



***Explorer:***  
**Business Intelligence a supporto delle decisioni strategiche**

Un'opportunità offerta dalla collaborazione tra  
**AREA Science Park e**  
**SRI Consulting Business Intelligence**

dott. Stephen Taylor  
Padriciano – 28 aprile 2009

# Business Intelligence

Un esempio di collaborazione internazionale di AREA:

- ✓ SRI Consulting Business Intelligence (SRIC-BI), uno spin off di SRI International, formerly Stanford Research Institute:  
le **Technology Map di Explorer**

# SRI International: la storia dell'innovazione

1950

1960

1970

1980

1990

2000

ERMA Banking Computer Prototype

Optical Disk Reading

Scenario-Based Planning

HDTV



MICR Encoding for Checks

Ink Jet Printing



Mouse Input Device

**Halofantrine**  
Falciparum malaria treatment marketed by SmithKline and the WHO

CBOT, CME Hand-Held Computer



Continuous Speech Recognition for Telephone Transactions



**Telepresence Surgery**

A new method of performing surgery using computer-mediated surgical tools that provide improved accuracy and flexibility, especially in minimally invasive procedures, and provide a future technology platform for remotely performing surgical procedures

All Magnetic Logic

Multimedia Electronic Mail

i4

Information Security

Hypertext



Pen-Input Computing

**Hirudin**

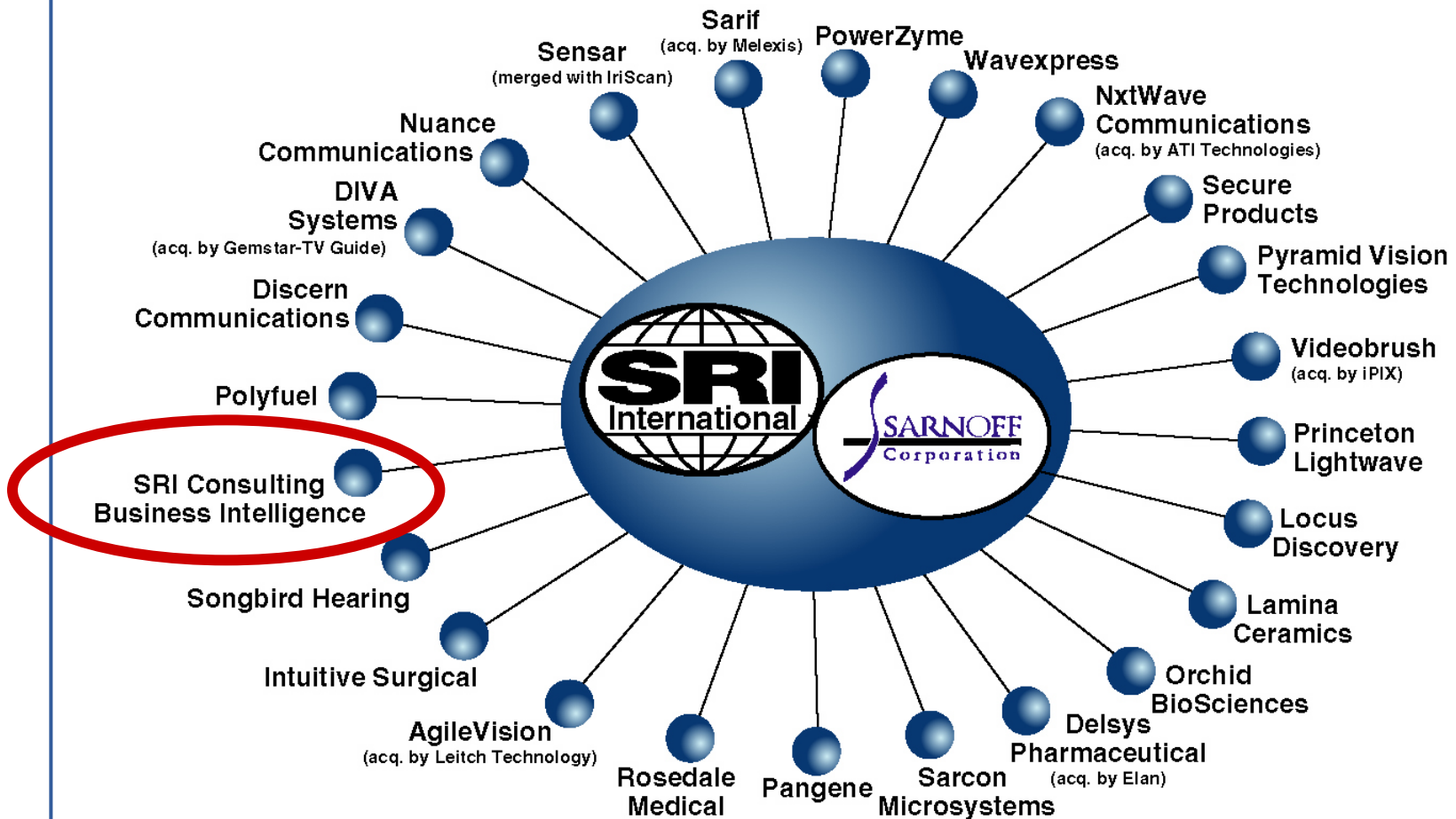
Small protein that inhibits major blood-clotting, used in the treatment of cardiovascular disease and cancer

Modem Acoustic Coupler



ARPA net

# Alcuni spin off selezionati di SRI International



# L'accordo con SRIC-BI

Obiettivo dell'accordo tra AREA e SRIC-BI, leader internazionale nel monitoraggio delle discontinuità tecnologiche è quello di fornire uno strumento di business intelligence tra i migliori a livello internazionale per:

- sostenere i processi decisionali aziendali;
- offrire riferimenti per le attività di ricerca del mondo scientifico e tecnologico;
- fornire supporto e orientamento alle attività di programmazione della ricerca e dell'innovazione.

# Explorer

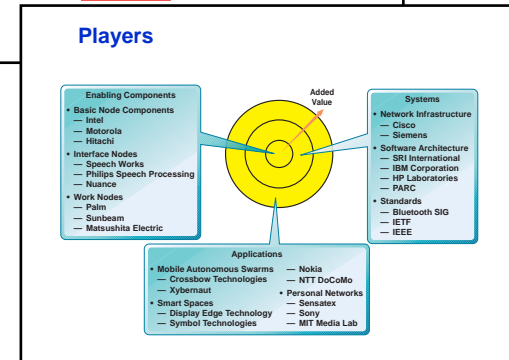
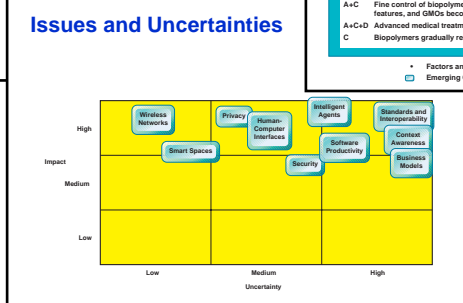
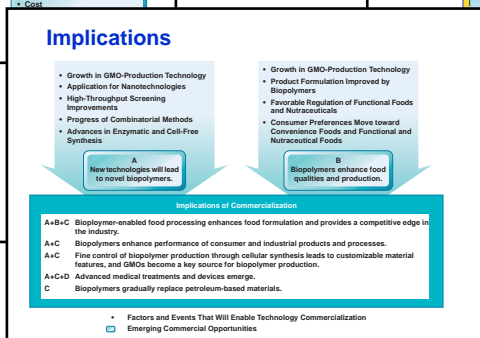
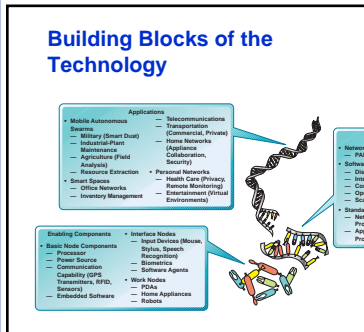
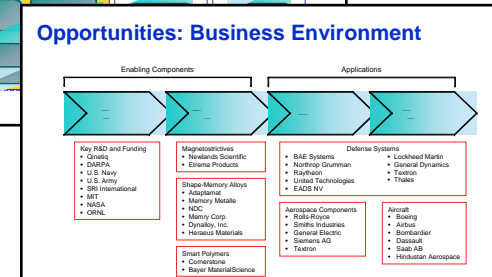
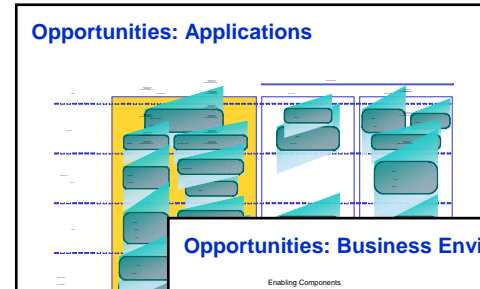
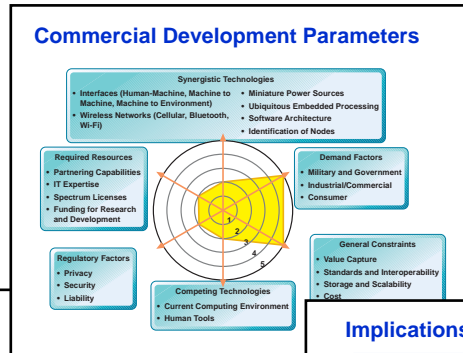
- Explorer fornisce un'analisi specifica delle **opportunità di business** che derivano dal passaggio di tecnologie in rapida evoluzione dallo stadio di ricerca a quello commerciale
- Il focus dei report è sulla commercializzazione delle tecnologie; la mappa tecnologica offre una guida logica ai molti parametri di sviluppo commerciale che possono influenzare il buon fine della commercializzazione della tecnologia, grazie a un'analisi accurata delle implicazioni commerciali che derivino da salti o sviluppi tecnologici



# Explorer: le technologie monitorate

- Advanced Silicon Microelectronics/ULSI
- Biocatalysis
- Biomaterials
- Biopolymers
- Biosensors
- Connected Cars
- Connected Homes
- Engineering Polymers
- Flat-Panel Displays
- Fuel Cells
- Genomics
- Knowledge-Based Systems
- Knowledge-Management Tools
- Membrane Separation
- MEMS/Micromachining
- Mobile Communications
- Nanobiotechnology
- Nanoelectronics
- Nanomaterials
- Novel Ceramic/Metallic Materials
- Optoelectronics/Photonics
- Organic Electronics
- Pervasive Computing
- Photovoltaics
- Polymer-Matrix Composites
- Portable Electronic Devices
- Portable Power
- Renewable Energy Technologies
- RFID Technologies
- Robotics
- Smart Materials
- Solid-State Microsensors
- User Interfaces
- Virtual Worlds

# Le schede di Explorer



# Capire la tecnologia

## Applications

- Mobile Autonomous Swarms
  - Military (Smart Dust)
  - Industrial-Plant Maintenance
  - Agriculture (Field Analysis)
  - Resource Extraction
- Smart Spaces
  - Office Networks
  - Inventory Management
- Telecommunications
- Transportation (Commercial, Private)
- Home Networks (Appliance Collaboration, Security)
- Personal Networks
  - Health Care (Privacy, Remote Monitoring)
  - Entertainment (Virtual Environments)

## Systems

- Network Infrastructure
  - PAN, LAN, WAN
- Software Architecture
  - Discovery
  - Intelligent Software Agents
  - Context Awareness
  - Operating Systems
  - Scalability
- Standards
  - Network and Communication Protocols
  - Application and Presentation Protocols

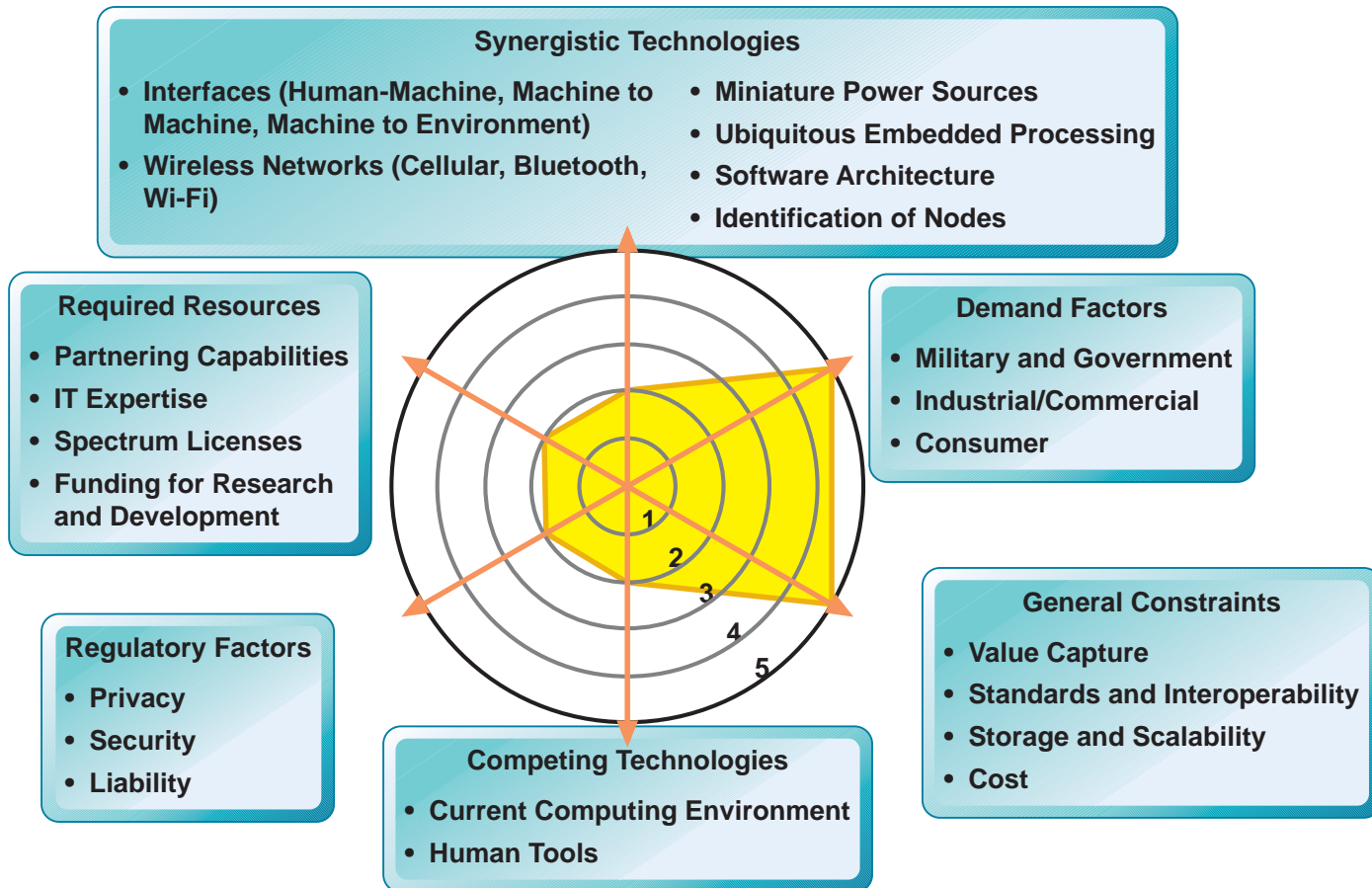
## Enabling Components

- Basic Node Components
  - Processor
  - Power Source
  - Communication Capability (GPS Transmitters, RFID, Sensors)
  - Embedded Software
- Interface Nodes
  - Input Devices (Mouse, Stylus, Speech Recognition)
  - Biometrics
  - Software Agents
- Work Nodes
  - PDAs
  - Home Appliances
  - Robots



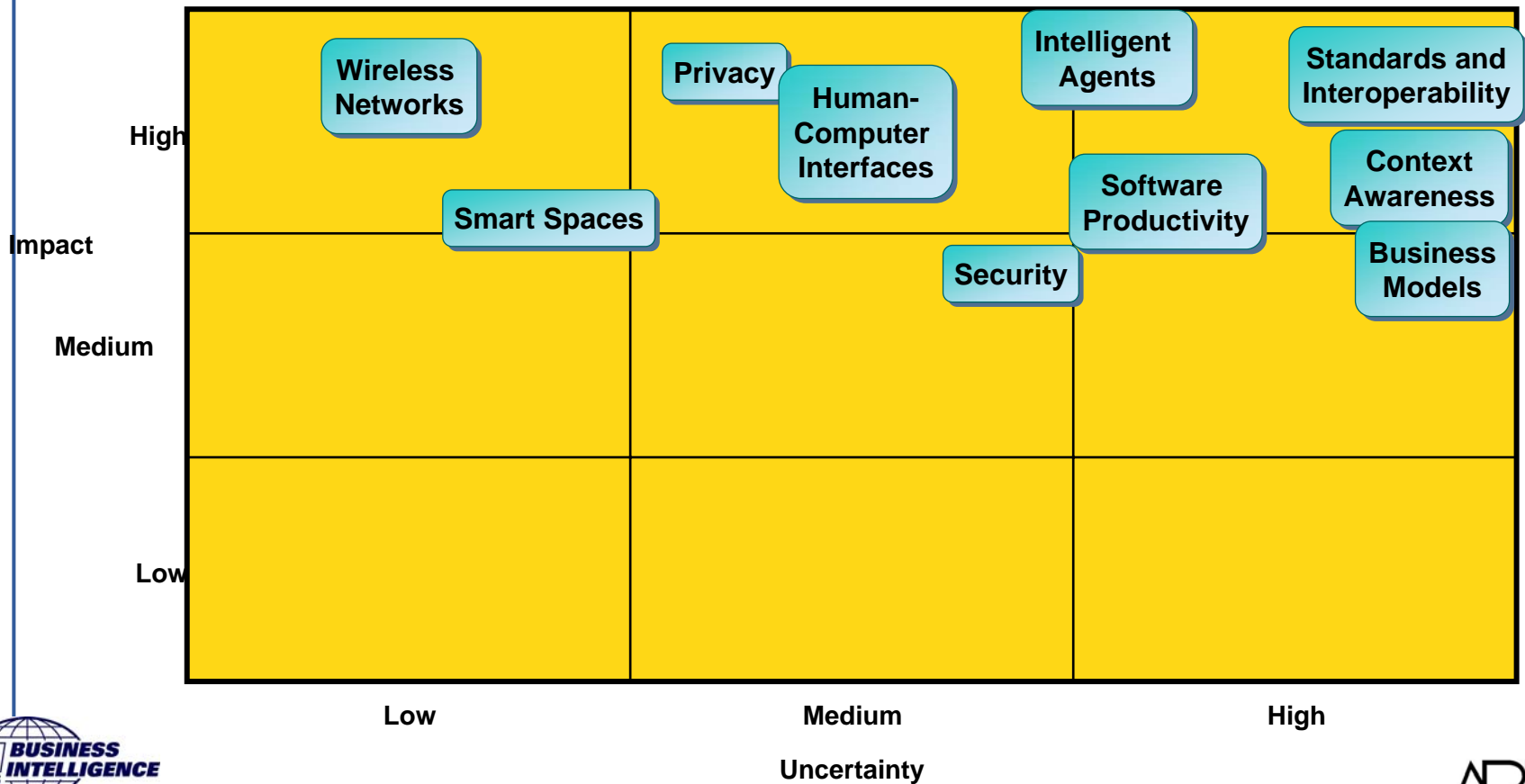
# Capire i parametri di sviluppo commerciale

## Pervasive Computing



# Capire l'impatto potenziale e le aree da monitorare

## Pervasive Computing



# Capire le implicazioni della commercializzazione

## Biopolymers

- Growth in GMO-Production Technology
- Application for Nanotechnologies
- High-Throughput Screening Improvements
- Progress of Combinatorial Methods
- Advances in Enzymatic and Cell-Free Synthesis

**A**  
New technologies will lead to novel biopolymers.

- Growth in GMO-Production Technology
- Product Formulation Improved by Biopolymers
- Favorable Regulation of Functional Foods and Nutraceuticals
- Consumer Preferences Move toward Convenience Foods and Functional and Nutraceutical Foods

**B**  
Biopolymers enhance food qualities and production.

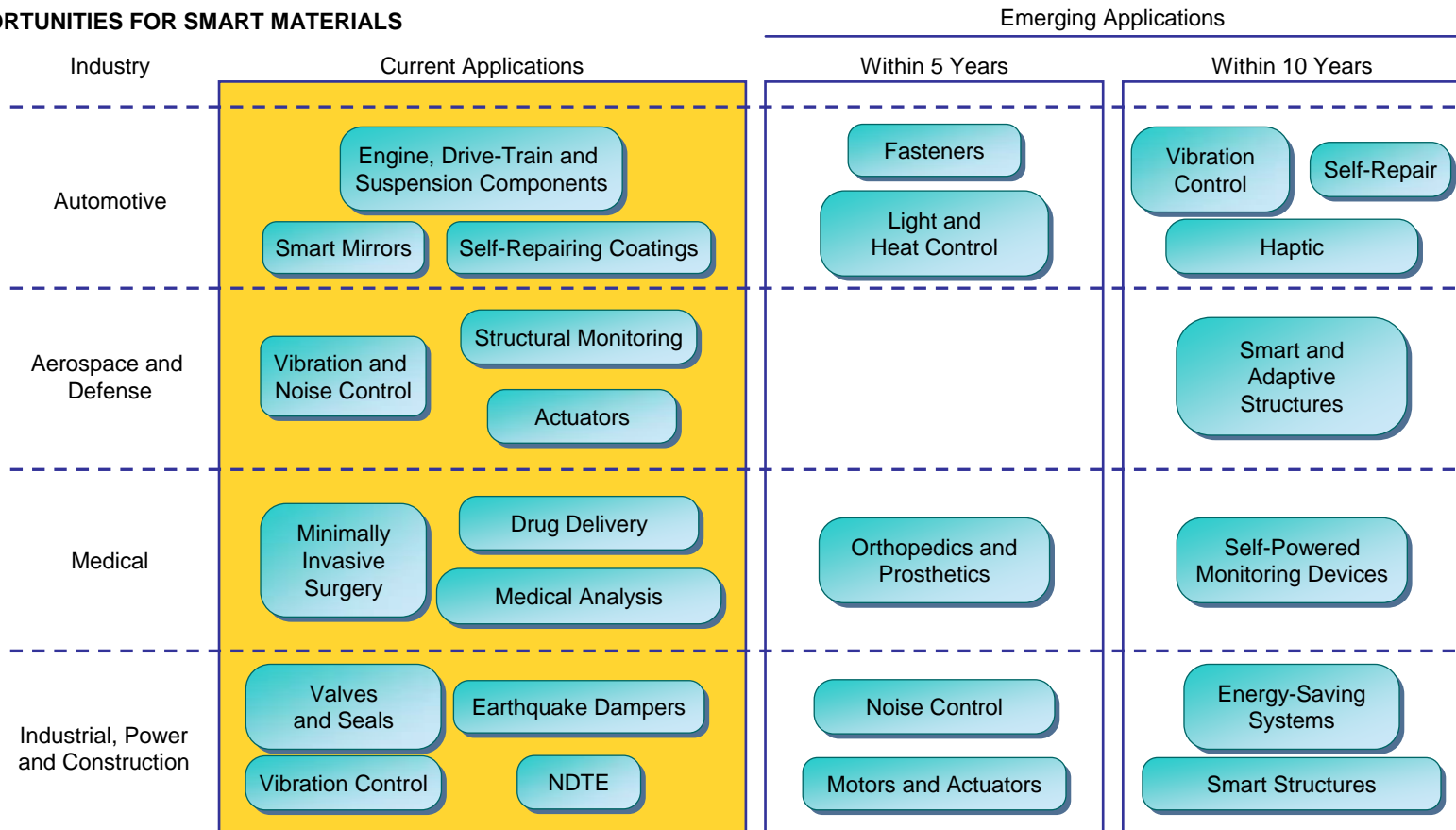
### Implications of Commercialization

- A+B+C** Biopolymer-enabled food processing enhances food formulation and provides a competitive edge in the industry.
- A+C** Biopolymers enhance performance of consumer and industrial products and processes.
- A+C** Fine control of biopolymer production through cellular synthesis leads to customizable material features, and GMOs become a key source for biopolymer production.
- A+C+D** Advanced medical treatments and devices emerge.
- C** Biopolymers gradually replace petroleum-based materials.

- Factors and Events That Will Enable Technology Commercialization
- Emerging Commercial Opportunities

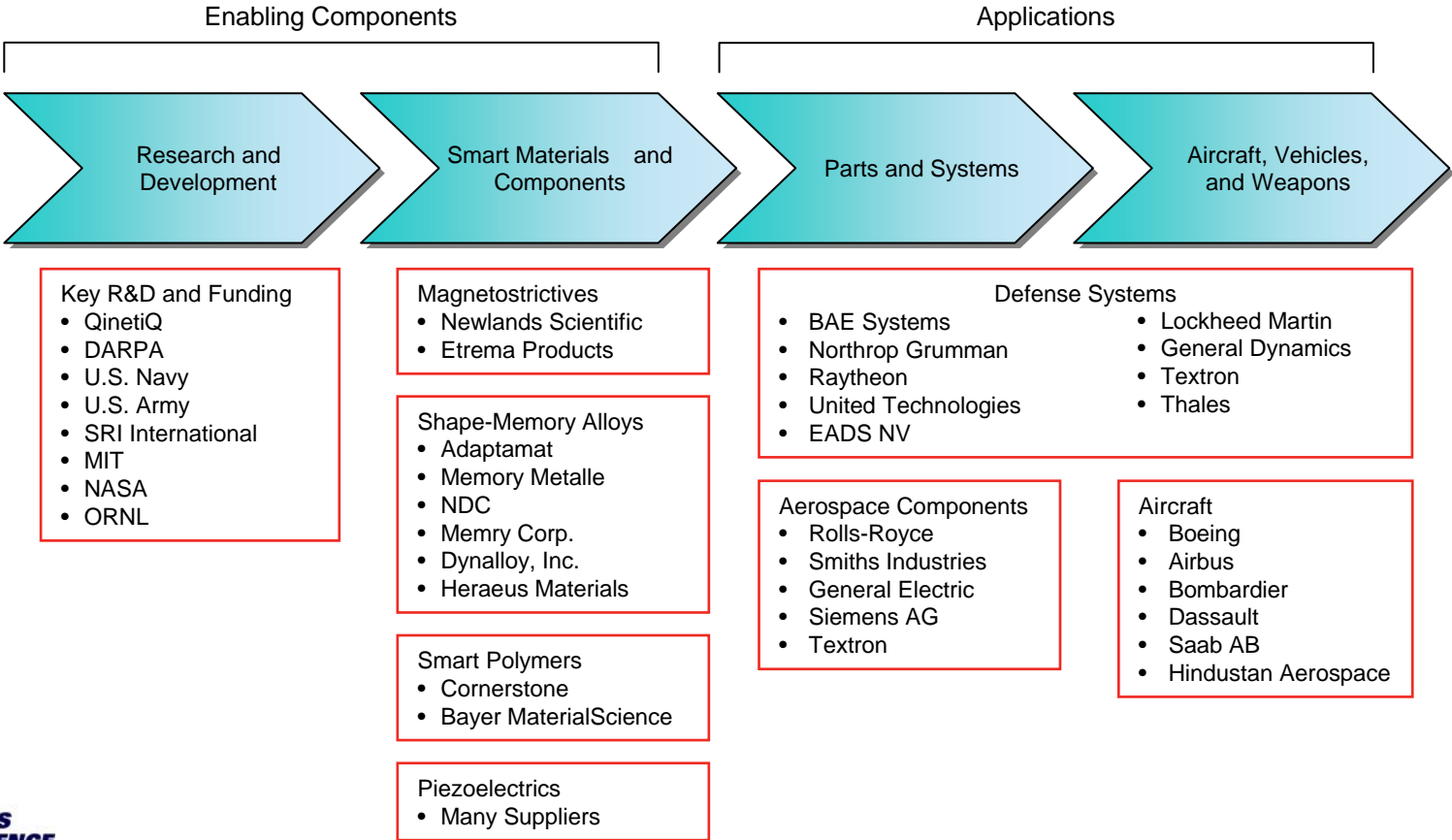
# Le opportunità

## OPPORTUNITIES FOR SMART MATERIALS



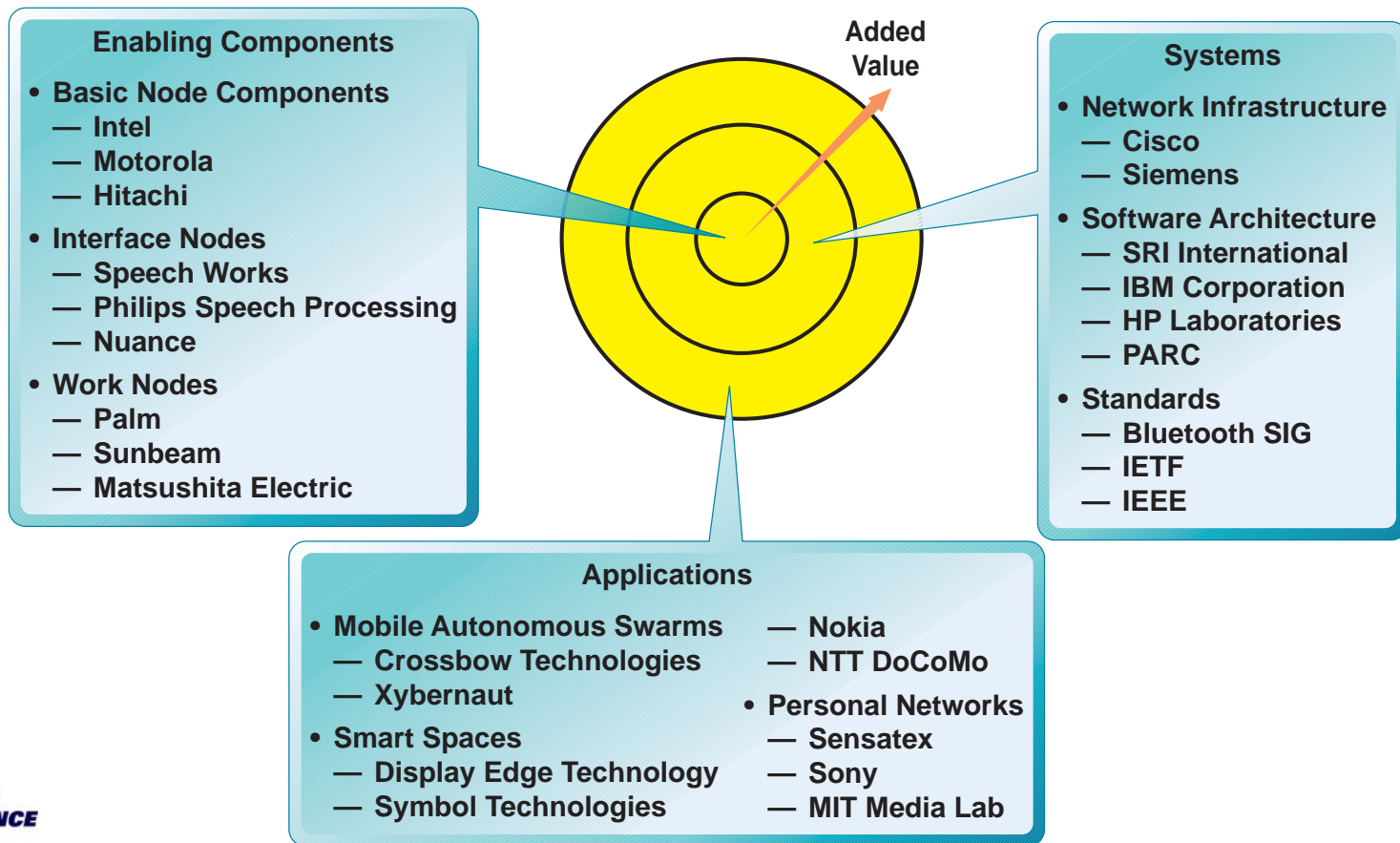
# Catene del valore

## VALUE CHAIN FOR SMART MATERIALS IN AEROSPACE AND DEFENSE APPLICATIONS



# I player

## Pervasive Computing



# Explorer: i Viewpoints

- I report explorer sono aggiornati mensilmente grazie ai Viewpoints:
  - Segnalano ogni evento che il *technology analyst* ritiene significativo per lo sviluppo e la commercializzazione della tecnologie in specifiche applicazioni
  - Aggiorna e modifica le schede presenti nel report Explorer

# Uso del sito web

Per far ricerca su Explorer:



# Contatti

Per maggiori informazioni e per richiedere una Technology Map o Viewpoints:

[area.international@area.trieste.it](mailto:area.international@area.trieste.it)