

Intelligent Cities

R&D offshoring, web 2.0 product development
and globalization of innovation networks

Nicos Komninos and Elena Sefertzi
URENIO Research Unit, Aristotle University of Thessaloniki

Second Knowledge Cities Summit 2009, Shenzhen, China, 5-7 November 2009

Outline

1. Introduction

2. Intelligent cities: Next generation innovation paradigm

3. Initiatives for intelligent cities

4. Research at URENIO

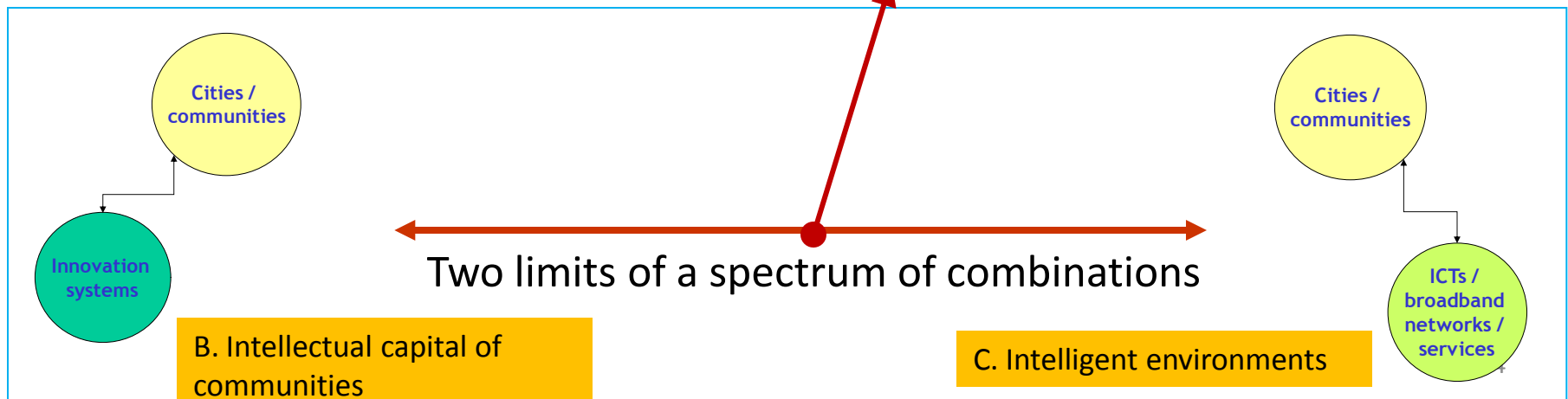
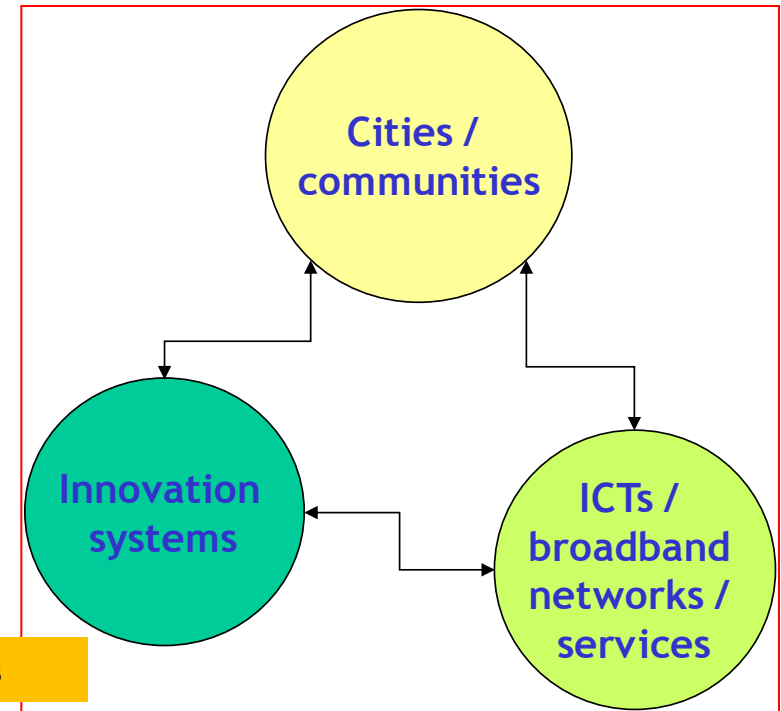
1. Introduction

Intelligent cities

Literature: Many concepts → Three broad models

Intelligent cities as planning and development paradigm deal with:

- Cities / communities
- Innovation
- ICTs and broadband networks / services

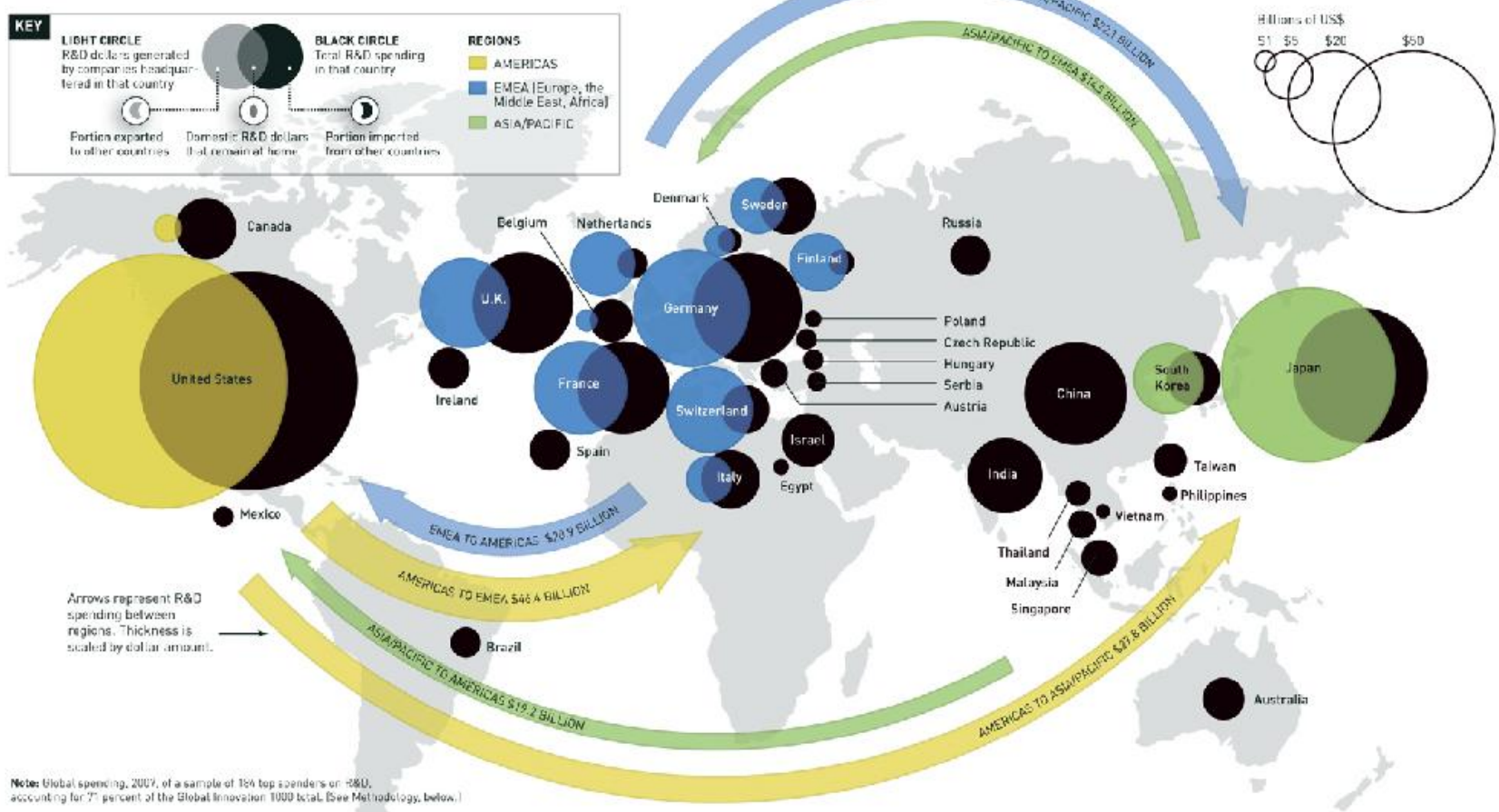


2. Intelligent cities: Next generation innovation paradigm

New trends in innovation (1): Open innovation and rising Asia

Exhibit 1: The World of R&D

As business has become increasingly global, so too has corporate spending on research and development. Here is a look at the 2007 flows of the top R&D spenders between the Americas, EMEA (Europe, the Middle East, and Africa), and the Asia/Pacific region.

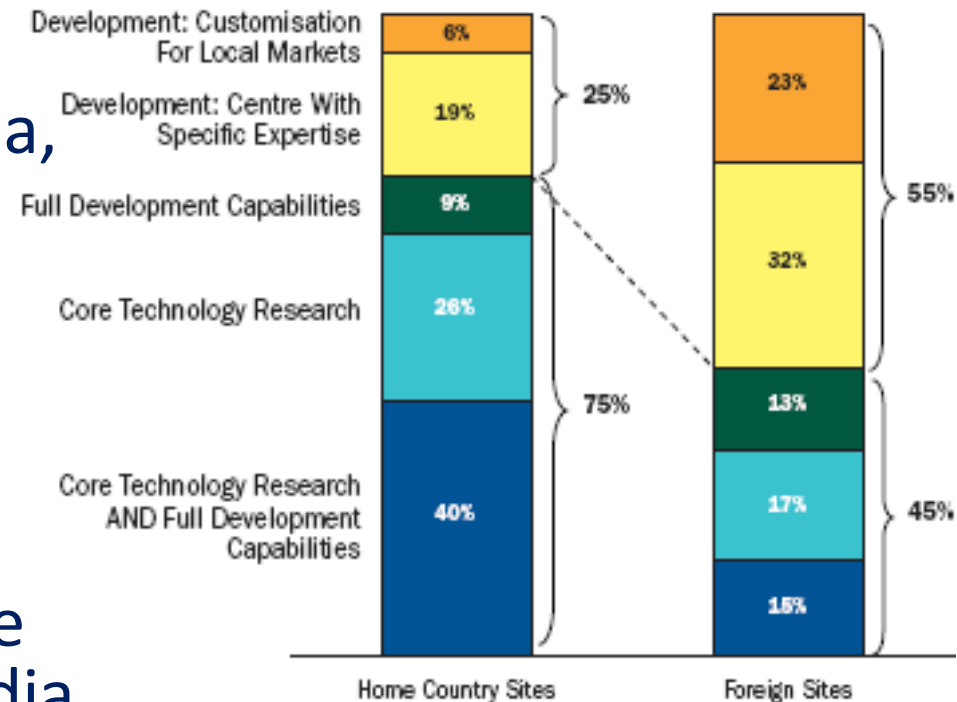


Business R&D expenditure rose by 5.2% in North America, 2.3% in Europe, and 3.8% in Japan during 2000-05, but by 17% in India and China, and by 19.7% in Australia, Brazil, Singapore, South Korea, and Taiwan combined.

New trends (2): Innovation offshoring

The majority of the new R&D centers to be created by MNCs will be located in India, China and Asian cities

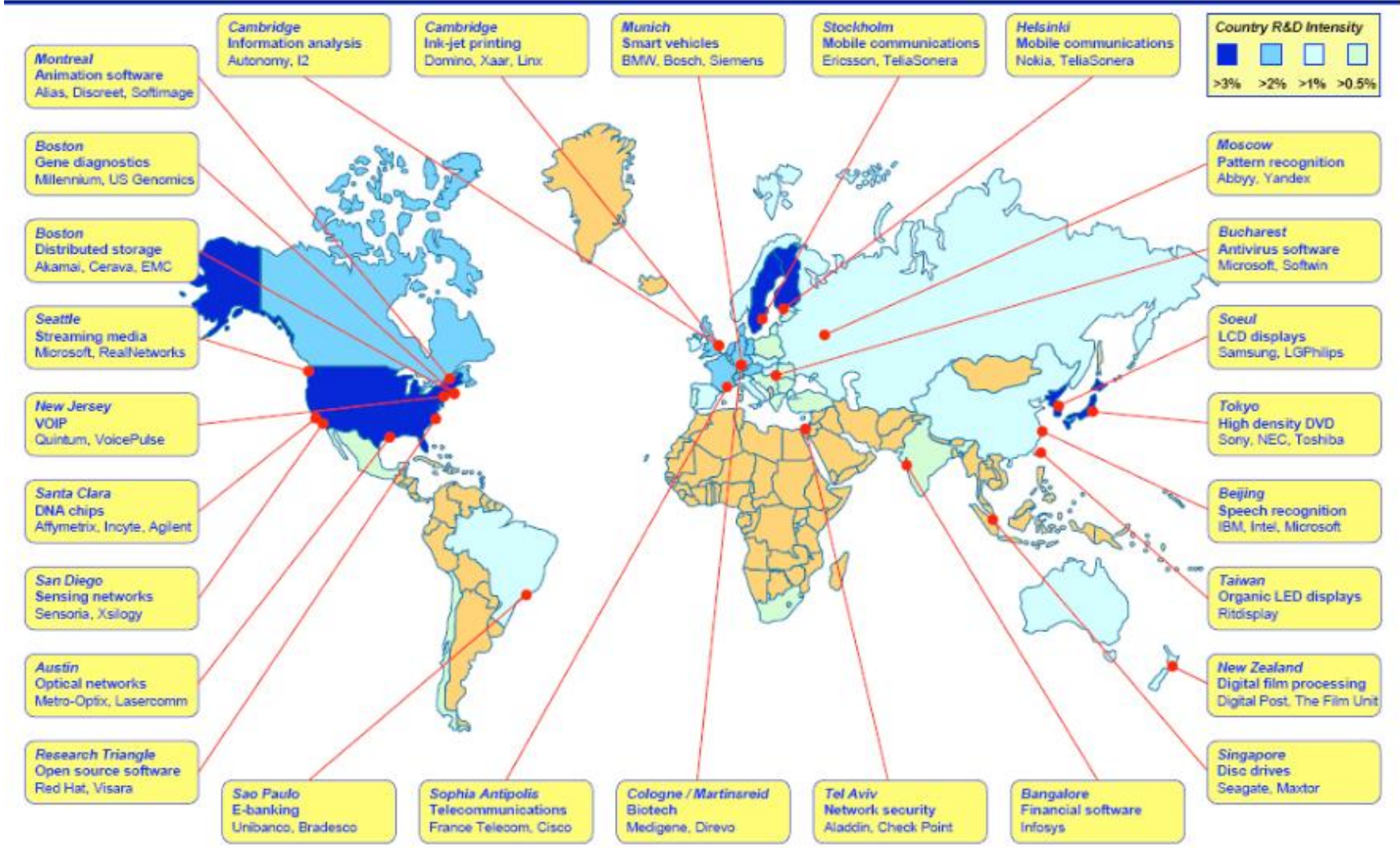
- Cisco has R&D facilities in Bangalore
- Toyota in Thailand
- Nokia operates nine satellite design studios located in India (Bangalore), China (Beijing), and Brazil



Source: United Nations (2005) UNCTAD Survey on the Internationalization of R&D

New trends (3): Globalization of innovation clusters

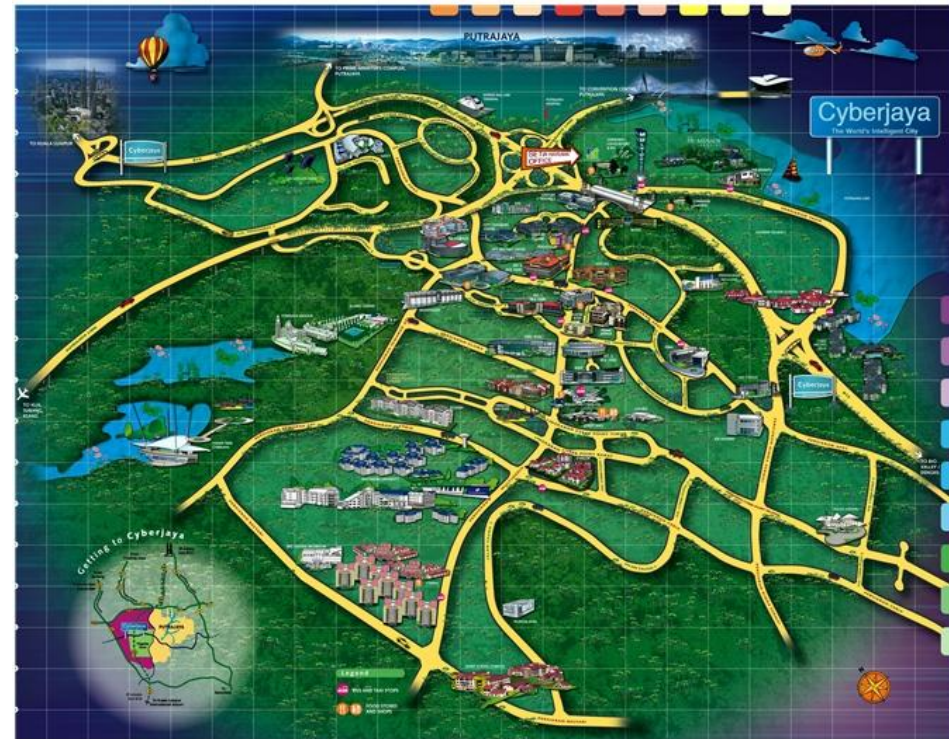
Global innovation clusters, core technologies and key companies



New trends (4):

New innovation clusters in China, India, Malaysia

- Bangalore (India) one of the largest IT clusters (satellite platform).
- Zhongguancun High Technology Development Zone (China), cluster in consumer electronics.
- Taiwan, Hsinchu Science Park, cluster leader in semiconductors.
- Singapore, new clusters in disk drivers, multimedia, broadband technologies, financial services.
- Korea, Teheran Valley near Seoul, a nucleus of national industry, clusters in broadband technologies and mobile communications.
- Malaysia, long term effort in semiconductors, electronics, and software: Multimedia Super Corridor, and cyber cities Cyberjaya, Putrajaya, Penang.



New trends (5): Global technology brokers

The screenshot shows the yet2.com website with a search bar at the top, navigation tabs for 'Find a Technology', 'List a Technology', 'Insight', 'Using this Site', and 'About Us'. The main content area is divided into several sections:

- Tech of the Week™**: Promising technologies available for sale/license.
 - A rapid process for making complex hard-resin foam components with a unique combination of properties**: -- By introducing a high volume of hollow glass spheres into a resin, highly complex parts can be made that are lightweight, mechanically strong, and excellent electrical and thermal insulators.
 - Method for secure and efficient metering on Internet (Web) communications**: -- This secure metering method for server accesses in a Web environment does not require the extensive usage of any new communications channels. It is secure against attempts that try to inflate the number of clients and against disruption by clients.
- TechNeed Challenge™**: Can you solve these technology needs?
 - Seeking: Delivery system to modify the release of an organic agricultural compound**: -- This need seeks a product that is either biodegradable or that can be removed with no cost, with minimal labor, and with no environmental impact to the user. It should generate less nitrate content, and thus less N2O in water.
 - Seeking: Innovative technology for improved performance of release agents/die lubricants used in high-pressure die casting**: -- Current release agents can deposit in and block spray nozzles or deposit on the die, causing surface imperfections. The release agent cycle is complicated and time-consuming. This TechNeed seeks new agents and ways to use them.
- Technology Marketing Report™**: The Technology Marketplace Report is a list of selected technologies from our database.
- Sensors & Air Systems**: The Technology Marketplace Report is a list of selected technologies from our database.

Other visible sections include 'News', 'Member Log In', 'About Us', and 'Global Calendar'.

The screenshot shows the talentica website with the tagline 'SPREAD YOUR WINGS'. The navigation menu includes 'site map', 'contact us', 'print page', 'BuildODC', 'WHY TALENTICA', 'CUSTOMERS', 'ABOUT US', and 'CAREERS'. The main content area features:

- BuildODC**: Talentica's BuildODC service helps you set up your fully owned offshore development center in India quickly with minimum risk and capital. [learn more>>](#)
- "The Risk Free Way to Setup Your Own Offshore Development Center"**: Talentica specializes in setting up Offshore Development Centers for small and medium sized software product companies across the USA. BuildODC - Our Build-Operate-Transfer provides you a low risk path to set up your own offshore development center in India without upfront capital investment.
- Case Study: GEMSTONE™**: Gemstone Systems used Talentica to set up its own development center in India using the Build-Operate-Transfer approach. [read more>>](#)

Additional text includes: 'Extend your Product Development Team Offshore', 'In minimal time to start up', 'Consider the benefits. You can', and a list of benefits: 'Conserve cash, while continuing to innovate', 'Leverage our experience in setting up offshore development centers', and 'Quick start your operations using our ready infrastructure'.

New trends (6): Global technology brokers / Global science communities

InnoCentive - Open Innovation Marketplace - Mozilla Firefox 3.1 Beta 3
http://www.innocentive.com/servlets/project/ProjectInfo.po

digital corfu

INNOCENTIVE
WHERE THE WORLD INNOVATES

Register Log In Help Contact Us

Products
Seekers
Solvers
Marketplace

Disciplines

- Business and Entrepreneurship
- Chemistry
- Computer Science and IT
- Engineering and Design
- Food Science
- Life Sciences
- Mathematics and Statistics
- Physical Sciences
- Requests for Partners/Suppliers

Pavilions

- SAP Innovation & Technology
- The Rockefeller Foundation
- Clean Tech and Renewable Energy
- Global Health
- Public Policy and Citizens in Action

FAQ
My InnoCentive
Refer-A-Friend
Blog
News and Events
About Us

Welcome to the InnoCentive Open Innovation Marketplace™!

Choose a **Discipline** and search for a Challenge that you can solve! Submit the winning solution and earn cash awards from \$5,000 to \$1,000,000. Or visit one of our **Pavilions** to search for Challenges based on areas of interest.

To check out some of our past winners, visit our [Awarded Challenges](#).

Disciplines:

- Business and Entrepreneurship**
Product Development, Business Development, Marketing, ... [More](#)
- Chemistry**
Organic, Polymer, Synthetic Chemistry, ... [More](#)
- Computer Science and Information Technology**
Applications/Programming Languages, Artificial Intelligence, Bioinformatics, ... [More](#)

Pavilions:

- SAP Innovation & Technology**
SAP is proud to sponsor the Innovation and Technology pavilion, where you'll find Challenges posted by SAP and other Seekers in Computer Science, Information Technology, and related fields. [More](#)
- The Rockefeller Foundation's Accelerating Innovation for Development Initiative**
Solve pressing challenges facing poor or vulnerable people around the world. [More](#)
- Clean Tech and Renewable Energy**

Calculator
Performs basic arithmetic tasks with an on-screen calculator.

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InnoCentive - ...
Intelligent City...
Adobe Photos...

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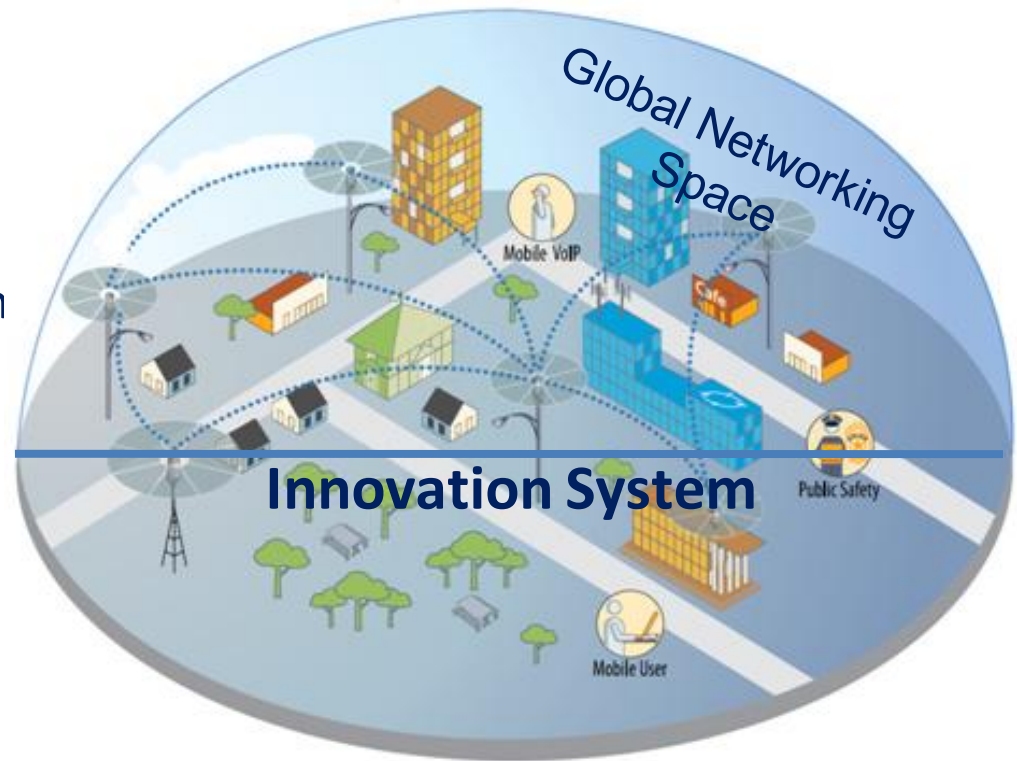
New trends (7): People-based innovation



Collaborative innovation environments based on community spaces, enable the involvement of population in innovation development: Creative communities

New trends (1-7): Global networks over local innovation systems

- New trends (innovation offshoring / digital brokers) create a **global virtual / organizational space** over the local / regional system of innovation
- Globalisation of innovation: Local systems open to global cooperation global networks in technology acquisition, global product development, global supply chains, product promotion
- **Intelligent cities enable local innovation systems to integrate global networks and advance people-led innovation**



3. Initiatives for intelligent cities

1. Local Initiatives

Overview: ICF awards ICF 2001 -2009

	Asia – Australia (11)	North America (18)	Europe (9)
2001	-Bario, Malaysia -Singapore	-LaGrange, Georgia, US -Nevada, Missouri, US -New York, US	-Ennis, Ireland -Sunderland, UK
2002	-Bangalore, India -Seoul, S. Korea	-Calgary, Alberta, CA -Florida, high tech corridor, US	
2003-04	-Taipei, Taiwan -Victoria, Australia -Yokosuka, Japan	-Spokane, Washington, US -Western Valley, N. Scotia, CA	-Glasgow, UK
2005	-Mitaka, Japan -Tianjin, China	-Pirai, Brazil -Toronto, Ontario, CA	-Issy-les-Moulineux, France
2006	-Gagnam District Seoul -Ichikawa, Japan	-Cleveland, Ohio, US -Waterloo, Ontario, CA	-Manchester, UK
2007		-Ottawa-Gatineau, Ontario, CA	-Dundee, Scotland, UK -Tallinn, Estonia
2008		-Fredericton, New Brunswick, CA -Northeast Ohio, US -Westchester, New York, US -Winston-Salem, N. Carolina, US	
2009		-Bristol, Virginia, US -Moncton, New Brunswick, CA	-Eindhoven, Netherlands -Stockholm, Sweden

Singapore

iN2015 < IMAGINE YOUR WORLD

Imagine iN2015 Experience iN2015

[Close Window](#)



Πηγή: http://www.ida.gov.sg/images/content/About%20us/About_Us_level1/iN2015/imagine.html

Singapore

Vision

Singapore: An Intelligent Nation, A Global City, Powered By Infocomm

Innovation

iN2015 will fuel creativity and innovation among businesses and individuals by providing an infocomm platform that supports enterprise and talent.

Integration

iN2015 will connect businesses, individuals and communities, giving them the ability to harness resources and capabilities - speedily and efficiently - across diverse businesses and geographies.

Internationalization

iN2015 will be the conduit for providing easy and immediate access to the world's resources as well as for exporting Singapore's ideas, products, services, companies and talent into the global markets.

10 τομείς προτεραιότητας

1. Digital media & Entertainment
2. Education and Learning
3. Financial Services
4. Government
5. Healthcare and Biomedical Sciences
6. Manufacturing and Logistics
7. Tourism, Hospitality and Retail
8. Infocomm Infrastructure
9. Enterprise Development for Singapore-based Infocomm Companies
10. Infocomm Manpower Development

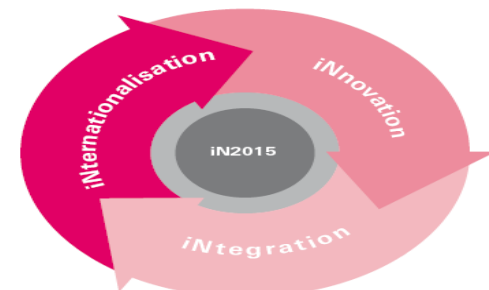
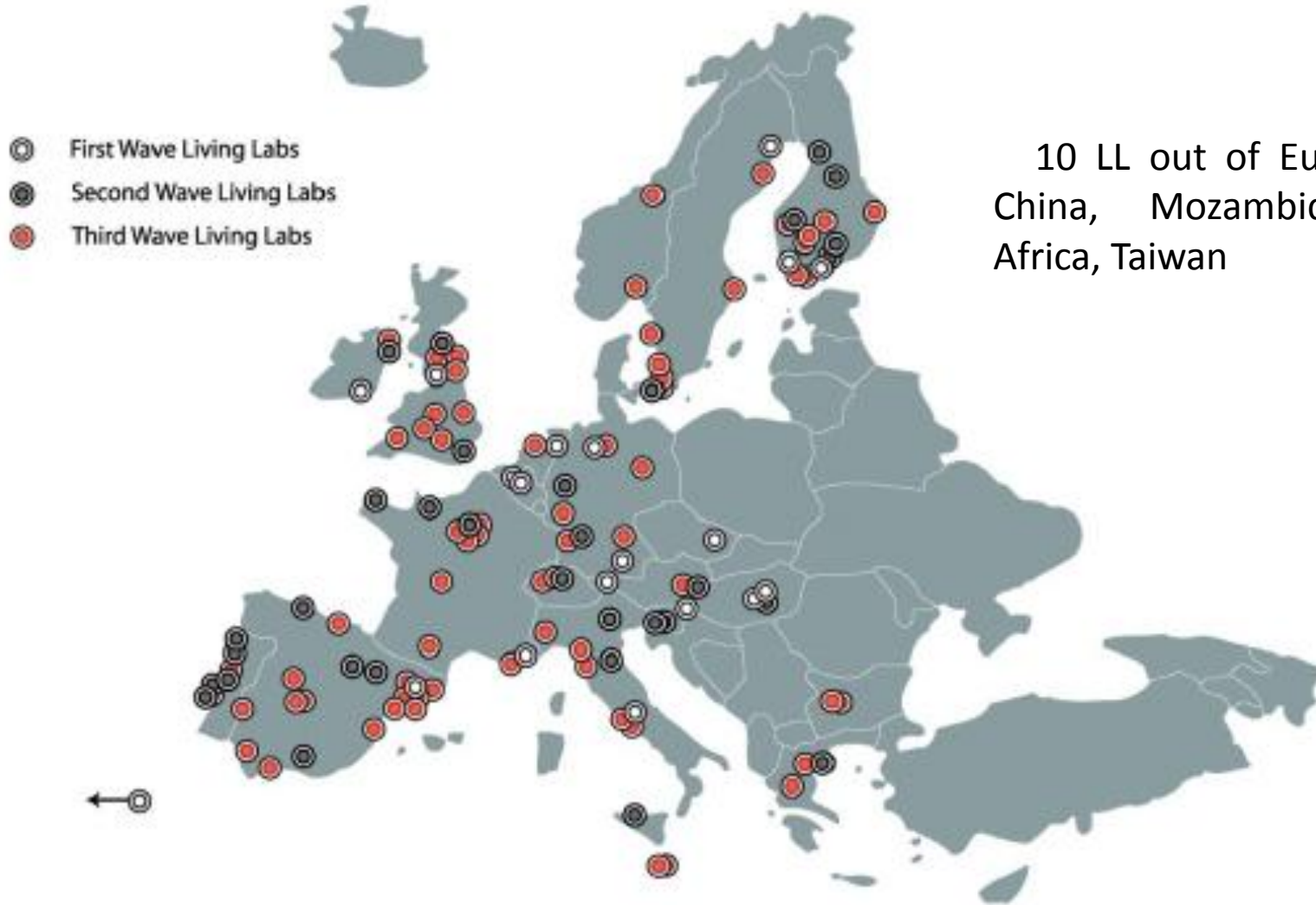


Figure 1-1: Key themes of iN2015

2. ENOLL – European Living Labs (Living Labs): 129 members



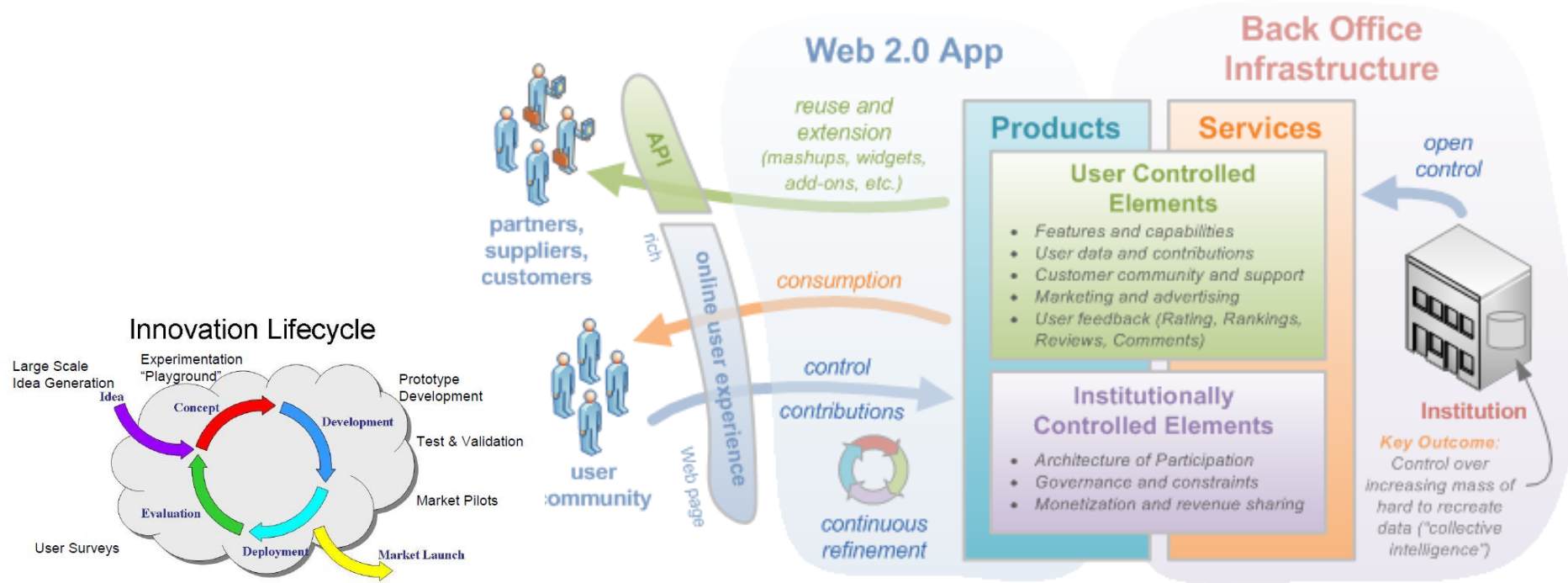
10 LL out of Europe: Brazil,
China, Mozambique, South
Africa, Taiwan

LLs:

New product development according Web 2.0 principles

Dion Hinchcliffe uses the term Product Development 2.0 to describe a concept that embodies the use of Web 2.0 concepts such as harnessing collective intelligence, users as co-creators, and turning applications into platforms, into the product development

Product Development 2.0: Using the Web to Put Users in Control and Co-Create Better, Richer Products Faster



Potential User Roles in all Phases of the Cycle




3. Multinationals are active

➤ IBM: Smarter Planet – Smarter Cities



- Education: interconnected – instrumented – intelligent. Healthcare: Patient Centered Medical Home - Patient-centric healthcare.
- Public safety systems: autonomic sense-and-respond capabilities –analytics - visualization - computational modeling.
- Traffic: smart traffic systems – integrating transportation services.
- Energy: smart grid – smart meters – customers empowerment.
- Government: Democratization of data – e-gov – collaborative platforms – citizen centric solutions.

 **Smarter governance**
Three local UK councils have adopted a new IBM business model that could change the way local government is managed. Through Southwest One

 **Smarter healthcare**
[Cheshire County Council \(PDF, 324KB\)](#) in the UK, was one of the first local authorities to address the government's requirement of a uniform, standardised way to assess the healthcare and social services needs of its senior citizens. The new model implemented has reduced the time and costs required to perform in-home senior visits by 20% as well as positioning Cheshire to be at the leading edge in the way it provides services to its older citizens.

To reduce excessive environmental noise pollution in our cities as well as near airports, railways and major roads, IBM has worked with [DEFRA \(PDF, 727KB\)](#) to produce 'noise maps'. Being of great use to both the public and to planners, they have helped provide a much clearer and accessible view of where noise pollution is most prevalent.

 **Smarter transportation**
Some cities start by transforming their transportation systems. [Stockholm](#), [Dublin \(US\)](#), [Singapore \(US\)](#), [Brisbane \(US\)](#) and London are working with IBM to develop smart systems ranging from predictive tools to smart cards to congestion charging in order to

A smart planet ▾

- A deeper view: Smarter Cities
- 📰 Watch stories from a smarter planet
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How IBM can help ▶

More Ideas from IBM ▶

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Microsoft Intelligent City proof of concept

Intelligent City Live Traffic

Network Options

- Traffic Flow
- Incidents
- Roadworks
- Events
- Points Of Interest
- Bus Positions

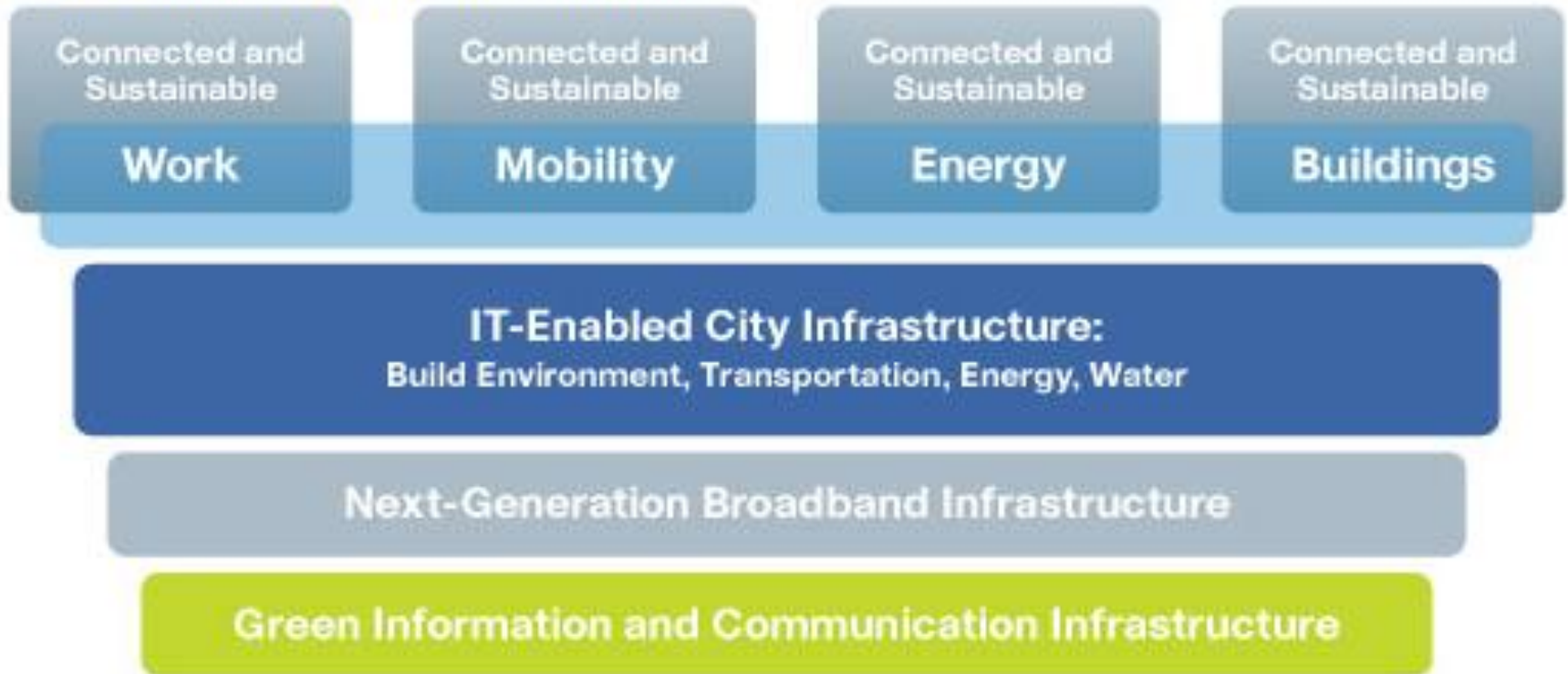
Real-time Traffic Updates

- A441** Traffic congestion. Average speed 10mph between Birmingham (junction with B4217) and Kings Norton (junction with A4040) in Southbound direction.
- A45** Traffic congestion. Average speed 10mph between Sheldon Birmingham (junction with B425) and Yardley Birmingham (junction with A4040) in Westbound direction.
- A449** Traffic congestion. Average speed 10mph between Junction with M54 and Wolverhampton (junction with A460) in Southbound direction.
- M5** Narrow lanes between J4 Lydiat Ash (junction with A38) and J4A Bromsgrove (junction with M42) in Southbound direction.
- M5** Narrow lanes between J4A Bromsgrove (junction with M42) and J4 Lydiat Ash



Intelligent urbanization

Connected Urban Development Framework



Cisco has committed \$15 million to Connected Urban Development over a five-year period. The initiative is presently at the proof-of-concept level, and a number of pilot projects have been established and their effects evaluated.

4. Research at URENIO

Intelligent cities

A more advanced, complex and effective urban system

More advanced

- A new space / dimension (digital spatiality) has been added to urban system of activities, infrastructures, agglomeration (effects), and planning.
- Digital infrastructure (broadband) and services create an umbrella of communication and cooperation over the local innovation system.
- New services are created (i) substituting physical space with digital (dematerialization) and (ii) covering new needs in communication, work, and leisure.

More effective

- Competitive and open system, based on knowledge clusters, innovative activities, creative economy (see, IN2015, LLs)
- Higher capacity of monitoring and management environmental issues (see, IBM Smarter Cities)
- Improving city transports (see, MS, Intelligent Transport proof of concept)
- A more secure urban space (Cisco, Intelligent Urbanization)



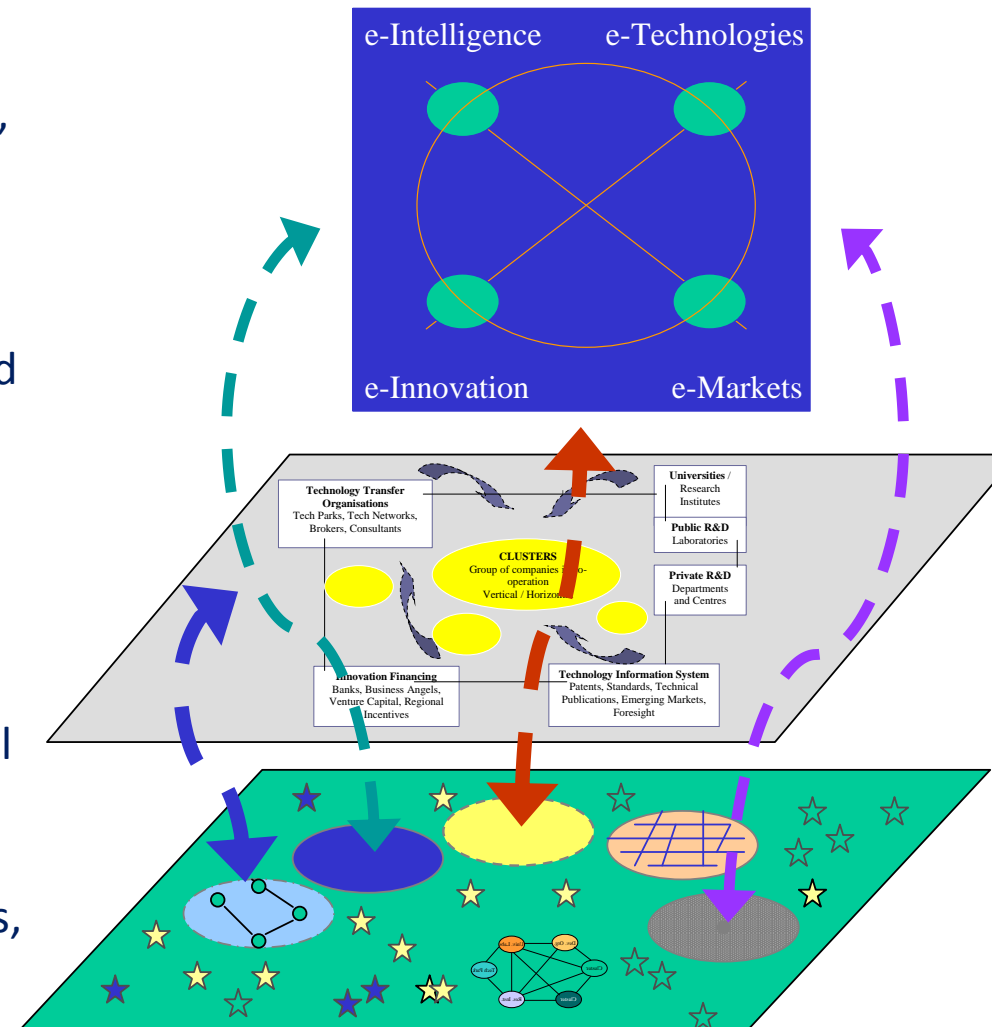
Intelligent cities: Research at URENIO

Central problem: Connecting the physical, institutional, and digital layers of ICs

Layer I, relates to people in the city: the intelligence, inventiveness and creativity of the individuals who live and work in the city, the activities and clusters of a city.

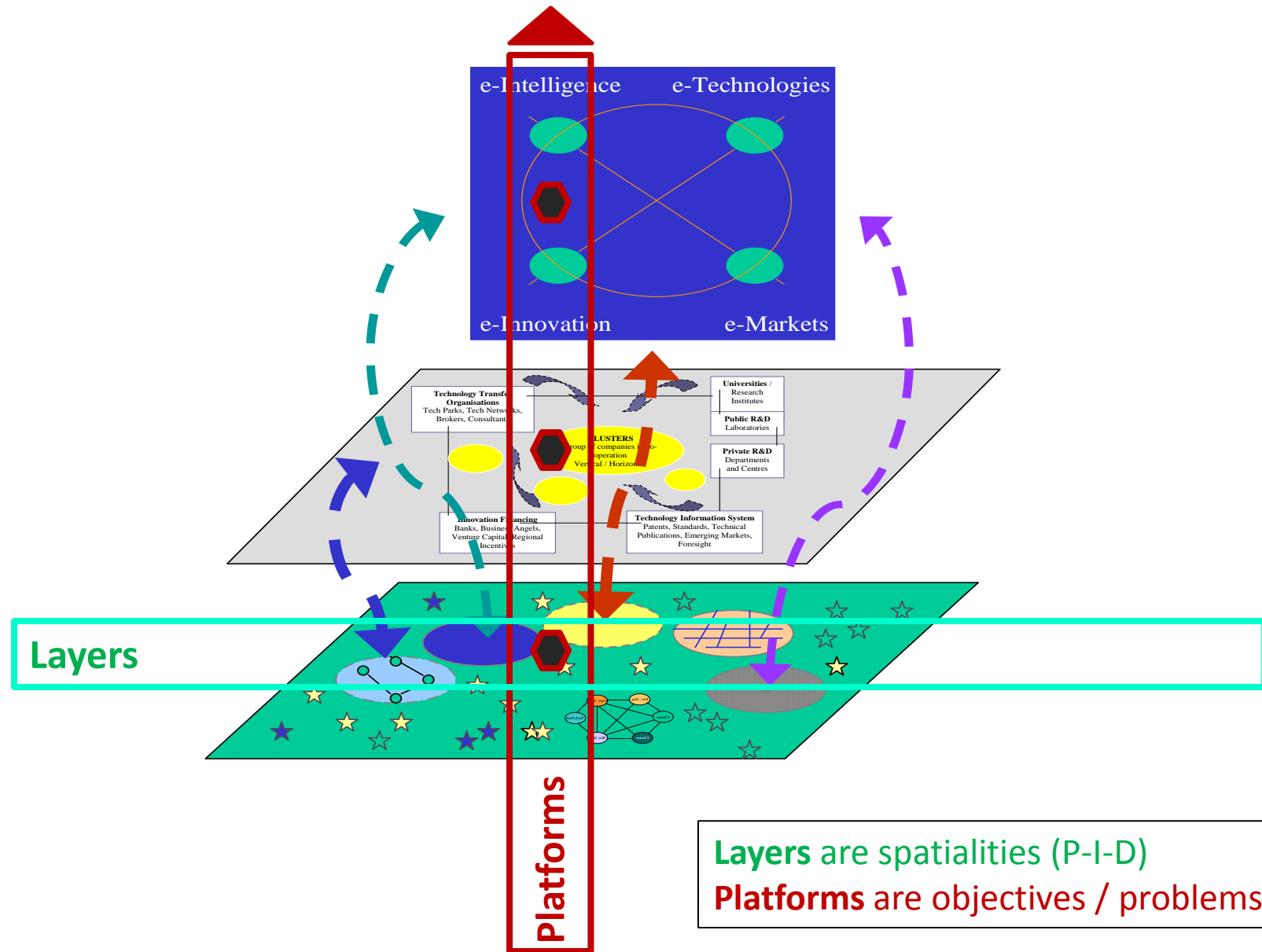
Layer II, relates to the collective intelligence of a city's population, including institutional mechanisms regulating knowledge flows and co-operation in learning and innovation. R&D institutions, venture capital funds, technology transfer and training centers, intellectual property, spin-off incubators, technology and marketing consultants.

Layer III, relates to digital space and artificial intelligence embedded into the physical environment of the city. This is a public communication infrastructure, digital spaces, and e-tools for problem-solving available to the city's population.



Intelligent cities: Research at URENIO

➤ Connecting the physical, institutional, and digital layers of ICs



Layers

Platforms

Layers are spatialities (P-I-D)
Platforms are objectives / problems / functions

Intelligent cities: Research at URENIO

➤ Five platforms corresponding to major innovation objectives

- Home
- Strategic Intelligence
- Technology Dissemination
- Collaborative Innovation
- New Company Incubation
- Virtual Tour & e-Market

Intelligent City Platforms



Intelligent cities are **systems of innovation** combining innovative clusters, technology learning institutions, and digital innovation spaces. The platforms enable the creation of digital spaces facilitating five key innovation processes.

Intelligent City Platforms

- Strategic intelligence**, allowing to gather, analyze and disseminate information about technologies, markets, and competitors;
- Technology dissemination**, allowing to acquire and adapt existing knowledge;
- Collaborative innovation**, for creating networks of product design and new product development;
- New company creation**; and
- Online marketing** of products, promotion and delivery of services.

Strategic intelligence

The **Strategic Intelligence Platform** supports information marketing. It is structured according to strategic intelligence priorities, and includes data collection, data analysis, and dissemination modules.

Applications:

- Market analysis
- Market monitoring
- High innovation centers, trends
- Market research

Tools on the Platform:

- Tools for market and technology watch
- Technological evolution
- Technological evolution maps of key technologies
- Competitive analysis
- Competitive analysis
- Competitive analysis
- Competitive analysis
- Competitive analysis

Services:

- Market and technology watch
- Market and technology watch
- Market and technology watch
- Market and technology watch
- Market and technology watch

Potential Users:

- Universities and research centers
- Universities and research centers
- Universities and research centers
- Universities and research centers
- Universities and research centers

Contact Person: Maria Perez, Tel: +34 2020 40504 | Fax: +34 2020 40504 | Email: maria.perez@urenio.es

Technology Dissemination

In the urban form, the **Technology Dissemination Platform** supports the dissemination of information about R&D and technology. It can be used to promote and adapt content to make it more relevant to the target audience.

Applications:

- Market analysis
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Collaborative Innovation

The **Collaborative Innovation Platform** supports the creation of networks of product design and new product development. It can be used to create new product development networks, and to manage existing networks.

Applications:

- Market analysis
- Market monitoring
- High innovation centers, trends
- Market research

Tools on the Platform:

- Tools for market and technology watch
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- Technological evolution maps of key technologies
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New Company Incubation

The **New Company Incubation Platform** helps users to create new companies. It provides a set of tools for creating a new company, including market analysis, business plan, and financial projections.

Applications:

- Market analysis
- Market monitoring
- High innovation centers, trends
- Market research

Tools on the Platform:

- Tools for market and technology watch
- Technological evolution
- Technological evolution maps of key technologies
- Competitive analysis
- Competitive analysis
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- Competitive analysis

Services:

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Potential Users:

- Universities and research centers
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- Universities and research centers
- Universities and research centers

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Virtual Tour & e-Market

The **Virtual Tour & e-Market Platform** supports the creation of virtual tours and e-marketplaces. It can be used to create virtual tours of products and services, and to manage e-marketplaces.

Applications:

- Market analysis
- Market monitoring
- High innovation centers, trends
- Market research

Tools on the Platform:

- Tools for market and technology watch
- Technological evolution
- Technological evolution maps of key technologies
- Competitive analysis
- Competitive analysis
- Competitive analysis
- Competitive analysis
- Competitive analysis

Services:

- Market and technology watch
- Market and technology watch
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Potential Users:

- Universities and research centers
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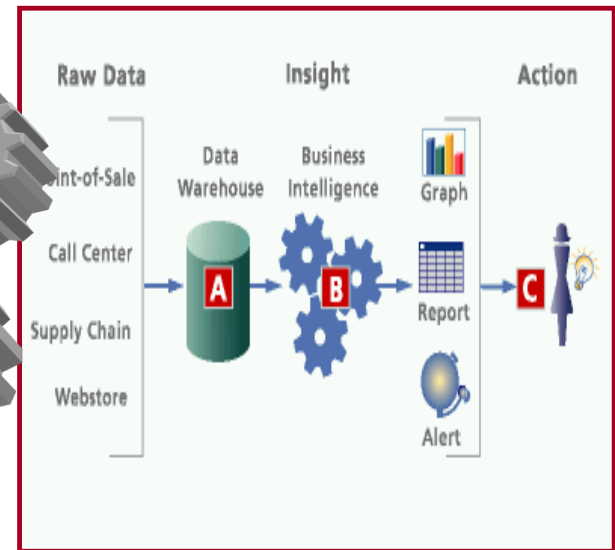
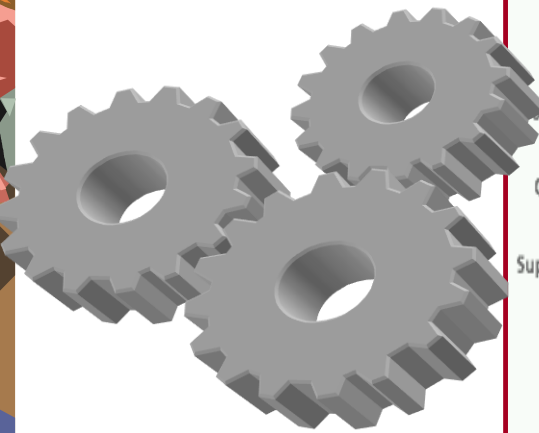
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Platform 1. Collective strategic information / intelligence

Linking communities, institutions, and digital applications

Problem definition: Can we create a system of strategic information supporting the decision making, based on (i) the skills of a community or group of population, (ii) institutional rules for information management, and (iii) digital / broadband services?

Potential users: Business clusters, development organizations, incubators, public administration, planning authorities



Platform 1. Collective strategic information / intelligence

Two applications

Strategic intelligence for regional authorities

Strategic intelligence for clusters

FP5, Regions of Knowledge

Regional Innovation Poles, CM

Platform 1. Collective strategic information / intelligence

How it works

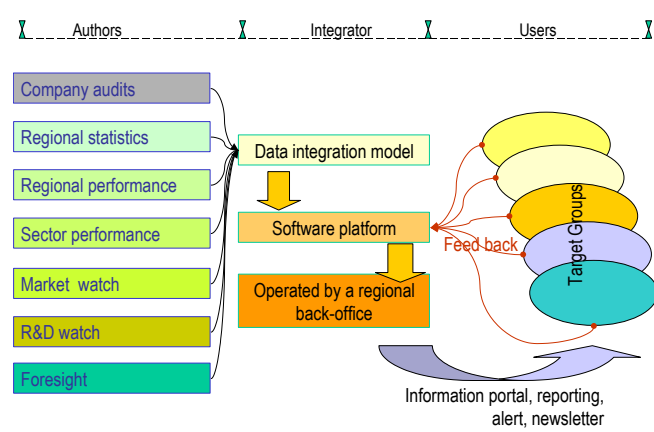
Community

- Social space of the community involved
- Geographic area of reference
- Social group of reference / type of cluster
- Human network of information gathering and elaboration
- Community of information dissemination / feed back

Rules - Agreements

- Rules concerning the collection of information
- Sources of information and validation procedures
- Rules concerning the community of dissemination
- Users' rights and privileges
- Information analysis – Knowledge model
- Sustainability of communities involved

Digital tool / e-services



46. Νέα προς την επιχείση παύσιμα

47. Νέα προς την επιχ. παύσιμα	3	4	5	2.827.994	1.678.012	33
	5	25	0	2.870.966	4.387.966	33

11. Συσχέτιση των επιδόσεων της επιχείρησης από την ανάπτυξη νέων προϊόντων (εξοικονομεί στους κλάδους, σύνταγμα επιδόσει με: ερωδοστική αίσθηση με τις επιδόσεις των επιχειρήσεων του δείγματος (benchmarking για την ερώτηση 19).

Άλλες επιλογές

- Επιχειρησιακά
- Πολιτική διαχείριση
- Προσφορές
- Διασπορά εργατομαζαχών
- Καταργεί Αθήνα

Google Groups

Με την υποστήριξη

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
ΥΠΟΥΡΓΕΙΟ ΟΙΚΟΝΟΜΙΑΣ ΚΑΙ ΑΝΤΑΓΩΝΙΣΤΙΚΟΤΗΤΑΣ
ΓΕΝΙΚΗ ΔΙΕΥΘΥΝΣΗ ΕΠΙΧΕΙΡΗΣΙΑΚΩΝ ΠΡΟΓΡΑΜΜΑΤΩΝ

Platform 2. Technology transfer and absorption

Linking communities, institutions, and digital applications

Problem definition: Can we create a system of technology transfer and diffusion based on the (i) skills of a community of technology providers, (ii) institutions of technology management, και (iii) digital / broadband support services?

Potential users: University labs clusters, business clusters, technology intermediaries, brokers, technology districts

InnoCentive: A reference of virtual technology community



The screenshot shows the InnoCentive Open Innovation Marketplace website in a Mozilla Firefox browser. The page features a navigation menu on the left with categories like Products, Seekers, Solvers, Marketplace, Disciplines, Pavingions, and FAQ. The main content area includes a welcome message, a list of disciplines, and a section for Pavingions. The website's header includes the InnoCentive logo and navigation links for Register, Log In, Help, and Contact Us. The browser's address bar shows the URL http://www.innocentive.com/servlets/project/ProjectInfo.po.

Platform 2. Technology transfer and absorption

Many applications (11)

ARISTOTELEIO ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΟΝΙΚΗΣ - ΠΟΛΥΤΕΧΝΙΚΗ ΣΧΟΛΗ

Ψηφιακό Κέντρο Έρευνας
Συνδέει την ακαδημαϊκή έρευνα με την επιχειρηματικότητα

Αρχική Σελίδα Προσφορά Τεχνολογίας Ζήτηση Τεχνολογίας Υποστήριξη Νέα - Ειδήσεις

Απευθύνεται σε: Εργαστήρια & Ομάδες Επιχειρήσεις & Οργανισμούς Φοιτητές & Αποφοίτους

Αξιοποίηση Ερευνητικών Αποτελεσμάτων

Το Ψηφιακό Κέντρο Έρευνας του Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης σαν σκοπό έχει να συντελέσει στην ευρύτερη διάδοση και αξιοποίηση προϊόντων και υπηρεσιών που βασίζονται στην ακαδημαϊκή έρευνα.

Το Ψηφιακό Κέντρο Έρευνας παρέχει στα ερευνητικά εργαστήρια ολοκληρωμένη υποστήριξη έτσι ώστε αυτά να εκμεταλλευτούν εμπορικά τα αποτελέσματά των ερευνητικών τους έργων.

Αναζήτηση ερευν. αποτελεσμάτων Αναζήτηση στις τεχνολογικές ανάγκες

Αναζήτηση Επιλέξτε κατηγορία... ΑΝΑΖΗΤΗΣΗ

ΕΡΕΥΝΗΤΙΚΑ ΑΠΟΤΕΛΕΣΜΑΤΑ

Ηλεκτρονική Βάση Δεδομένων για μεγάλες Οφθαλμολογικές κλινικές

Με την Ηλεκτρονική Βάση Δεδομένων για μεγάλες Οφθαλμολογικές κλινικές είναι δυνατή η καταγραφή και η αποθήκευση σε ενιαίο αρχείο του κάθε ασθενούς όλων των εξετάσεων και των επανεξετάσεων. Ειδικά από... (Περισσότερα...)

Βάση Δεδομένων, Καταγραφή, Κλινική πληροφορία, Παρακολούθηση ασθενών, Γλαύκωμα, Υπερτασία, Ενδοφθάλμια πίεση, Πρώιμη διάγνωση, Διαβητική αμφιπλευρική αβλαστική χειρουργική, Τολονορία

Επιστημονικές Κατηγορίες Εφαρμογές Αγοράς Εργαστήρια & Ομάδες

Βιολογία (3), Βιοχημεία (2), Γενικές Επιστήμες Μηχανικού (13), Γεωργικές Επιστήμες (5), Μηχανολογία (2), Δασολογικές Επιστήμες (1), Επιστήμη Χημικού Μηχανικού (11), Ηλεκτρολογία (6), Ιατρική (6), Πληροφορική (1), Φαρμακευτική (1), Φυσικοχημεία - Τεχνική Χημεία (1), Χημεία (2)

NEA - ΕΙΔΗΣΕΙΣ

Χορήγηση πιστοποιητικού ισοδυναμίας διπλώματος με master (PDF - 57,47KB)

Σχτικά με το σχέδιο νόμου για τα ΤΕΙ (PDF - 106,86KB)

Πορτή για τη Αθήνα του ακαδημαϊκού έτους στις 25 Ιουνίου 2009 (PDF - 276,08KB)

ΤΕΧΝΟΛΟΓΙΚΕΣ ΑΝΑΓΚΕΣ

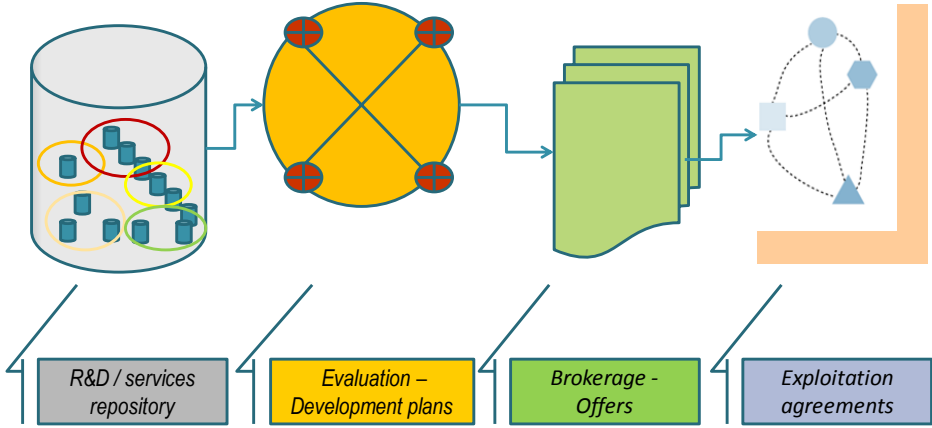
Λογισμικό Παρακολούθησης Βουτηκίων Διαδικασιών

Στοιχεία για ένταση ανέμων & ηλιοφάνεια στην Π.Α.Μ.Β.

Κατάσταση ανάγκης

ΘΕΣΕΙΣ ΠΡΑΚΤΙΚΗΣ ΑΣΚΗΣΗΣ

ΘΕΣΕΙΣ ΕΡΓΑΣΙΑΣ



Intervalue: Technology valorization communities – South east Europe Universities

Virtual Research Center – Aristotle University and University of Mac & Thrace

Platform 2. Technology transfer and absorption

How it works

Community

- A community of technology providers
- University campus
- Research area
- Technology district
- Network of technology providers
- Network of technology recipients

Institutions

- IPR management rules
- Technology transfer / licensing agreements
- R&D valorization and commercialization agreements
- Spin-offs
- Technology dissemination rules
- Technology demonstration

Digital space

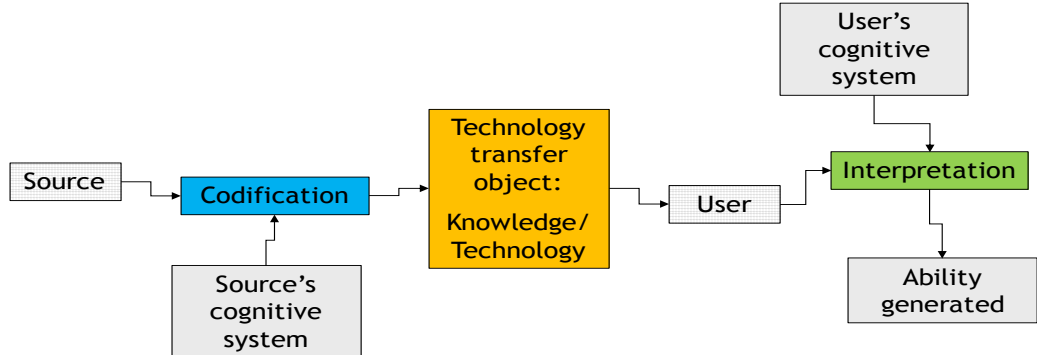
INTERVALUE

Home Page

R&D Summary Reports	Assessment Reports	Dissemination	IPR Agreement Space	R&D Products Demos
R&D results in English	4 evaluations / R&D result	Brokerage events	Full assessment report	Slideshows
R&D results in other languages	Experts database	Newsletter	Messages	Flash movies
		Recipient list	Financial agreement	Videos
			Logfile / tracking	

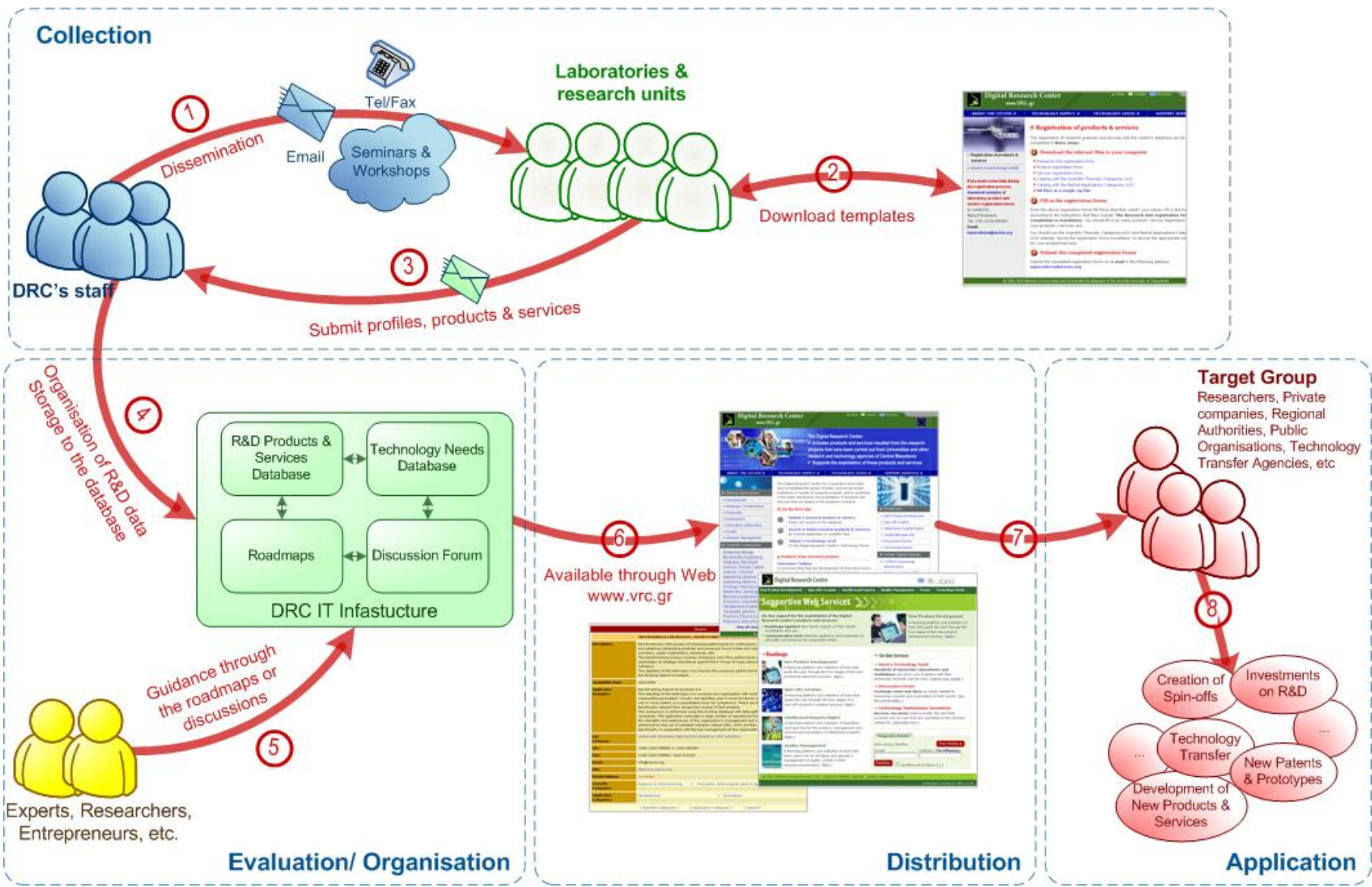
Intelligent Tools

Visualisation	Popularity Rank	Similar Content	Web Analytics	User Rating	Automatic search: Google scholar + patents online
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Platform 2. Technology transfer and absorption

How it works



Intelligent cities: Research at URENIO

Central problem: Connecting the physical, institutional, and digital layers of ICs

- Layer III: The technologies we use at this layer are mainly web technologies and applications

- Open source

- Design of digital spaces:

- ❖ Html+Css

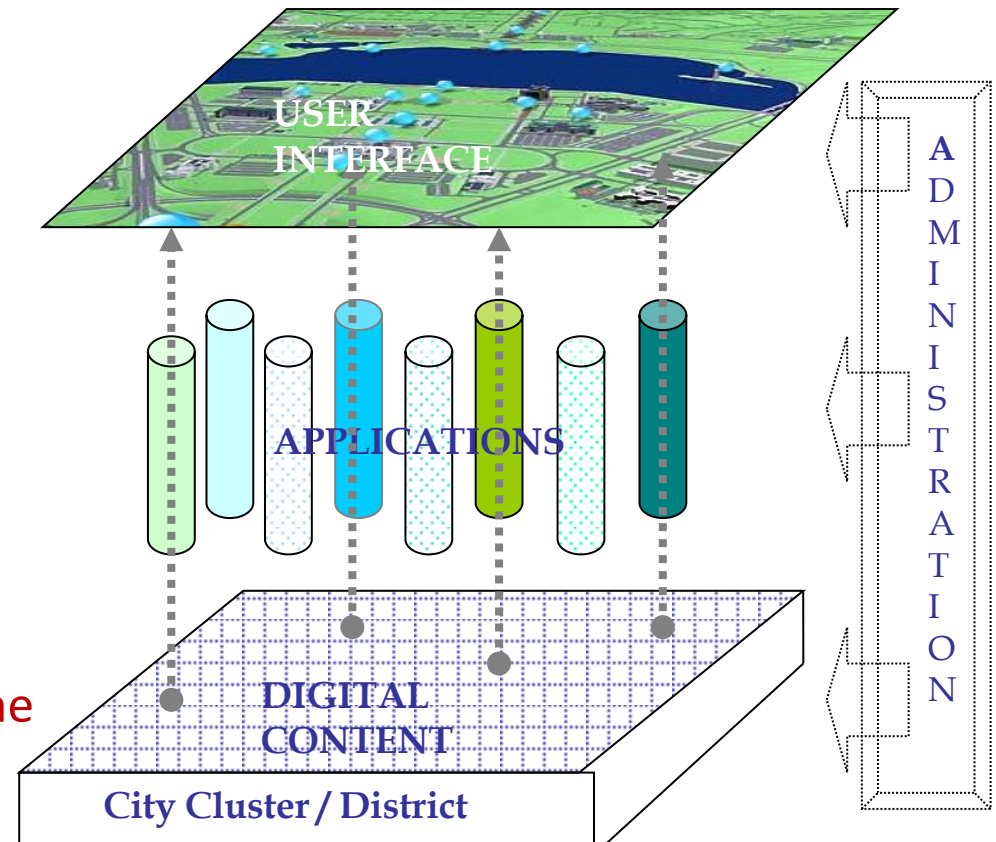
- ❖ PHP/ Perl/Python

- ❖ Apache server, MySQL

- Webhosting -> Cloud computing

- Low entry cost /scalability

➤ The bridges you can built (among the physical, institutional, and digital spatialities of cities) with these technologies are in the fields of knowledge enhancement and innovation collaboration.



More

- Komninos, N. (2002) *Intelligent Cities: Innovation, knowledge systems and digital spaces*, London and New York, Taylor and Francis.
- Komninos, N. (2008) *Intelligent Cities and Globalisation of Innovation Networks*, London and New York, Routledge.
- Komninos, N. (2009) (ed.) 'Intelligent Clusters, Communities and Cities: Enhancing innovation with virtual environments and embedded systems, Special Issue, *International Journal of Innovation and Regional Development*, Vol. 1, No. 4.