks



Company information (1/3)

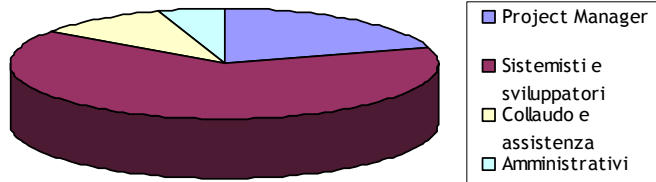
Est. year	2002
Staff	24 people
Profiles	100% graduates, 95% ICT
Headquarters	Pisa
Annual sales (2010)	~ 2.4 M€

□ Main strengths

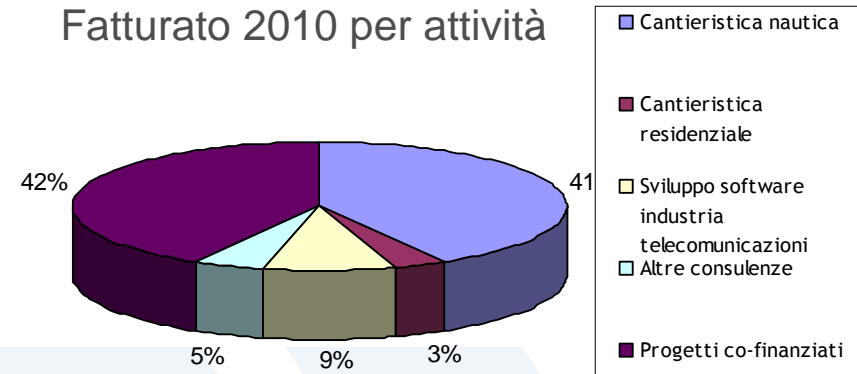
- Strong focus in a well defined set of ICT technologies and architectures
- Specialized in integrated systems' engineering and consultancy
- Long experience in planning and execution of co-financed R&D projects, both in national and European contexts

Company information (2/3)

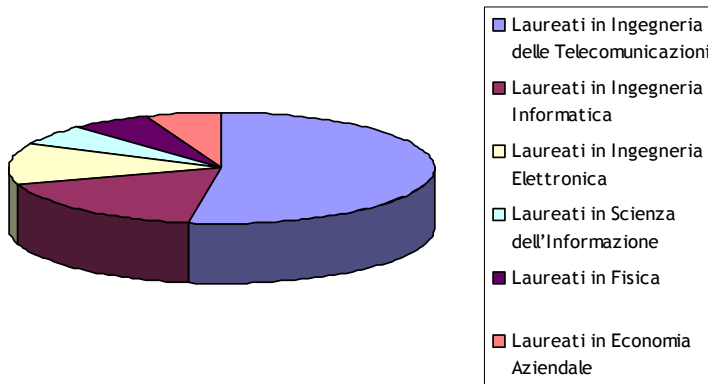
Ruoli del personale



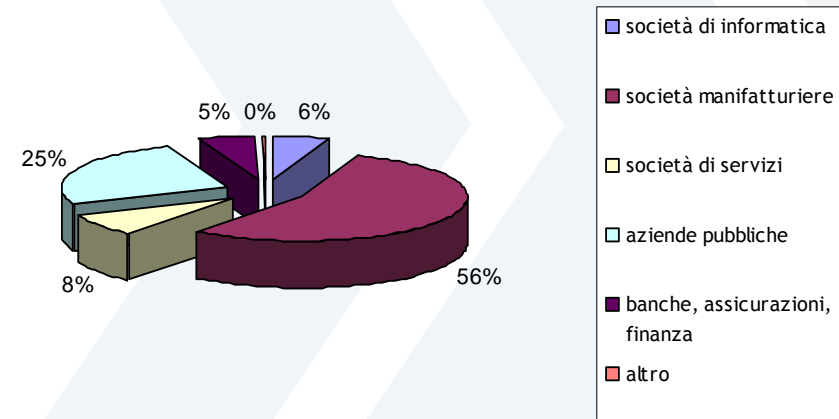
Fatturato 2010 per attività



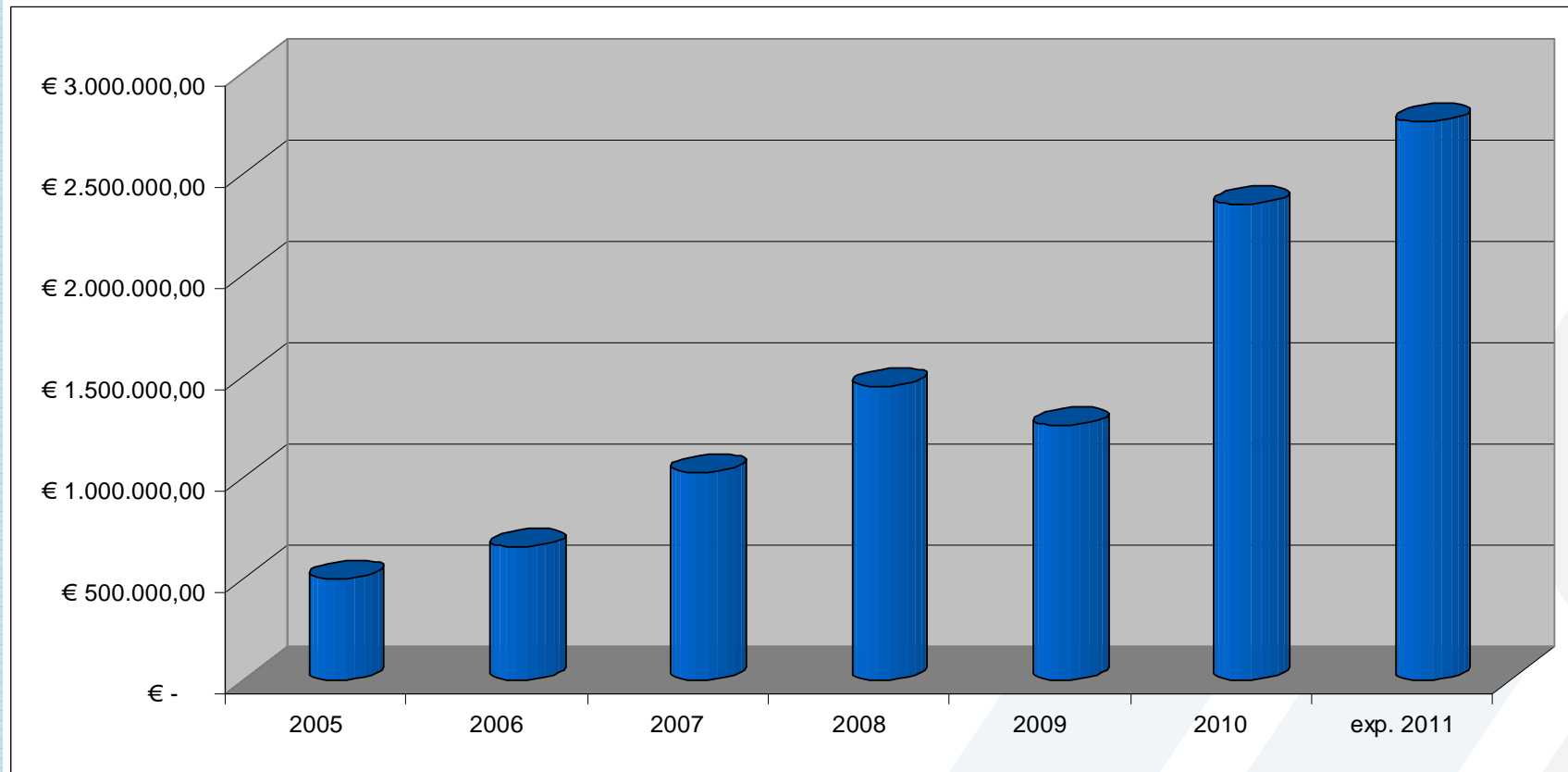
Titoli di studio



Fatturato 2010 per tipologia di cliente

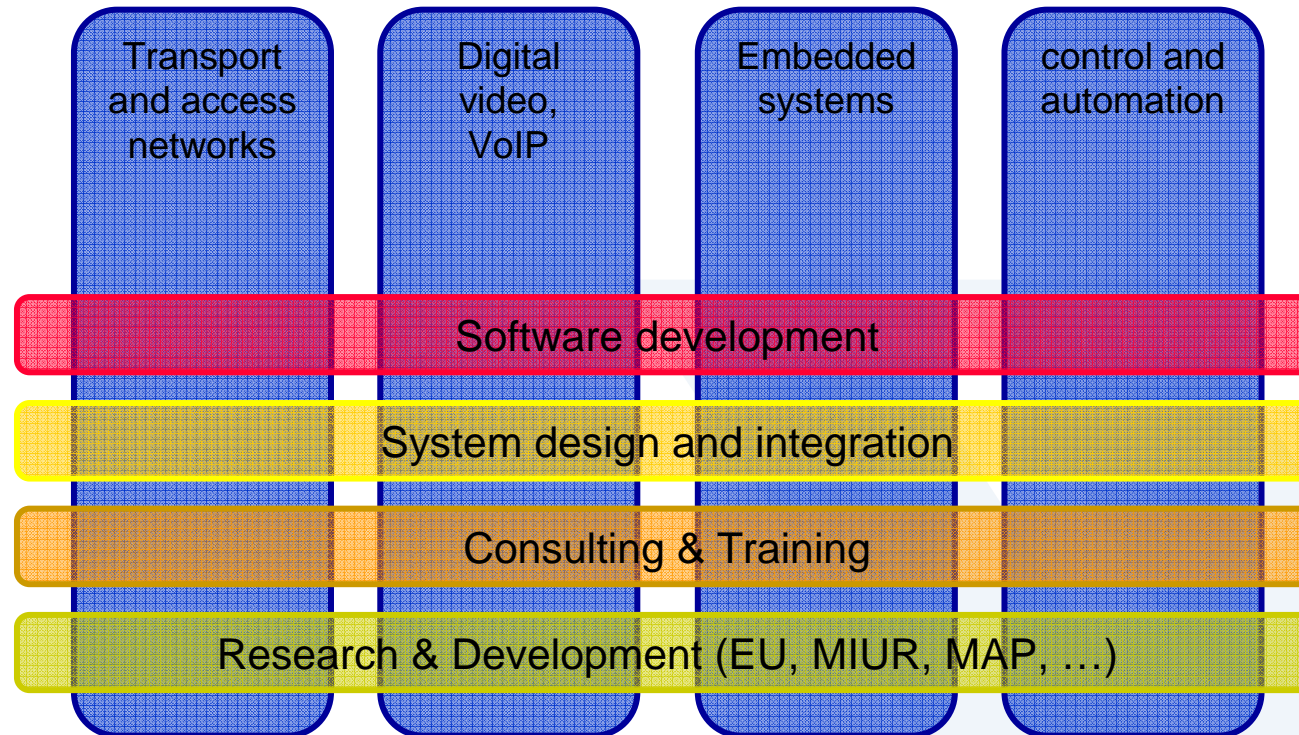


Company information (3/3)



Annual sales

Technical Areas and Business Activities



Activity areas

❑ Two divisions

- KNOWLEDGE

(⇒ research, consulting, 3rd-party development mostly on **networks**)

- PRODUCTS

(⇒ entertainment, domotics, control & automation systems for **residential** and **yachting markets**)

❑ Technology domains

- Packet networks (IP, Ethernet) and core transport networks (WSON, MPLS-TP, SONET/SDH, OTN)
- Architectures & standards (IETF, OIF, ITU, OGF, MEF, IEEE, etc.) for signalling and routing
- Digital video coding & transport (IETF, MPEG), Voice over IP (ITU-T, IETF)
- Industrial control and automation systems
- Embedded systems

“KNOWLEDGE” DIVISION

Design and development industrial activities

- ❖ **ASON/GMPLS** control plane stack for SDH and WDM devices (Linux / VxWorks / pSOS boards)
- ❖ Transport Ethernet **E-LINE/E-LAN** control components of a hybrid TDM-GbE switching equipment (Linux PPC boards)
- ❖ **T-MPLS/MPLS-TP** data plane software agents for a hybrid TDM-GbE switching equipment (Linux PPC boards)
- ❖ Extensions to a commercial **GMPLS PCE** server
- ❖ **GMPLS** I&V on SDH and **WSON** equipment
- ❖ NXW-GMPLS, an ASON/GMPLS and PCE Control Plane (internal project)
- ❖ System software on radio base stations
- ❖ Support for network architecture and service operations

Activities carried out for Ericsson, Alcatel-Lucent, Interoute, Siemens, Selex Communications, Marconi Communications

Relevant ongoing/recent internal R&D projects

- ❖ [JunOS-SDK] User/service provider defined network applications
 - Integration of a Path Computation Client in the JunOS-SDK
Interfacing Juniper LSRs to external Path Computation Elements for operator defined routing policies
 - Easing BGP configuration / operation for network operators
Automating BGP fine tuning (load balancing, recovery, etc.)
 - Enhanced network monitoring
Collecting and correlating different network statistics for more effective network operation

- ❖ [Networks of the future] Investigating emerging trends and technologies
 - Network + Cloud Control Plane (Cloud-to-network interface)
 - Virtualization of network resources
 - Energy efficient networks
 - Sub-wavelength switching in metro networking
 - Openflow architectures

Co-funded through EU-FP7 projects GEYSERS, ETICS, MAINS, CHANGE, ...

Customers and partners

❖ Network vendors

- Alcatel-Lucent Italia
- Ericsson
- Selex Communications
- Nokia Siemens / Technolabs
- Adva AG Optical
- Marben
- Italtel
- Nortel
- Thomson
- HP
- Hitachi
- Radcom

❖ Cloud & IT

- SAP

❖ Network operators

- Interoute
- Telefonica I+D
- France Telecom
- Wind
- Telecom Italia
- Eutelsat
- British Telecom
- Deutsche Telecom
- Telenor
- Primetel
- Polish PTT
- Etisalat (UAE)

❖ Shipyards

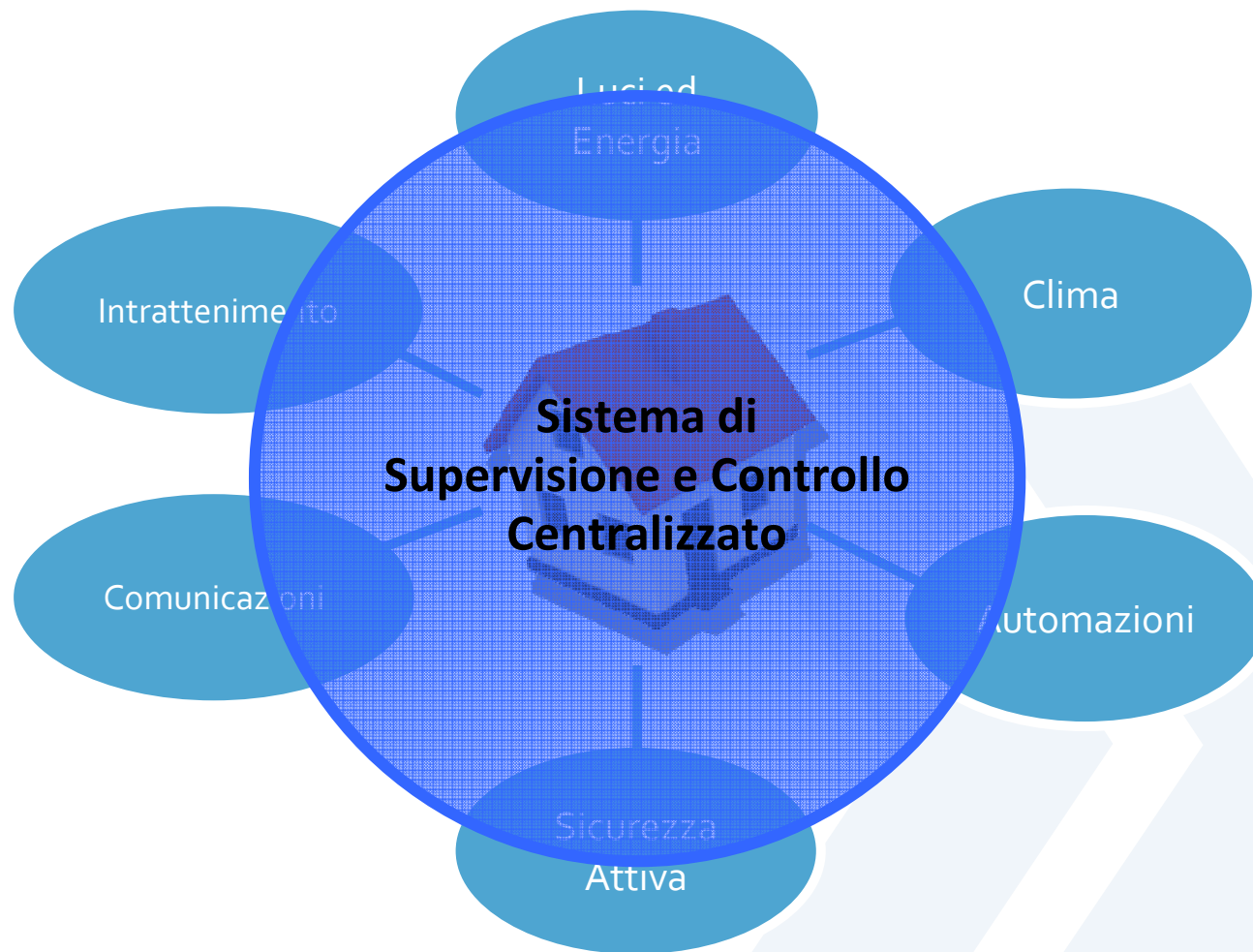
- Azimut Benetti Yachts
- Leopard Yachts
- Viudes Yachts

Research partnerships

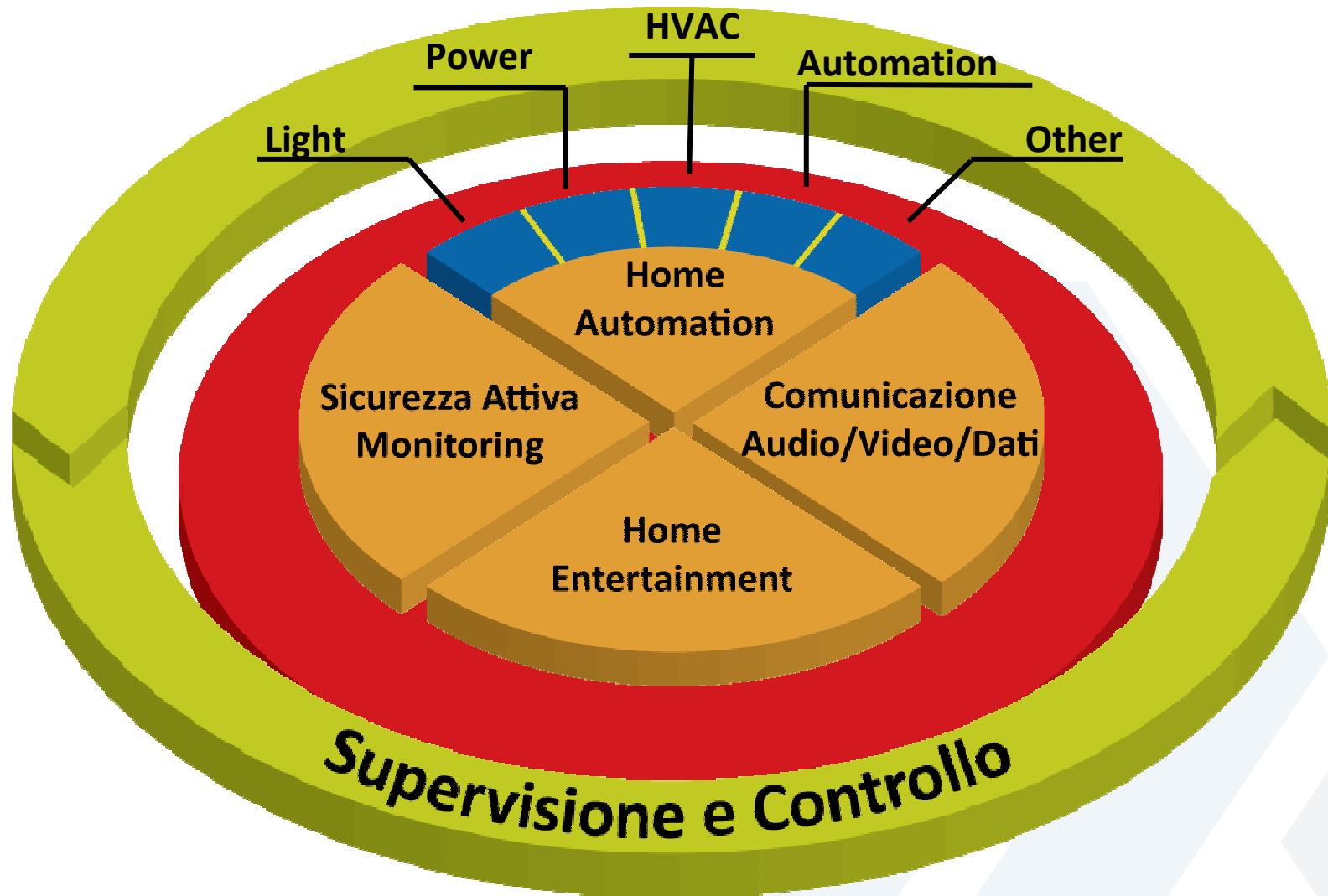
- ❖ Alcatel-Lucent Bell Labs (FR)
- ❖ NEC Europe (DE)
- ❖ University of Pisa (IT)
- ❖ CNR (IT)
- ❖ Consorzio Pisa Ricerche (IT)
- ❖ Poznan Supercomputing and Networking Centre (PL)
- ❖ INRIA (FR)
- ❖ Fundació i2CAT (ES)
- ❖ Universiteit van Amsterdam (NL)
- ❖ University of Essex (UK)
- ❖ Research and Education Society in Information Technologies (GR)
- ❖ Technical University of Braunschweig (DE)
- ❖ Interdisciplinary Institute for BroadBand Technology (BE)
- ❖ Indian Institute of Technology (IN)
- ❖ Politecnico di Milano (IT)
- ❖ FTW (AT)
- ❖ Institut Telecom (FR)
- ❖ Universite de Versailles (FR)
- ❖ Technion – Israel Institute of Technology (IL)
- ❖ Athens University (GR)
- ❖ Universidad Autonoma de Madrid (ES)
- ❖ University College London (UK)
- ❖ Lancaster University (UK)
- ❖ Universite Catholique de Louvain (BE)
- ❖ Technische Universitat Berlin (DE)
- ❖ Universtitatea Politehnica din Bucuresti (RO)

PRODUCTS DIVISION

Digital Living Environment – concept



Digital Living Environment – architecture



Benetti's Exclusive Sea Technology



- ❑ Strong partnership with Azimut Benetti shipyard, started in 2005, to develop and install a new integrated system encompassing all the on board digital services: BEST®
- ❑ BEST is a sophisticated technological solution covering entertainment, domotics, communications, automation and ICT, specifically designed for the yachting market and adopted as a *standard* by Benetti for all its steel and composite yachts
- ❑ Nextworks designed and developed the system, and currently takes care of installation, maintenance and assistance on about 20 yachts



- ❑ Una linea di prodotti pensata e realizzata espressamente per il mercato nautico
 - Intrattenimento
 - Living
 - Videosorveglianza
 - Networking
 - Comunicazioni



- ❑ A complete solution for the integration of
 - Multimedia entertainment (TV, audio / video on demand)
 - Voice/video/data communications
 - Domotics, video surveillance and intrusion detection
 - Interfacing with several custom automated systems (pool, wine cellar, irrigation system, ...)
- ❑ **Integrated:** every device in the system is always connected to all the others, and exchanges information to provide effective end user services
- ❑ **Easy to use:** a consistent and intuitive user interface to control all the functions



For further info...

Gianluca Insolubile

Managing Director

g.insolubile@nextworks.it

info@nextworks.it

www.nextworks.it

HQ: via Turati, 43/45, 56125 Pisa (Italy)

Tel: +39-050-3871600

Fax: +39-050-3871601