

REGIONAL PRODUCTIVITY ENHANCED THROUGH **DIGITAL TECHNOLOGY**



Smart Buildings for Smart Cities Commission - SB4SC

The “Smart Building for Smart Cities” Commission was set up in late 2016 and shortly brought together multiple players from diverse and complementary spheres including public authorities, private companies, engineers, industrial manufacturers, service specialists, constructors, consultants, developers, legal practitioners, integrators and architects. The enthusiasm and the varied views demonstrate how much people care about the topic and how this exceeds vested interests.

The commission of experts quickly focused their attention on a starting point: although digital technology is a wonderful tool, it must serve the needs of the citizen, the city, and the environment. They also made an observation: the digital transition also has its own challenges and requires support from all stakeholders to reveal its full potential.

Therefore, the first edition of the SBathéma collection is intended to demystify digital technology so that policy makers consider it a key resource for their strategies. In addition, this guide was especially compiled to provide a clear idea of the various strategic thrusts to be addressed and how to go about doing so.

Acknowledgements

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DOING BETTER WITH LESS

In a world undergoing deep-seated change, characterised by the energy and digital transitions, regions need to adapt to the surge of the knowledge economy, the strong development of the collaborative economy, new lifestyles and new forms of work, the emergence of new technologies: artificial intelligence, robotics, nanotechnologies and biotechnologies. Each region must give thought to its specific features and the partnerships to be established in order to take advantage of new emerging opportunities and effectively leverage on this momentum.

Doing better with less - that is the promise of digital technology - faster, cheaper, more interactive, fewer barriers, more options, less congestion, more security, less CO2, more social interests, more efficiency of the city.

In only twenty years, information technology, the Internet, mobile communications and very soon artificial intelligence have permeated nearly all business sectors. The topic of smart cities and the promises that they offer are an extraordinary catalyst of our modern times as digital technology allow us to collectively improve cities, the activities taking place therein and the lives of city dwellers.

There is a pressing need for regional stakeholders to jointly take on this issue at a time when the GAFAs are offering “Turnkey cities”, managed by private financing and by the uses, where the political vision would be replaced by a solution to immediate individual needs.

In keeping with the work carried out by the Smart Buildings Alliance in relation to buildings and the creation of the structuring frame of reference, Ready2Services, with this guide **we are introducing a new Ready2Services “R2S” framework for the regions. This guide provides regional leaders with an organisation of the actions to be undertaken in order to fully leverage on digital technology.**

THE “SMART REGION”, FOR WHAT PURPOSE?

Digital technology is not an end in itself, it must serve and expedite the regional strategy.

The ability of local authorities to view digital technology as an enabler of their innovation policy is restricted by many barriers which include siloing as well as the fear of risks. However, the digital revolution is a matter for all: users, elected officials and public agents. Accordingly, it is necessary to understand how this digital culture can be made more accessible to all sectors, including the more traditional sectors inherent to the operation and management of local authorities; the goal being to achieve **an open and connected region that is easy and pleasant to live in.**

What is a Smart Region and what are its aims? Amongst the many definitions of a Smart City, the CNIL (French Data Protection Authority) offers one that is both appropriate and comprehensive. The CNIL views the smart city as “a new urban development concept”. This involves providing an enhanced quality of life for city dwellers by making the city more adapted and efficient using new technologies which rely on an ecosystem of innovative objects and services. The scope encompassing this new city management structure includes inter alia: public infrastructure (buildings, street furniture, home automation, etc.); networks (water, electricity, gas, telecommunications); transport (public transportation, smart roads and vehicles, car sharing, “soft” mobility (cycling, walking, etc.)); e-services and e-administration; with technologies playing a central role in bringing about the transformations underway.



DIGITAL TECHNOLOGY: A TOOL FOR THE REGIONS

“How does the Smart Region help to provide faster and better digital transformation for local authorities?” Technological developments change ecosystems, promote discussions and challenge the existing balances in order to gradually reveal new ones in an increasingly-connected and mobile world:

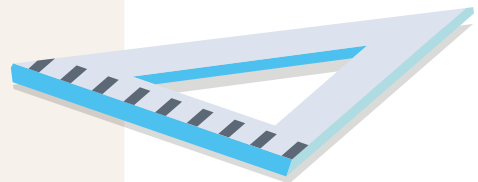
- Buildings communicate and become energy consumers / producers / storers;
- Vehicles become shared, electric, self-driving and connected;
- Individuals are central to these developments with their smartphone, a universal remote, in hand;
- A portion of the work may be remotely performed;
- etc.

Elected officials and policy makers are becoming aware that digital technology can help to improve the management of services and enhance the attractiveness of their region. However in many cases, they do not know how to go about doing this! Although an increasing number of major metropolitan cities are now using digital technology to optimise their services (places of innovation, new forms of mobility, smart lighting, innovative water and waste management, etc.), digital technology can also represent a real driving force of regional strategies in small municipalities that are increasingly being aggregated into consolidated intermunicipal syndicates.

*Digital technology
is a reality and
must be urgently
controlled in order
to harness
its benefits.*

DIGITAL TECHNOLOGY, A DRIVER OF PERFORMANCE FOR ALL REGIONAL POLICY ISSUES

- | | |
|----------------------------------|-------------------------|
| • COMMUNICATION
WITH CITIZENS | • WATER |
| • REGIONAL ATTRACTIVENESS | • PUBLIC LIGHTING |
| • HEALTH | • WASTE |
| • EDUCATION | • PUBLIC SERVICES |
| • SUSTAINABLE
DEVELOPMENT | • PUBLIC TRANSPORTATION |
| • CIVIL SAFETY & SECURITY | • GREEN SPACES |
| • ENERGY | • BUDGET |
| • ROADS AND CAR PARKS | • HOUSING |
| | • TOURISM |



THE DIGITAL TRANSITION: AN OPPORTUNITY FOR ALL

The increased pace of changes in small cities and intermunicipal syndicates comes with heightened awareness of local policy makers and regional agents. In this context, cooperative resource management between local authorities is essential, at least in terms of raising awareness, financing and public procurement.

Municipalities, particularly large cities, and now the intermunicipal syndicates make up the body responsible for planning and strategic thinking in relation to the regions. Their scope has expanded over the years in light of the social and economic realities and they are developing joint collaborative initiatives.

Reforms shifting the composition of regions have given rise to the movement. The main thrust involves working together based on joint information and awareness raising actions, taking advantage of shared resources, planning projects together; especially those projects which take advantage of digital innovations. Each local authority, each region and in particular the smaller ones will benefit from these opportunities; while having previously taken care to establish a multi-layered approach:

- Firstly, taking stock of the potential initiatives;
- Then, preparing a mapping of the skills;
- Finally, delineating the region and the field(s) of application.

THE SBA APPROACH

“The energy, environmental, technological, demographic and urban transitions are challenges and opportunities for action for the stakeholders of cities and regions. These issues demonstrate the importance of developing smart urban systems to achieve the shift to smart and sustainable regions.” That is the approach of the Smart Buildings Alliance for Smart Cities (SBA) that has been led since 2013.

Buildings are central to this transition. They are expected to meet the overall collective and individual needs. This can be achieved by offering diverse and adapted services, by addressing the issues of the regions, and by remaining agile and scalable in order to meet future innovations.

This federating approach for the “Smart Build-

ings for Smart Cities” (SB4SC) has been translated by the Alliance into the creation of the Ready2Services (R2S) label which can be obtained by individual buildings as well as on a regional scale. “Regions are faced with many economic, environmental, social and societal challenges and therefore have to make transitions.” These transitions are both digital and energy-based, combining the power of these two major transitions will pave the way to significant progress which is at the heart of the SBA's actions.

LOCAL AUTHORITIES ARE ON THE FRONT LINE TO CARRY OUT THESE TRANSITIONS

12 KEY POINTS FOR BUILDING A “READY2SERVICES” (R2S) REGION

CIVIC ENGAGEMENT

1. A region **by and for the citizen:** Consultation with citizens and their involvement is at the core of this system, simplified e-administration, reduction of the digital divide.

2. A **sustainable region:** Preservation of resources, energy policy, reduction of pollution.

3. A region which **protects citizens:** Secure public spaces, personal data protection, cybersecurity.

GOVERNANCE

4. A **digital regional strategy:** Forming part of the programming documents and plans of the region.

5. **Digital governance:** Inclusive of public and quasi-public stakeholders, companies and citizens.

6. A region with **transparent management:** Sharing its actions and results with all members.

DATA

7. A **common language:** Development of standards (digital Esperanto) so that data can be understood and used by all.

8. **Widespread use of the BIM and the CIM:** 3D frames of reference, shared Building and City Information Modeling.

9. A **Smart work package** included in each public procurement contract: Data publication requirements in keeping with regional, national or international standards, contributing to common 3D frames of reference.

INFRASTRUCTURE

10. A **connected region:** High-quality fixed and mobile telecommunication networks, roll out of very high speed connection, coverage by one or more IoT networks.

11. **R2S public infrastructure:** Ready2Mobility as a Service transportation networks; Ready2Grids (R2G) water and energy networks.

12. **R2S public buildings:** R2S (Ready2Services) buildings, open and connected to the region.



CITIZENS AT THE HEART OF A REGION'S PUBLIC POLICIES...



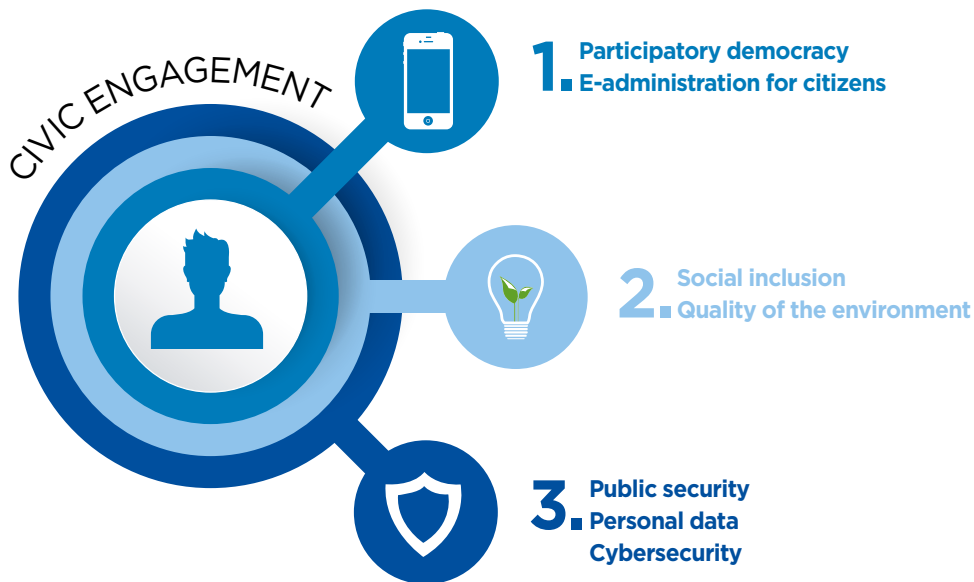
How can we improve the life of our constituents? How can we involve them; how can we improve their protection? How can we guarantee social cohesion? How can we preserve our regional environment? All these questions are central to public policy and have many solutions. In many cases, digital technology is an effective driver for their implementation.

Smart and sustainable regions can act in any areas such as new services to facilitate urban mobility, collaborative economy, smartgrids, intelligent lighting and Wi-Fi access in public areas. However, proper development of Smart Regions must entail the closer involvement of their residents. Social media networks, mobile applications and online petitions are now common place and have joined neighbourhood assemblies and associations as a means of expressing public will.

Whether online or face to face, there are many reasons for public consultation including inter alia local urban planning schemes, public consultation regarding urban mobility, organisation of school hours, day-care centres, etc. and the information provided by citizens is highly relevant. Smart Cities gained their smartness from their residents and many local elected officials have already understood this fact. More and more elected officials are using crowdsourcing, i.e. ideas put forward by citizens. All this data and these discussions foster the development of equipment and services that are better suited to users (mobility, networks, energy), while improving the relationship between elected officials and their constituents.

...DIGITAL TECHNOLOGY SUSTAINING PUBLIC DIALOGUE





1. A REGION BY AND FOR THE CITIZEN

What policy maker does not want to involve his or her constituents in the daily management and continued improvement of the public space? What citizen does not want to give his or her opinion in order to help to make a choice between two options? Bearing in mind the imperative of reducing the digital divide, digital technology helps to facilitate and smoothen participatory democracy while simplifying administrative procedures and optimising processes.

2. AN RSE REGION FOR ALL CITIZENS

A growing number of regions and citizens are now aware that we have entered an era where sustainable development is no longer an option, highlighting the need to preserve our natural resources, hinder the development of activities that cause pollution and promote local and solidarity-based economies. We must act on the environment, the quality of air, water, noise pollution, food, to improve the quality of life and health. Digital technology is a tool which can help to measure, analyse and inform in order to gain a better understanding of how public and civic actions impact the environment and to play a key role in encouraging virtuous policies and behaviours.

3. A REGION WHICH PROTECTS CITIZENS

Public safety and security lie at the heart of public service missions: all citizens expect the government and local authorities to protect them. The networking of tools, such as video surveillance, monitoring and control systems, interaction and warning mechanisms for residents, promote and improve the safety and security of our regions. Moreover, in a world where each data producer tracks its daily activities, the protection of data has become a major public policy issue. The deployment of digital solutions must go hand in hand with special attention paid to the cybersecurity of public infrastructure.

*Participatory
democracy helps
to imagine and
achieve projects
that elected
officials would not
have been able
to achieve alone.*

WHAT KIND OF DIGITAL GOVERNANCE...



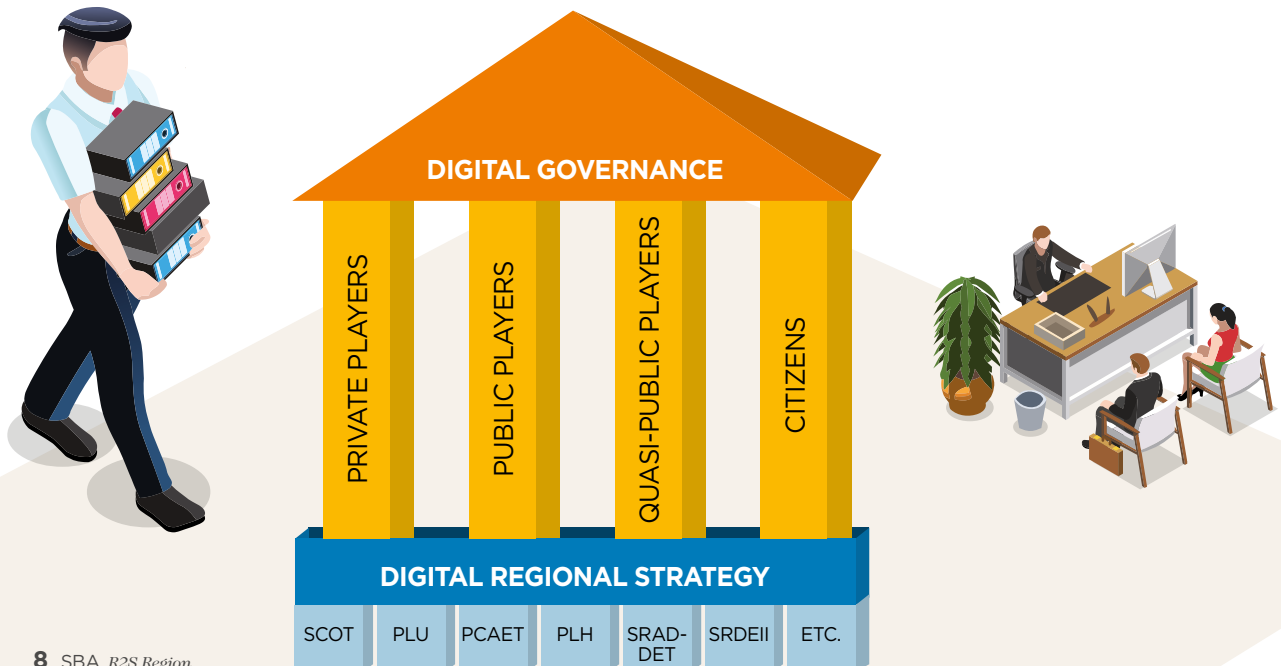
Underlying this issue is the question of regional governance and the inclusion of digital technology in its overall strategy. This means promoting technology not as mere technology but rather using the drivers offered to us in order to (re)address key issues relating to the challenges that our society wishes to meet. In light of the ecological and digital transition, the possible answers must be identified while having a clear vision of the associated opportunities and constraints.

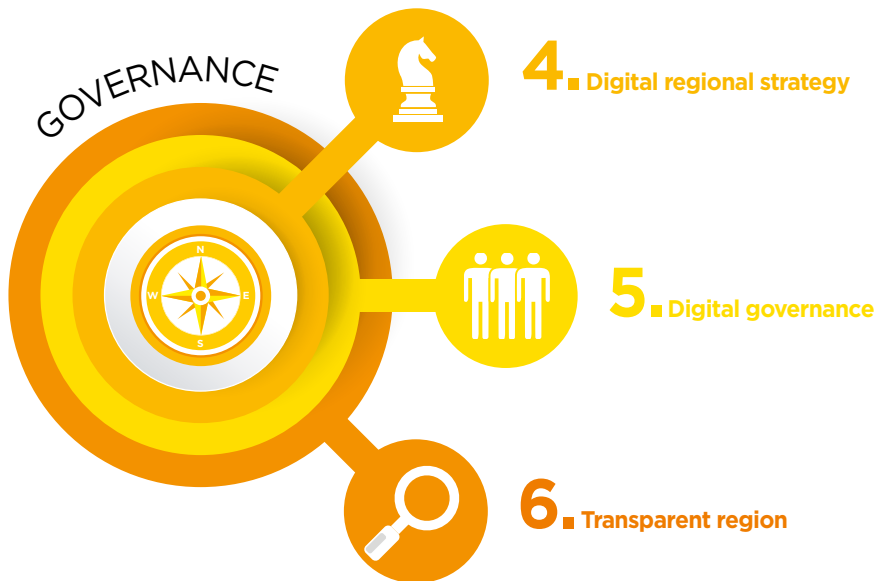
Many regional departments have already seized upon these new tools in order to fully enter the digital area and handle a greater amount of data. There are huge opportunities for digital services at a regional level. The creation of digital governance within the regions has become essential in order to involve elected officials and departments in a shared strategic programming region around these new issues.

The first task of this digital governance team should entail proper coordination of public and private actions. Secondly, it should define the common base for a “Smart Region” approach taking into account its specific features, which must be applied in a cross-cutting manner in all projects. Finally, a common urban language should be defined for all stakeholders involved in order to guarantee the compatibility and complementarity between all the recommended solutions.

This governance must ask the fundamental questions: Who owns the solution? Who has access to what? Who can act on what? Are these rules static? Who can deviate from them in the event of an emergency?

...AND HOW CAN AN ORGANISATION BE PUT IN PLACE TO ANSWER THESE QUESTIONS?





4. A DIGITAL REGIONAL STRATEGY

The Smart Region approach must form part of the various programming documents developed by the different entities of public intermunicipal cooperation institutions. The Regional consistency schemes (SCOT); Local urban planning schemes (PLU); Local housing plans (PLH); Regional air-energy climate plans (PCAET); Regional schemes for urban planning, sustainable development and equality of the regions (SRADDET); Regional schemes for economic development, innovation and internationalisation (SREDII) must all include a digital technology component to maximise their main drivers and connect these various programmes.

5. UNIQUE DIGITAL GOVERNANCE

A method of digital governance taking into account the various players, their skills and scope of action must be clearly established. This internalised or partly-delegated governance must bring together public and private players in order to focus the interests of all parties in the implementation of the aforementioned digital components. It leads the joint programmes, coordinates the initiatives, promotes data and service exchanges and organises harmonization work.

6. A REGION WITH TRANSPARENT MANAGEMENT

Very often digitalisation, the data produced and the increase of exchanged information enhance the understanding or assessment of a situation or serve to simulate the various options to make a better choice and arrive at a better decision. This is also an opportunity to improve transparency and clarity with respect to voters and, generally, of any organisation forming part of the region.

*Being Smart is not
the preserve of big
cities: each region
has its own skills,
it can and it must
take advantage
of digital tools.*

MANAGING DATA FOR GREATER OPTIMISATION



Data is everywhere: on the Internet, mobile telephone and now IoT; there are huge amounts of digital data being produced. Beyond these information repositories, this data must be refined in order to be usable. The issue of collecting and processing data arises for regions as one of the key challenges of the public policy framework.

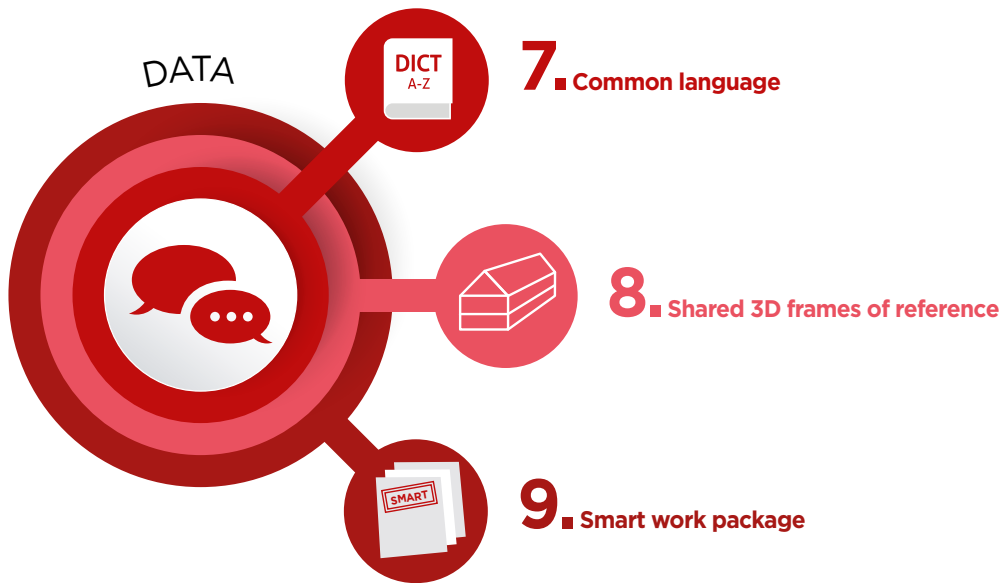
Open data, Big Data, Smart Data... There are many initiatives and obligations driving public and private players to publish data. In particular, within the context of the law for a Digital Republic, any region with more than 3,500 inhabitants must play a role as a data control and organising body. Accordingly, data and data management are now central strategic and control components for public entities. Public players must therefore organise themselves in order to coordinate the production, collection, “refining” and provision of all data relating to their region and their area of authority. Whether this function is internalised or partly externalised, it must guarantee all indi-

viduals equal access to public data and the quality of the services provided to citizens. Furthermore, local and regional authorities desirous of hosting their data must do so in a “sovereign cloud”.

In November 2016, the French Federation of licencing and public utility authorities (FNC-CR, Fédération nationale des collectivités concédantes et régies) published a study, jointly led by the Caisse des Dépôts, regarding the emerging issue of “regional Big Data”. It confirms that outside of major cities, the ground work is still being led for data management. In order to attain a critical mass, it would be difficult for the public stakeholder of a region to avoid pooling the management of their data and an integration of their information systems.

**...DATA MANAGEMENT HAS
BECOME A MAJOR ISSUE FOR
LOCAL AUTHORITIES**





7. A COMMON LANGUAGE

In order to provide a cross-cutting and overall vision of the city and the regions, the various sectors and their information must be connected and an urban language created to offer a new way of viewing the city and the actions to be undertaken. As a matter of fact, if the terminologies for referring to an object differ in 2 business segments, then a common language is necessary so that individuals are able to understand each other. This is achieved by shared dictionaries which play a vital role in smoothing the cross-referencing of data and data augmentation, key requirements for the emergence of new services.

8. A WIDESPREAD USE OF 3D FRAMES OF REFERENCE

One major quality of urban data is that it can be tracked. One other quality is that it can be time-based thereby making it possible to put data back into its context: positioning and monitoring of work, consumption or energy production, traffic, etc. The emerging digital solutions such as BIM and CIM are some of the tools to be implemented to manage this data and the associated formats and classifications. In addition, they offer a shared working environment for regional players. These representation and monitoring tools are an essential base for each R2S region.

9. A SMART WORK PACKAGE INCLUDED IN EACH CONTRACT

The public players of the region, and more generally, the players involved in creating the urban fabric and services, must expedite the publication of their data by complying with a common language, in an open and shared 3D frame of reference. The drafting of clearly defined digital requirements aggregated within a “smart” work package in public calls for tenders, will make it possible to ease the execution and operational deployment of the Smart Region.

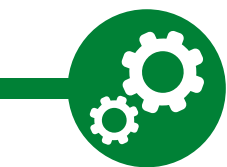
Data is a huge source of value and is increasing exponentially.

We must avoid building a data Tower of Babel and we must ensure that

the data produced is understandable.

INFRASTRUCTURE

THE **SAVINGS** ACHIEVED INCLUDE INVESTMENTS...



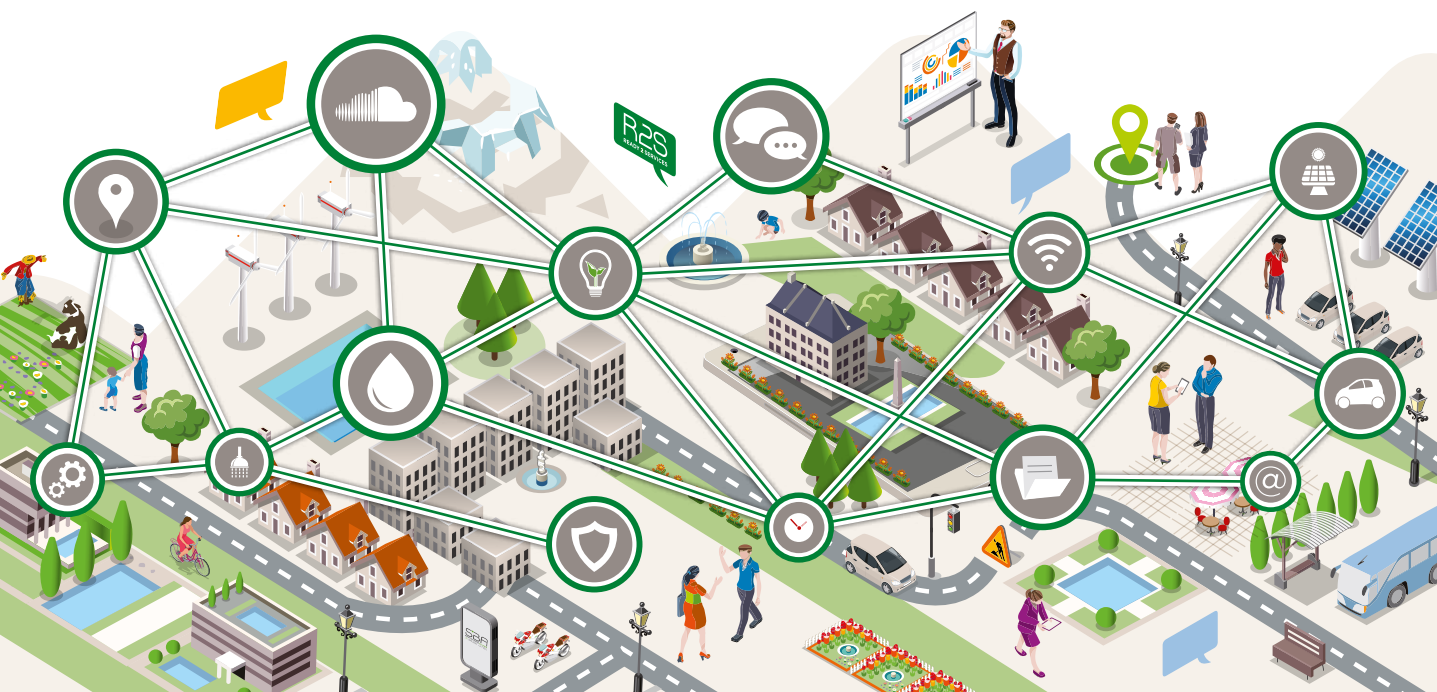
With the mainstreaming of connected objects (sensors, cameras, meters, smart lighting, etc.) and the resulting new services, the region and its subsections (districts, buildings, etc.) become multiple service platforms. This may lead to a genuine transformation of uses, to the benefit of citizens / residents, as well as the professionals responsible for urban infrastructure and services.

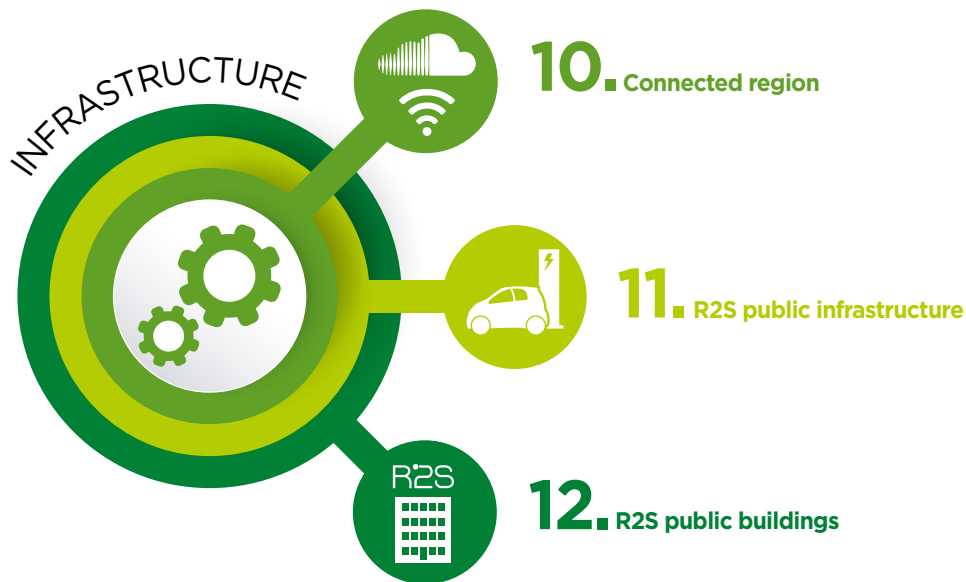
For local authorities, these emerging digital tools provide an opportunity to change the way they manage their region, optimise their costs, ensure better interaction with their constituents, increase the efficiency and quality of the services provided, and even conceive new ones, which are more in keeping with the changes in usage patterns. Digital technology can also help to create useful value at a time when endowments are being decreased.

In his report to the government entitled “De la smart city au territoire d’intelligence(s)” (From smart city to smart region), Luc Bélot (former MP for Maine-et-Loire) outlines some keys for providing support to local authorities. The main keys include: the deployment of digital infrastructure (networks, connected objects, data), involving a high level of technical and legal control that pooling would serve to easily achieve.

The observation that can be drawn from Smart City projects is that very often the initiatives are isolated and remain at an experimental phase. However, scaling up will provide companies and local authorities with a viable economic model and a promising showcase for the export market.

...FROM SMART CITY TO SMART REGIONS





10. A CONNECTED REGION

A Smart Region cannot be obtained without high quality communication networks: both fixed and mobile, open and secure, optical fibre, 4G/5G, IoT network. Regions have a central role to play in the outfitting of communication infrastructure and they must take up this role as coordinator, facilitator and integrator.

11. R2S PUBLIC INFRASTRUCTURE

Infrastructure is fast entering the era of digital technology and must take into account societal changes. Therefore, smart car parks are becoming a source of income, roads are producing energy, the arrival of electric and autonomous vehicles has a considerable impact on the charging systems, traffic and management of drop-off / pick-up locations.

At the same time, utility networks (electricity, gas, water, heat, cold) are becoming two-way with the capacity to control the decentralised energy production and the purchase and sale of energy for a building, a district or a region.

12. R2S PUBLIC BUILDINGS

Digital technology is transforming the management of real-estate assets by diversifying their use, optimising their occupancy and increasing the flexibility of their use while rationalising their costs. Public authorities often possess high-value built assets making up genuine urban areas. Developing digital technology towards R2S buildings will provide sources of income and savings serving to broaden the range of services offered to citizens while decreasing the carbon footprint of the region.

*Communication,
transportation,
energy, water,
public building...*

*The public
infrastructure is
a driving force of
our regions and
is taking full
advantage of
digital technology.*

PROOF THROUGH 7 EXAMPLES

The SBA (Smart Buildings Alliance) experts explain through 7 non-exhaustive examples how digital technology has a major role to play in the implementation of regional policies.

These solutions can be accessed through various public contracting processes such as conventional public procurement contracts, service contracts, works contracts, leasing with purchase option or hire purchase; design-execution-operation-maintenance; DSP (public service delegation); partnership agreement; CPE (energy performance agreement); concession and semi-public company (SEM - Société d'économie mixte).

"The type of contract is selected by the local authority and depends on its strategic choices as well as its financial, technical and human resources," explains the SB4SC Commission. "It must make the decision based on its technical skills, its financial capacity and the level of risk that it intends to retain and/or the level of performance commitment required from private companies."

1. Make energy greener and reduce energy costs

Install photovoltaic panels on public buildings and/or urban infrastructure (sun shade over car parks, etc.); install smart public lighting, adjust the lighting level to the type of roads and the use patterns (traffic rate).

• *What leverage can digital technology offer?*

Facility control system, weather forecast and exchanges with the (Smartgrid) network in order to determine energy purchases or sales. Sensors measuring the "shade" level and adjusting the lighting.

• *Positive externalities*

Improve the region's energy resilience; reduce energy costs; carbon footprint.

2. Ease traffic flows

A traffic regulation system gives priority to public transportation (bus, trams).

• *What leverage can digital technology offer?*

Programming and control of traffic lights depending on movements of public transportation in real time. Intersections are interconnected.

• *Positive externalities*

Emergency services (police, firefighters, ambulances) benefit from the same system; the message that public transportation is faster than a private car.



3. ■ Develop new forms of mobility

Implementation of car sharing solutions (electric or otherwise) for citizens or employees of a community (all the entities of the municipality).

● *What leverage can digital technology offer?*

Development of systems and applications (booking, electronic keys, real-time geolocation of vehicles, monitoring of consumption, use rate). Pooling of investment and operating costs while taking advantage of the use of different times slots.

● *Positive externalities*

Improvement of the carbon footprint, smoother traffic flows (less vehicles per inhabitant), reduced costs.

4. ■ Communicating with and involving citizens

A digital application allows citizens to guide the investments and actions carried out by the local authority and establish a lasting relationship between the public entities and citizens.

● *What leverage can digital technology offer?*

Practical method for flexibly and cost-effectively meeting the demand for expression from a citizen.

● *Positive externalities*

Reinforcing the commitment and the link to citizens; descending information; modernising the image of public entities; demonstrating the ability of elected officials for scalability / modernisation.

5. ■ Take into account security

On a daily basis and during festive, cultural or economic events, temporary or permanent, fixed or mobile video surveillance solutions enabling remote surveillance and guaranteeing better responsiveness.

● *What leverage can digital technology offer?*

Digital video technologies serve to efficiently deploy and transmit information.

● *Positive externalities*

Put citizens at ease; possibility to promote the camera as a multi-use sensor (metering, fixed and mobile video ticketing, traffic congestion).

6. ■ Improve the performance of urban infrastructure

A multi-sector platform connects various sectors to each other (public lighting, video-surveillance, recharging terminals, automatic barriers, etc.), and ensures centralised management of urban areas in a single command post. Therefore the performance of urban infrastructure is improved both in relation to cost and service quality.

● *What leverage can digital technology offer?*

The digital platform collects, processes, compiles and records data for better understanding of the uses and to guide immediate actions and public policy.

● *Positive externalities*

Create cross-cutting between the entities; reduce supervision costs; pool maintenance costs; provide policy makers with the tools and factual data to establish public policies.

7. ■ Improve the quality of life at the work place and at home

By speeding up the transformation of the property sectors through the construction and renovation of connected and communicating buildings, the links between the indoor and outdoor space are restored thereby ensuring service continuity in the urban area.

● *What leverage can digital technology offer?*

With scalable digital architecture (Smart Buildings Alliance R2S frame of reference), the building becomes a service platform for its regular or occasional occupants.

● *Positive externalities*

In addition, by opening up to the city, it becomes an active resource and one of the main links in the Smart City policy.

THE SBA PROVIDES SUPPORT TO THE BUILDING SECTOR TO HELP ACCELERATE ITS TRANSFORMATION IN LIGHT OF THE CHANGES RELATED TO THE MASS ARRIVAL OF DIGITAL TECHNOLOGY IN SMART BUILDINGS AND THE SMART CITY. IT OFFERS AN OVERALL VISION BY RELYING ON POOLED INFRASTRUCTURE FOR THE PROMOTION OF NEW SERVICES CENTRED ON USAGE PATTERNS, GENERATORS OF EFFICIENCY AND BETTER SOCIAL COHESION.

SBA's actions

MEETINGS

Federate the sector in a cross-cutting manner

SBA events, for shared experiences and a watch on themes regarding the smart building in the sustainable city.

PUBLICATIONS

Share our vision and our recommendations

Smart buildings for sustainable cities manifesto, guide for Ready2Services buildings and regions. e-SBA (bimonthly news).

COMMISSIONS

Reflection on changes to buildings in the smart city

Expert commissions to define a common framework for connected and open buildings.

RELATIONSHIP WITH INSTITUTIONS

Raising the awareness of public policy makers

Ministries, public institutions, local authorities, professional unions.

INTERNATIONAL COOPERATION

Expanding beyond national borders

Exchanges with international organisations

Become a member of the SBA, alongside Smart Buildings and Smart City leaders and experts in order to:

- Understand the associated challenges and issues
- Help to define and implement the basic frames of reference
- Obtain information and monitor innovations of the sector
- Develop your network and interact with your peers
- Meet with experts from sectors connected to your own

THE SMART BUILDING ALLIANCE IS MADE FOR YOU,

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THE MEMBERS

ABB ● ACCENTA ● ACCOR INVEST ● ACOME ● ACR ● ACS2I ● ACTIWATT ● ADEUNIS RF ● AIRELIOR
FACILITY MANAGEMENT ● AIRRIA ● ALIAXIS ● ALLIANZ REAL ESTATE FRANCE ● ALPHA RLH ●
ALTAREA COGEDIM ● ALTECA ● ALTECON ● AN2V ● ANC TECHS ● APILOG AUTOMATION ● ARC
INFORMATIQUE ● ARCHIMEN ● ARCOM ENERGIE SERVICE ● ARISTOTE ● ARKHENSPACES ● ARP
ASTRANCE ● ARTELIA ● ASCAUDIT ● ASSOCIATION HQE ● ASSYSTEM ● ATC FRANCE ● AURI
ZONE ● AVIDSEN ● AXIANS ● AZUR SOFT ● B.TIB ● BAALBEK MANAGEMENT ● BARBANEL ● BCM
ENERGY ● BEEBRYTE ● BIRDZ ● BNP PARIBAS REAL ESTATE ● BORDEAUX METROPOLE
● BOUYGUES CONSTRUCTION ● BOUYGUES ENERGIES & SERVICES ● BOUYGUES IMMOBILIER ●
CABA ● CAILLOU VERT CONSEIL ● CAISSE DES DEPOTS ● CAPENERGIES ● CCF ● CCI NICE COTE
D'AZUR ● CDU IMMOBILIER ● CEA TECH ● CERTIVEA ● CISCO ● CIT RED ● CITYLITY ● CLUSTER HBI
● CONNEK+ CONSEIL ● CONSEIL DE DEVELOPPEMENT METROPOLE DE LYON ● COSTE
ARCHITECTURES ● COTHERM ● CSTB ● CYMBIO ● CYRISEA ● DALKIA - GROUPE EDF ● DASSAULT
SYSTEMES ● DATA SOLUCE ● DECAYEUX ● DECELECT ● DELTA DORE ● DEMATHIEU & BARD ●
DISTECH CONTROLS ● DOVOP DÉVELOPPEMENT ● E.ON ● E'NERGYS ● EASY SMART BUILDING
● ECONOCOM ● EDF - BRANCHE COMMERCE ● EDF OPTIMAL SOLUTIONS ● EFFIPILOT ● EIFFAGE
ENERGIE ● ELITHIS ● EMBIX ● ENERGISME ● ENGIE ● ENGIE AXIMA ● ENGIE INEO ● ENLIGHTED ●
ENOCEAN ● ENSI POITIERS ● FAYAT ENERGIE SERVICES ● FFDOMOTIQUE ● FIFTHPLAY
● FONCIERE DES REGIONS ● GA2B ● GEMALTO ● GETEO ● GETRALINE ● GFI INFORMATIQUE ● GLI
- GROUPE EKIU ● GRAND PARIS HABITAT ● GRDF ● GREENERWAVE ● GROUPE BETOM - IDEAM
SOLUTIONS ● HAGER ● HAVR ● HENT CONSULTING ● HESTIA INNOV ● HONEYWELL ● HXPERIENCE
● HYDRELIS ● IBM ● ICADE ● ICONICS ● IDEX ● IMMOBILIÈRE 3F ● IMPERIHOM ● INEX ● INGETEL
BET ● INNOVATION PLASTURGIE COMPOSITES ● INSITEO ● INTENT TECHNOLOGIES ● IP2I ● IPORTA
● ISTA ● KALIMA DB ● KARDHAM CONNECT ● KOONTOO ● KORUS ● L'IMMOBILIERE IDF ●
LEGRAND ● LEON GROSSE ● LM INGENIERIE ● LONMARK FRANCE ● LUTRON ELECTRONICS ●
LUXENDI ● MBA INGENIERIE ● MCS SOLUTIONS ● MEDIACONSTRUCT ● MICROSENS ● MIOS
● NEOBUILD ● NETATMO ● NETISSE ● NEXITY ● NEXTDOOR ● NOVAL ● NXP ● OCCITALINE ●
OGER INTERNATIONAL ● OGGA ● ORANGE ● OVERKIZ ● OYA LIGHT ● OZE ENERGIES ● PARTAGER
LA VILLE ● PHILIPS LIGHTING ● PICHET ● PLAN BATIMENT DURABLE ● POLE TES ● POLE STAR
● PRIVA ● PROMOTELEC SERVICES ● PROXISERVE ● QARNOT COMPUTING ● QOS SOLUTIONS
● QUALITEL ● QUINTEA ● RABOT DUTILLEUL - NACARAT ● RENESAS ● RESOLVING ● REXEL ●
S2I COURANT FAIBLE ● SANTECH ● SCHNEIDER ELECTRIC ● SE3M ● SEMERU ● SEMTECH ● SERCE
● SFEL ● SFR ● SIBCO ● SIEMENS ● SIRLAN ● SLAT ● SMART CUBE ● SMART USE
● SMARTENON ● SMARTHAB ● SNACG ● SNEF CONNECT ● SOMFY ● SPIE ● SPIE BATIGNOLLES ●
SPINALCOM ● SPL LYON CONFLUENCE ● STUDINNOV ● SXD ● SYLFEN ● SYSTECHMAR
● TECHNAL ● TECHNILOG ● TEVOLYS ● TRIDONIC ● TRIO2SYS ● UBIANT ● ULIS ● UNIBAIL-
RODAMCO ● UNIVERSITE DE RENNES 1 ● URBAN PRACTICES ● URBEST ● VALLOGIS ● VEOLIA
● VERTUOZ BY ENGIE ● VINCI ENERGIES FRANCE ● VINCI FACILITIES ● WAGO
● WEBINAGE ● WICONA ● WISEBIM ● WIT ● Z#BRE ● ZEPLUG

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