

Siracusa TechTown Integrated Action Plan



A Digital Strategy for Siracusa 2030

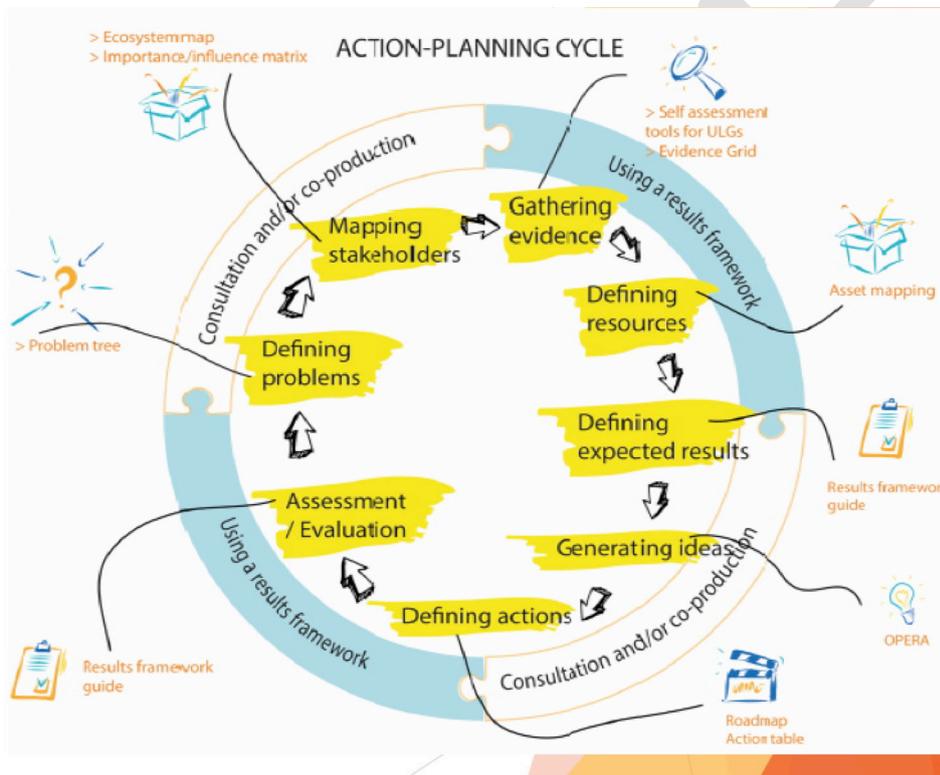
| | |
|---|-----------|
| Introduction | 3 |
| <i>What a Strategy is</i> | 3 |
| <i>Urbact TechTown and The Digital Strategy</i> | 4 |
| 1. Siracusa's background | 7 |
| 1.1 <i>About the city</i> | 7 |
| 1.2 <i>About the economy</i> | 8 |
| 1.3 <i>About the labour market</i> | 10 |
| 1.4 <i>About digital economy</i> | 11 |
| 2. Analysis and Problem Areas | 15 |
| 2.1 <i>Definition of Digital</i> | 15 |
| 2.2 <i>Siracusa: how digital is it?</i> | 15 |
| 2.3 <i>Evidence and Data gathering (method and tools)</i> | 17 |
| 2.4 <i>Siracusa's Problem Area *</i> | 19 |
| 2.5 <i>Specific Objectives</i> | 19 |
| 3. The Siracusa 2030 Strategy | 22 |
| 3.1 <i>From the complex problem to the strategy</i> | 22 |
| 3.2 <i>Existing Strategies: Siracusa 2020 and IBM Smart City Challenge</i> | 22 |
| 3.3 <i>The 2 Strategic Lines</i> | 24 |
| 3.4 <i>Governance as the Horizontal Pillar</i> | 28 |
| 3.5 <i>Siracusa's Digital Action Plan</i> | 30 |
| 3.6 <i>Insights: Other Challenges and Opportunities (inspiration from the Action Grids)</i> | 59 |
| 4. GeniUSiracusa / GeniUSiracusa** | 61 |
| 4.1 <i>The GeniUS process</i> | 61 |
| 4.2 <i>Stakeholders (creation of a LSG, Stakeholders Mapping)</i> | 64 |
| 4.3 <i>Defining the Challenges</i> | 67 |
| 4.4 <i>Generating Ideas: The 'Post and Participate' Results</i> | 69 |
| 4.5 <i>Defining Actions: The Open Innovation Events</i> | 70 |
| <i>Note</i> | 77 |
| <i>Acknowledgements and Credits</i> | 77 |

INTRODUCTION

What a Strategy is

A Strategy and/or an Action Plan normally consists of the following elements:

- detecting a problem or challenge in a city, including some evidence about the problem and its evolution.
- a strategy for addressing the challenge (including objectives), and specification of the results that will show that the city has achieved such objectives,
- a set of actions (normally projects) that will achieve the results, and an estimate of the resources required, the time-frame and the partner that will lead the process,
- output and result indicators to measure what has been done (outputs) and what has been achieved (results).



This document was developed by the Municipality of Siracusa together with the Urbact Local Support Group, thanks to the participation and concrete commitment to Urbact’s ‘TechTown’ network focussing on digital economy.

Urbact TechTown and The Digital Strategy

Urbact is a European Programme aiming to foster sustainable integrated urban development in cities across Europe. It is an instrument of cohesion policy, co-financed by the European Regional Development Fund, the 28 Member States, Norway and Switzerland.

URBACT's mission is to enable cities to work together and develop integrated solutions to common urban challenges, through networking, learning from one another's experiences, drawing lessons and identifying good practices to improve urban policies. The 4 objectives of this programme are:

1. Policy Delivery: to improve the abilities of cities in managing sustainable urban policies and practices in an integrated and participatory way.
2. Policy Design: to improve the design of sustainable urban policies and practices in cities.
3. Policy Implementation: to improve the implementation of integrated and sustainable urban strategies and actions in cities.
4. Building and Sharing Knowledge: to ensure that practitioners and decision-makers at all levels have access to knowledge and share know-how on all aspects of sustainable urban development in order to improve urban development policies.

TechTown is an URBACT III Action Planning Network of 11 cities which aims to explore how small and medium-sized cities can maximise the job-creation potential of digital economy. During the period from May 2016 to May 2018 Siracusa had the chance to:

- examine whether there is a potential spillover deriving from the interaction with close bigger cities and/or regional bodies;
- explore the Municipality's role in increasing digital economy;
- examine how clusters can work at city level
- and look collaboratively at what cities can do to support businesses in accessing the digital skills and innovations they need in order to grow and compete.

Thanks to **TechTown**, during these 2 years, the city of Siracusa has been sharing the same challenge with other 10 European cities. Despite very different contexts, the 11 cities found a common ground of dialogue and had a chance to discuss and make progress in dealing with the topic of Digital Economy, considered as an opportunity to create new jobs. An added value is certainly represented by the methodology proposed by the Lead Expert, Alison Patridge, and the Lead partner, Tracey Johnson, that proved very fruitful:

- transnational meetings every 2 months in order to deepen a specific aspect of Digital Economy (Places and Spaces, Start up, Smart cities Agenda, etc.)
- the active involvement of each partner in several workshops during meetings, including moments for sharing information about the cities' running activities

- the use of Action Grids in order to reflect on what has been learnt during the transnational meetings and verify the relevance for the IAP and the consequent actions to be taken
- the use of digital tools for communication (Slack, etc.)
- and most of all, the peer-review approach for the evaluation of the IAP (Integrated Action Plan).

Seminars organized during the meetings, in particular, provided us a strong theoretical knowledge about Digital Economy and also inspired us in the use of the '6 Pillars' as a reference to measure Siracusa's 'digitalization'. While the peer-review method allowed us to learn a lot about the strengths and the weaknesses of our IAP. This learning process happened both in reading the others' IAPs and in listening to comments by our peers.

We can certainly affirm that each city has been at the same time receiving and a giving contribution within the network.

Each city revealed different faces of the Challenge, teaching us the importance of creating a Digital Ecosystem and how to measure digitalization (Limerick), or how to collect and manage the right data, how to create places able to support Digital Economy (Barnsley), how to link digital economy to the Smart City Agenda (Dubrovnik and Loop City), or the importance of attracting talents and focussing on a specific target of population (Cesis), the opportunities coming from the cultural/creative industries (Clermont-Ferrand and San Sebastian), etc.

Since the beginning, during these 2 years we - the 11 cities, together with the Lead Expert and the Lead Partner- have truly understood the significance of this topic, its complexity and the importance for cities to adopt a Digital Strategy.

According to the European Commission, **digital economy** is the 'single most important driver of innovation, competitiveness and growth'. It estimates that 1.5m additional jobs could be created in the EU's digital economy if it mirrored the performance of the US. It already contributes around 8% of GDP in the G-20 economies and yet only 2% of EU businesses are said to be taking full advantage of digital opportunities (European Commission, Internal Market, Industry, entrepreneurship and SMEs, 2015).

Recent developments in ICT including the rapid growth of smart devices, social media and the internet-of-things, allow for a new type and level of connectedness and digitally-mediated interaction between people. New technologies also hold massive potential for manufacturing industries, offering potential (good and bad) to transform entire sectors. These new digital trends are not just about technological innovation. They are radically shifting the business landscape, reshaping the world of labour, introducing innovations in business models, developing new networking and knowledge-transfer mechanisms, reducing the time to market and widening

access to international markets. They are also relevant to the management of the cities themselves and in the delivery of public services which benefit the economy, citizens and the environment.

It is also evident that globalization and technology are going to deeply transform all the economic sectors and that many jobs will disappear, even if for each job destroyed by digital economy, 2 more will be created. In particular women will be affected by this changes especially in those countries where female employment is linked to care activities and jobs and where female labour force is less skilled. In Italy, for example, the employment gap compared to men is among the highest in Europe, equal to 18.4%. Only Turkey, Malta and Macedonia do worse. The number of women employed as ICT specialists in our country is lower than in Spain, a country with 13 million fewer inhabitants than Italy and very high unemployment. It is half that of France, which has a population exceeding ours of only 5 million inhabitants. If digital technology is everywhere a predominantly male sector, in Italy this data become pathological. We are among those countries where the portion of women employed in the sector out of the total is the lowest ever, 14.2%.

It is important to deeply understand and know about current trends in order not to be passive citizens, who just look for personal or 'short-term' benefits, but in order to become active, aware and responsible citizens (entrepreneurs, users, public administrators, etc.) who act in order to create new job opportunities, in a healthy environment, against a global capitalism that creates a growing gap between the rich and the poor.

'Searching for an alternative to capitalism in the twentieth century that will sustain life on the planet for at least the next seven generations' (Tom Angotti, *The New Century of the Metropolis*, Routledge, New York and London, 2013)

1. SIRACUSA'S BACKGROUND

1.1 About the city

Siracusa is a medium-sized town on the eastern coast of Sicily. It has an ancient and glorious past: the city is notable for its rich Greek history, culture, amphitheatres, architecture, and as the birthplace of preeminent mathematician and engineer Archimedes. This 2,700-year-old city played a key role in ancient times, when it was one of the major powers of the Mediterranean area. Siracusa is located in the southeastern corner of Sicily, by the Ionian Sea.

The city was founded by ancient Corinthians and became a very powerful city-state. Siracusa was allied with Sparta and Corinth and exerted influence over the entirety of Graecia Magna, being its most important city. Described by Cicero as "the greatest Greek city and the most beautiful of them all", it equaled Athens in size during the 5th century BC. It later became part of the Roman Republic and the Byzantine Empire. After this, Palermo overtook it in importance, as it became the capital of the Kingdom of Sicily. Eventually the kingdom would be united with the Kingdom of Naples to form the Two Sicilies until the Italian unification of 1860. The old city centre is an island named Ortigia and it is connected to the rest of the city by a bridge.

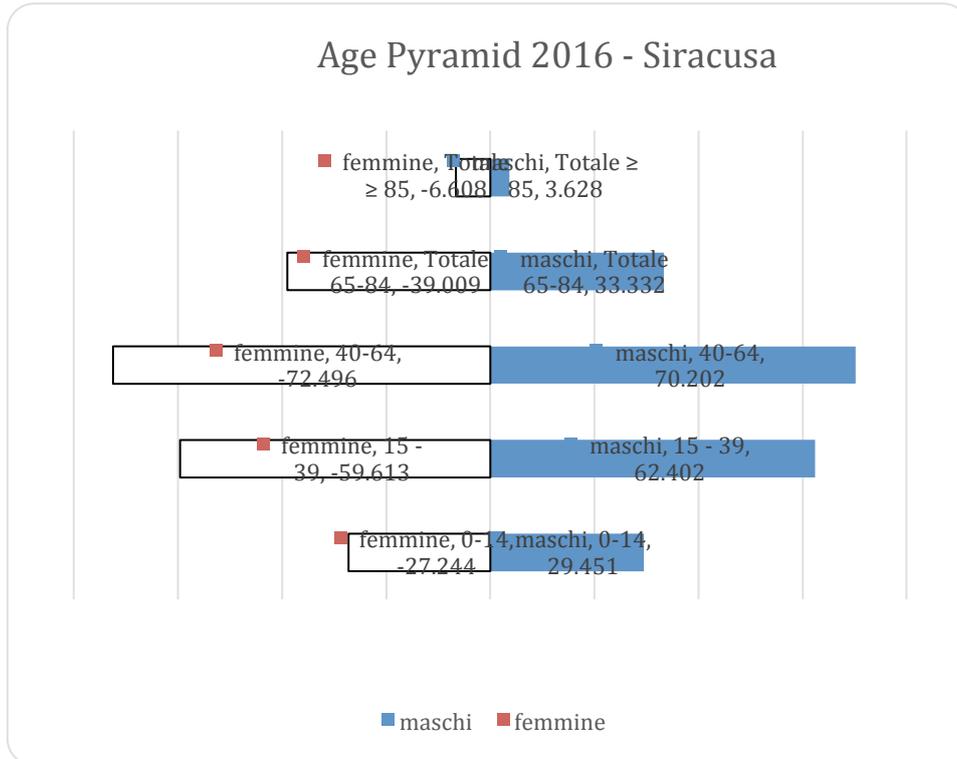
In modern days, the city is listed by UNESCO as a World Heritage Site along with the Necropolis of Pantalica. Two thirds of the territory is hilly and the remaining part is plain; it is the second largest urbanized area in Sicily following Ragusa (75% of residents live in large municipalities). Unluckily the area of Siracusa is underdeveloped in terms of infrastructures, utilities and mobility.

At the end of December 2016, there are 122,291¹ people living in Siracusa, a trend that is growing compared to the previous ten years. The number of foreign residents is 14,364, registering an increase of 48% compared to 2012. The largest foreign community is that coming from Sri Lanka, followed by Moroccans. Among European nationalities, the presence of Romanians and Poles is a significant one.

The elderly index, which represents the ratio between the population aged 65 and over, and the population of 0-14 years is 1.5. The structural dependency index, which represents the ratio between the non-active population (0-14 years and 65 years and older) and the working-age population (15-64 years), is 52.6. The structural dependency index of the elderly that represents the ratio between the population aged 65 and over, and the working age population (15-64 years) is 31.2. The values of the three indexes are rising when compared to 2012, but the general structure of the population remains quite young if compared to the Italian average.

Figure 1

¹ ISTAT 31/12/2016



Source Istat 2016

1.2 About the economy

Siracusa is the fifth Sicilian province with the best infrastructures, with an index of economic infrastructures (102.7) higher than the average Italian value (= 100). This indicator is dragged upwards by the high performance of port infrastructures (306 in 2012 - Italy 100) for which the province is the ninth one among all Italian provinces and the second one in Southern Italy for this type of infrastructures. The index for the provision of business services is very low, and the transport system is very weak in all ways, with particular regard to mobility on roads and trains. On the other hand, telecommunications, energy and environmental structures appear to be good. Among other indicators useful to draw a picture of the economic context are: the ratio of bad debts to ordinary customers, which is significantly higher than the Italian average, and also the number of enterprises who are going to go bankrupt and are already involved in bankrupt procedures (first position in the Italian ranking).

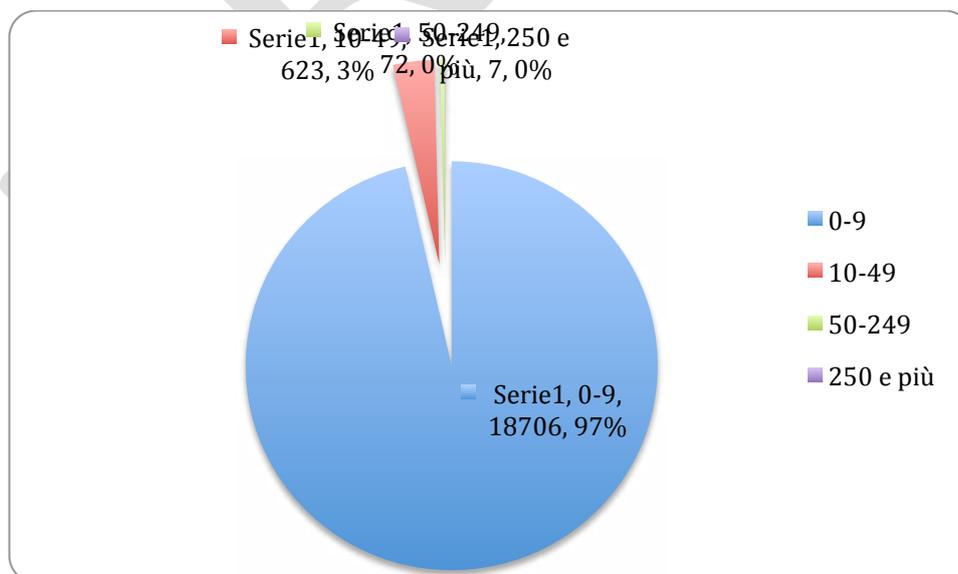
Table 1 illustrates the structure of local economy (not only in the city of Siracusa but the entire surrounding area). As you can see, businesses in the sectors of Agriculture and Services represent the majority but these companies are quite often of micro (96%) or small (3%) size (see figure 2). Inside the industry sector there are a few companies but of a medium or large size.

Table 1

| | | Number of enterprises |
|--------------|---|-----------------------|
| A | AGRICULTURE | 6.944 |
| B | EXTRACTION | 28 |
| C | INDUSTRY | 2.630 |
| D | ENERGY | 94 |
| E | WATER AND WASTE | 95 |
| G | BUSINESS | 9.273 |
| H | TRANSPORTATION | 761 |
| I | ACCOMMODATION AND RESTAURANTS | 2.469 |
| J | ICT | 650 |
| K | FINANCIAL SERVICES | 571 |
| L | REAL ESTATE ACTIVITIES | 471 |
| M | OTHER PROFESSIONAL SERVICES | 909 |
| N | OTHER SERVICES | 2.287 |
| P | EDUCATION | 229 |
| Q | HEALTH | 419 |
| R | ARTISTIC, CULTURAL, SPORTS AND ENTERTAINMENT ACTIVITIES | 427 |
| S | OTHER SERVICES | 1.252 |
| | UNCLASSIFIED COMPANIES | 5.270 |
| TOTAL | | 37.859 |

Source: Unioncamere (National Chambers of Commerce) Movimprese 2016

Figure 2: distribution of companies by size



Source: ISTAT 2015

Table 2 illustrates the main economic indicators of the local situation:

Table 2

| Income Savings Consumption | | |
|--|--------------|---|
| | Value | National ranking (provincial capitals) |
| Monthly rental rates - average 2016 (Euros) | 490 | 36/107 |
| Per capita protested bills - July 2015 / August 2016 - average (Euros) | 2,334.20 | 47/107 |
| Monthly average pensions - 2015 (Euros) | 741.1 | 71/107 |
| GDP per capita 2015 (Euros) | 17,405.20 | 82/107 |
| Residential real estate per capita - 2015 (Euros) | 34,654.80 | 84/107 |
| Expenditure on durable goods per family - average 2015 (Euros) | 1,502.00 | 88/107 |
| Banking Deposits - per capita 2015 | 9,698.40 | 107/107 |

Source: *Isole24Ore - Annual study about the quality of life in Italian cities, 2016*

1.3 About the labour market

The regional average shows better performances in the labour market. Siracusa is the second Italian province for female unemployment rate. The real challenge for the city and its surroundings is to create job opportunities for women and young people, and more favourable conditions for women to become available to work.

Table 3

| | Male | Female | Total |
|--------------------------------|-------------|---------------|--------------|
| Employment rate | 51.79 | 30.96 | 41.37 |
| Unemployment rate | 24.82 | 27.21 | 25.72 |
| Youth Unemployment rate | 54.10 | 52.90 | 53.60 |
| Activity rate | 69.15 | 42.64 | 55.88 |

Source: *ISTAT 2016*

With such a few people in the labour market, it will be very difficult to generate an attractive city in the next future.

1.4 About digital economy

Table 4 illustrates the ability of local enterprises and inventors to produce innovation suitable to be patented. We can use these indicators as a proxy of the general ability of local economy to be innovative and able to transform and adapt itself to new conditions depending on the context, producing original inventions whose patent process produces economic advantages. Let us consider that the town of Enna has the worst performance in Sicily.

Sicily contributes to the national indicator of total deposited patent applications only for 2.2 %.

Table 4

| | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|------|------|------|------|------|
| Total deposited patent applications (inventions, trademarks, drawings and utility models) (% Siracusa/Sicily) | 2 | 4 | 4 | 5 | 5 |
| Impact of patent applications (inventions, trademarks, drawings and utility models) on the population | 3.7 | 1.6 | 1.4 | 1.1 | 1.5 |
| Impact of deposited patent applications (inventions, trademarks, designs and utility models) on labour force | 10.8 | 4.3 | 4.0 | 3.3 | 4.1 |

Source: Unioncamere 2016

In march 2015 two new national registers were created: the national register of innovative start-ups and the national register of innovative enterprises. Since then, 411 companies have been listed in the second register in Italy². Only 11 new companies have been listed in Sicily.

Regarding the start-ups' register, in Italy there are 6.747 new companies and 321 (4.7%) of these are based in Sicily: 13 innovative start-ups are located in the area of Siracusa, very few if compared to some other Sicilian towns that are smaller and whose economy is more closed and a bad performer as a whole, such as the town of Agrigento where 23 innovative start-ups have been created.

Innovative SMEs definition by the national register:

An enterprise's innovative content is identified when having at least two out of the

² Source: Unioncamere Movimprese 2016

following three criteria:

1. Expenses on R&D and innovation has to be at least 3% of the greater between the cost and annual turnover;
2. 1/5 of total workforce employed or collaborators must have a PhD or carry out a PhD in an Italian or foreign university, or must have a degree and have been carrying out certified research activities in public or private research institutes in Italy or abroad for at least three years; or at least 1/3 of the total workforce staff must have a Master's Degree.
3. The enterprise has to own, or being depository or licensor, of at least one patent relating to an industrial, biotechnological invention, semiconductor product topography or a new plant variety or ownership of rights relating to a software originally registered in the public register specialised for computer programmes, provided that this privatization is directly related to the corporate object and business activity.

Good news from monitoring the 2017's trend: as shown in the last business report from Confcooperative³, during the last year in southern Italy there was an increase of 300% of digital enterprises. Between 2011 and 2017, the best growth of digital enterprises was registered in Campania, (+26.3%), Sicily (+25.3%) and Apulia (+24.2%); this highlights how digital transformation can be carried out also in places and regions on the edge of economic dynamism. Digital devices have profoundly changed the importance of competitive advantages for territories and the configuration of growth factors, breaking down boundaries and consolidated revenues.

In the end, ISTAT, the national institute for statistical analysis, produces a yearly survey in which it analyses the way Italians use the internet and PCs.

As we can see, in Sicily less than 50% of the population can use a PC and 53% can surf the web. There is a problem of digital divide, for sure; but also a lack in skills and attitude.

Table 5

| | 2015 | | | | | | 2016 | | | | | |
|-------|----------|-----------|------------------------|----------------------|---------------------|----------------|----------|-----------|------------------------|------------------------|---------------------|----------------|
| | Use a pc | Every day | Once or more in a week | Sometimes in a month | Sometimes in a year | Don't use a PC | Use a pc | Every day | Once or more in a week | Sometimes in one month | Sometimes in a year | Don't use a PC |
| Italy | 56.5 | 34.4 | 18 | 2.9 | 1.1 | 42.3 | 56.1 | 33.4 | 18.1 | 3.1 | 1.4 | 41.9 |

³ <http://www.confcooperative.it/Linformazione/Notizie-Quotidiano/imprese-40-al-sud-scoppia-la-rivoluzione-digitale>

| | | | | | | | | | | | | |
|--------|------|------|------|-----|-----|------|------|------|------|---|-----|------|
| | 48.5 | 29.7 | 15.1 | 2.8 | 0.9 | 49.9 | 43.7 | 26.1 | 14.2 | 2 | 1.4 | 53.1 |
| Sicily | | | | | | | | | | | | |

Table 6

| | 2015 | | | | | | 2016 | | | | | |
|--------|--------------|-----------|-------------------------------------|----------------------|---------------------|--------------------|--------------|-----------|-------------------------------------|------------------------|---------------------|--------------------|
| | Surf the web | Every day | Once or more in a week ^a | Sometimes in a month | Sometimes in a year | Don't surf the web | Surf the web | Every day | Once or more in a week ^a | Sometimes in one month | Sometimes in a year | Don't surf the web |
| Italy | 60.2 | 40.3 | 16.8 | 2.4 | 0.7 | 38 | 63.2 | 44.6 | 16 | 2 | 0.7 | 34.9 |
| Sicily | 51.9 | 35.1 | 14.1 | 2.2 | 0.5 | 45.7 | 53.5 | 37.3 | 13.6 | 1.8 | 0.9 | 43.7 |

Source: ISTAT 2016

Even if the national register defines innovative enterprises as above-mentioned, we decided to use a more open and inclusive definition to set our target, which states that *an innovative digital enterprise is an organization that uses technology as a competitive advantage in its internal and external operations*. This means: to be aware of what is going on in the digital sector, to make choices and use them to boost business, improve competitiveness and growth.

About the Municipality's digital services

During the last two years, new public digital services have been created and improved. Here is a list:

- self-certification portal: citizens can certify information about their civil status by themselves
- tax portal: thanks to this digital service you can pay local taxes online
- SUAP (single office for businesses): it is useful for professionals to send requests for business permissions and any kind of communication relating business and enterprises
- SITR (territorial integrated information system): digital city cartography
- weighing scales: here you can find weekly official price lists for some kinds of products
- tourist tax: for hotels and B&Bs, it allows to pay tourist taxes online
- Municipality's official online archive: acts (from 2013)
- *Easypark*: DropTicket payment via sms for parking and shuttle bus tickets;
- WhatsApp Siracusa: the Municipality informs citizens via WhatsApp about weather alerts, **union's initiatives**, road works, extraordinary office closings, strikes, etc .
- school card system for the payment and booking of meals: schools can book daily meals for students
- electronic identity card;
- single information desk for the building sector.

All services are accessible on the website of the City of Siracusa, <http://www.comune.siracusa.it/>. Just a small number of users take advantage of these services, if compared to the total population. The most used online service is WhatsApp with more than 5,000 followers.

The Municipality's website had been visited 560,516 times during 2017, and 1,318,853 is the number of surfed web pages. There are 374 citizens registered for the birth and death digital service. As already stated, the Municipality has recently created a new digital service dedicated to the building sector: in less than 2 months, 300 architects and engineers registered, 3 citizens and 1 enterprise have registered.

DRAFT

2. ANALYSIS AND PROBLEM AREAS

2.1 Definition of Digital

To define what digital means to Siracusa, we can quote the book “The digital city”⁴: “The city connected to the network with both wired and wireless systems, digitized in the sense that it is equipped with ICT-based and Internet-based technology platforms, enabling huge amounts of data and information to be processed, linking the tangible urban dimension to the virtual dimension (intangible) and the various actors involved” (Hollands, 2008, Ishida, 2000). In this way, open data are promoted, as well as the development of e-democracy tools that improve communication and the active involvement of citizens. The components on which the digital city is based are therefore hardware, software, TLC, IT activities and services, and wetware.

This definition of digital city was selected by the local support group members during a meeting. The definition is the result of a participatory process than has animated all the TechTown project.

In the digital city we (the city as a whole, together with the Municipality and its local support group) want to build digital devices such as tools able to transform analogical reality in numeric data helping citizens understand, influence and modify reality. In this context, citizens, enterprises, social organizations, public administration and all the single and collective stakeholders can **participate** in producing data, **make use of** those data (in the form of products, processes and services), **influence** the production of complex data through digital communication tools (web, social media, etc.).

Looking from the Municipality’s perspective, for Siracusa, “digital” means a complex of methods and technological tools enabling the Public Administration to simplify communication and the management of processes implementing **transparency, (sustainable) development, participation and active inclusion**.

2.2 Siracusa: how digital is it?

The data presented in the section above allow us to define which are the main problem areas. An Integrated Action Plan will be designed in order to develop a digital strategy of the city of Siracusa, within a bigger and more complex general strategy for the city’s economic development. In order to identify specific problems and objectives, we first need to ‘measure’ more in detail how ‘digital’ Siracusa is, taking into consideration the main ingredients for a successful TechTown. These are represented by five “Pillars”:

Places & Spaces

⁴ *La città digitale. Sistema nervoso della smart city*, a cura di CTI Liguria, Franco Angeli Editore, Milano 2014.

The Municipality has recently restored a building that will be soon opened to host the Urban Centre, where it will be possible to hold participatory events, and will also be used as a networking and co-working space. Two private business incubators are still working in the city and they are members of the LSG of the TechTown Project. The city needs a place open to citizens where to promote the testing of digital transformation in an open and public way.

> Talent (attract & retain)

The closest university is the one of Catania, famous for its excellence in the field of engineering and ICT. The city of Catania, together with other Italian higher education centres, attract many talents who, after having studied far from home, have no interest in going back. Today the city has no strategy to retain and attract talented people. Traditional industries are failing to attract due to the oil crisis and to the inability of local enterprises to hire talented people (who ask for better salaries!).

> Connectivity

A national broadband connection plan is going to start. The main problem is that of improving connectivity in schools and public offices in order to promote digital skills and innovation within public administration.

> Data

Collecting open data is the main challenge. An independent workgroup has been created here in Sicily and it is strongly promoting open data (<http://opendatasicilia.it/>). The Municipality (but also the Regional Authority) is not able to collect its own data and to share it with citizens. A new project with the goal of reorganizing the administration's data production and storage system could be designed, applying for a national or European grant.

> Finance

Traditional banks are not able to support start-ups (not only digital ones). Thanks to the presence of the two business incubators, there are now some grants available from *Fondazione Val di Noto* and from the Municipality. No stable connections with venture capitalists and investors.

It was actually agreed that Siracusa needs to assess its capability and capacity under each of the main TechTown pillars, and address the gaps and inefficiencies via its digital strategy. This is to be one of the priority actions in the next steps of strategy development.

2.3 Evidence and Data gathering (method and tools)

In October 2017 the Municipality organized an event (GOTECH Siracusa!) in collaboration with the LSG in order to use the Problem Tree and define problem areas.

There were more than 70 participants – ranging from 18 to 60 - belonging to different contexts: SMEs/local start-ups, Public Administration, schools and Universities (both students and teachers).

During the event, after 5 inspirational talks from successful local digital start-ups, 4 working groups elaborated 4 Problem trees aimed at focussing on the main 'digital problem' in the 4 areas of interest selected by the LSG:

- Higher education;
- Schools and Youth;
- Digital and Traditional Enterprises;
- Digital Services for citizens.

At the end, it was noticed with surprise that in the 4 areas the main problem was the same: it was detected a LACK OF DIGITAL CULTURE.



GoTech Siracusa event – 7th October 2016

After a Skype meeting with Kèzy Bela (on 11/01/2017), an URBACT expert, we agreed to change the 'generic' definition of the identified problem and we started to move towards a problem statement related to Siracusa's low level of **digital economy** (where digital culture is just one aspect in terms of trust and attitude).

Even if it seems a bit generic, we decided, at local level, not to consider one single general problem and more specific objectives (i.e. low number of employees involved in digital economy). Instead, we agreed to maintain the problem statement as a complex problem, made by 3-5 different sub-problems belonging to different dimensions. We decided to maintain the problem statement more 'general' and complex for 2 reasons: to respect the vision shared with the LSG members; and to avoid simplifying too much, risking to exclude important aspects that are part of the identified complex problem.

To collect data, different techniques were used: a desk analysis to understand the social and economic framework; some interviews to managers working in the Municipality in order to understand how digital it is; a questionnaire for schools' deans; a questionnaire for citizens and another one for SMEs.

DRAFT

2.4 Siracusa's Problem Area *

As detailed above, during the initial work on defining the problem, the city has identified the following problems in developing the city's digital economy.

"The overarching problem is:

Digital Economy's low levels of development

This comprises:

- **Culture** Lack of digital culture in the city - poor digital skills and attitude amongst citizens
- **Infrastructures** low levels of digital infrastructures or access to digital media (digital divide)
- **Collaboration** rare occasions for collaborative activities in digital spaces
- **Businesses** few digital businesses & SMEs
- **Municipality** poor interaction between citizens and PA in a digital way

The municipality and the ULG first looked at the **Businesses** problem,, but there was a lack of sufficient data, further work being necessary prior to looking for a solution to that problem. The ULG then decided that the "**Municipality**" problem would be the first one to be explored, also for a strategic choice.

2.5 Specific Objectives

Following on from the identification of the problems, the city defined a set of objectives for its digital strategy. These were discussed and reviewed including visits around the city and workshops. The following is a synthesis of the review, as a suggestion for further discussion during the development of the strategy.

These are:

1. **Digital Municipality**
2. **Increase the number of Digital & Tech businesses (SMEs)**
3. **Leverage maximum benefits from existing infrastructures in the short term**
4. **Raise the general digital attitude within the city**
5. **Foster greater SME/Citizen/City collaboration**
6. **Develop and improve digital infrastructures in the long term**

These objectives are explained further below:

1. Digital Municipality

Become a digital Municipality, leading the city to a digital revolution by becoming a C21 municipality. Set the tone of the city as “tech-savvy and digitally capable” - a place that is harnessing the opportunities offered by digital products and services.

2. Increase the number of Digital & Tech businesses (SMEs)

Encourage start-ups and support their development and growth. Market the relocation opportunities that Siracusa offers - have a clear strategy to “market the city” in this regard. Make use of some revised “city proposals” to attract inward investment and greater business growth in this sector.

3. Leverage maximum benefits from existing infrastructures in the short term

Make use of the considerable connectivity tools and spaces that already exist. Look for new and innovative ways of linking citizens and businesses with these places and spaces and through connectivity. Quick and simple to get things moving - paving the way for longer term development and creating a “desire” within the city for expanded infrastructures.

4. Raise the general digital attitude within the city

Create an increased capacity and appetite for digital services and products within the city. Create the environment and culture whereby businesses and citizens are actively seeking and consuming digital products and services. Enable existing sectors to successfully make the transition to a digital economy.

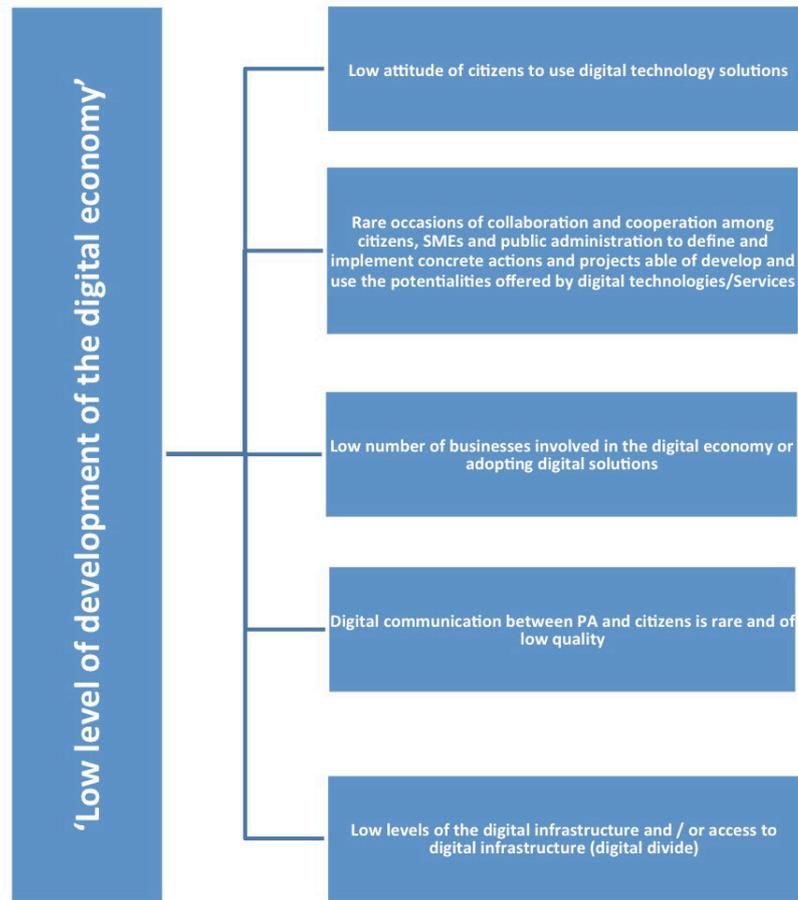
5. Foster greater SME/Citizen/City collaborations

Ensure greater collaboration between those who live, work and do business in Siracusa. Create the opportunities for people to come together and collaborate. Create a flushing network of digital players. Enable and support those wishing to lead this; take the lead where there are gaps or opportunities.

6. Develop and improve digital infrastructures in the long term

Explore and investigate funding opportunities and delivery mechanisms for developing core infrastructures in the city - fast broadband, wi-fi, sector support, supply chains, internet access, hardware access, etc.”.

PROBLEM DEFINITION



3. THE SIRACUSA 2030 STRATEGY

3.1 From the complex problem to the strategy

Our first step in the path towards the design of a digital strategy, was starting the URBACT TechTown project with "identifying the problem"; the city questioned itself on what was the main cause of the lacking digital development. In this regard, the Siracusa GoTech event was organised (see page 16): a well-mixed audience (students, entrepreneurs, voluntary organizations, municipal employees, teachers, citizens, etc.) worked together to investigate a general problem - the lack of a digital culture, caused by multiple factors.

Looking at the scenario analysis, there are different causes generating the problem, all sharpened by the general low vitality of the local economic system, together with a low level of communication among the parties involved. Such a situation does not drive the local society towards an open and positive attitude for innovation. This was the starting point in trying to find a solution for a complex problem.

The complexity in this case is represented by the number and the variety of stakeholders involved in the ULG: those who participated in public events, together with the level of analysis that involves different representatives of local society (businesses, schools, universities, voluntary groups, etc.). This happened within a scenario with data pointing out the population's low level of computerization (also due to the problem of digital divide).

We strongly believe that complexity is, in this case, an added value, meaning that it allows us to define a strategy that, by focusing on individual actions, would achieve cross-cutting objectives, making progress for the entire urban system. The projects presented below have direct objectives as well as indirect objectives (and beneficiaries); to achieve those objectives means to influence the framework context in a positive and remarkable way.

3.2 Existing Strategies: Siracusa 2020 and IBM Smart City Challenge

In 2012 Siracusa won the IBM Smarter City Challenge. These are the results described within the Report produced by IBM team:

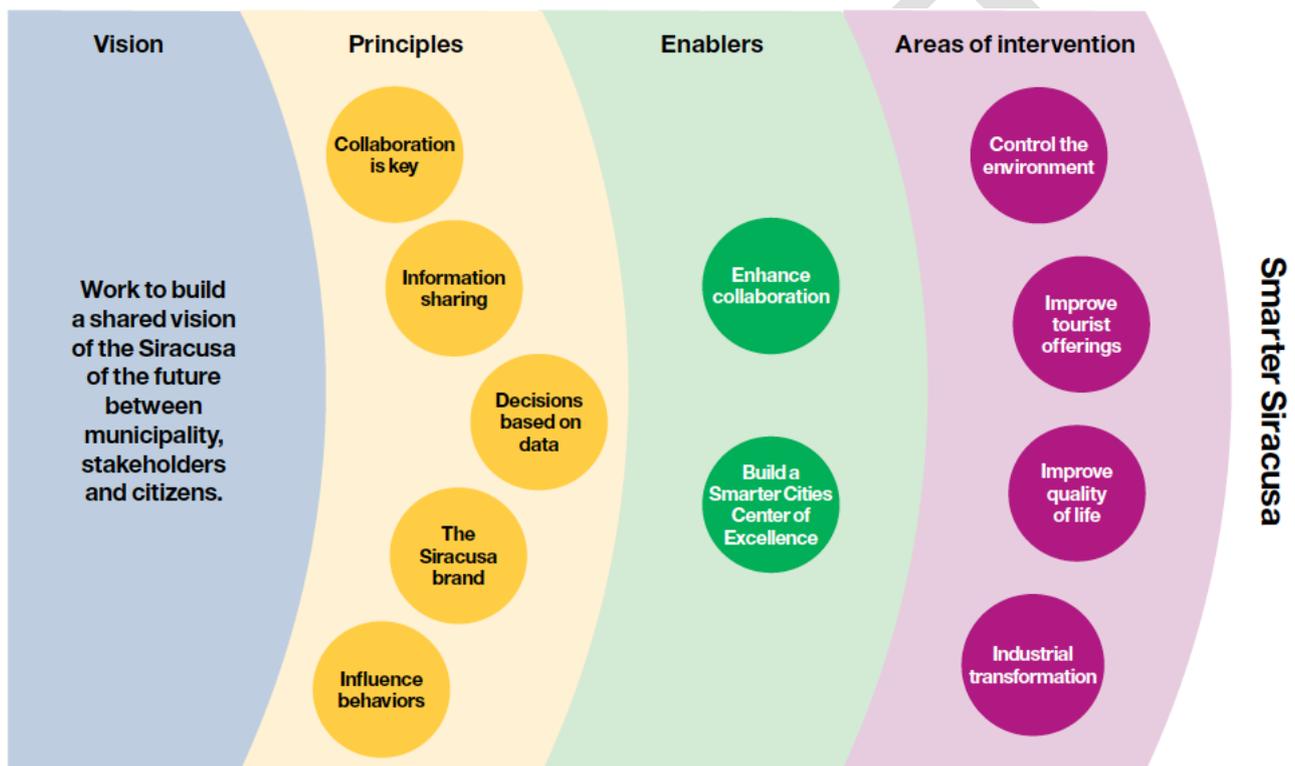
"Based on key findings and observations, the IBM Smarter Cities Challenge team has elaborated key recommendations that constitute the framework for the further development of Siracusa. The framework consists of a vision, five principles and six fundamental pillars consisting of two enablers and four areas of intervention.

Recommendations that flowed from these findings are built upon five key principles:

- Collaboration is central to success.
- Visibility and universal access to information must be maintained.
- Decisions must rely on sufficient, confirmed data.
- Building and growing a "Siracusa" brand is all important.
- Behavior must be influenced through education and incentives

Six fundamental “pillar” recommendations were developed together with various ancillary projects that lay out how each recommendation can be achieved:

- Enhance collaboration – the “Power of Many”
- Build a Smarter City Center of Excellence (CoE) – “Manage through data”
- Control the environment – protect your investments
- Improve tourism – know your customer
- Improve quality of life – Live Siracusa!
- Industrial transformation – build together”



Path to a smarter Siracusa – IBM Smarter Cities Challenge Report on Siracusa

These recommendations have been also part of the documentation took into account when TechTown started. The Digital Strategy of Siracusa presented in this document is in fact coherent and in line with the IBM suggestions.

3.3 The 2 Strategic Lines

Siracusa 's Digital Strategy is mainly aimed at answering this general, crucial question:

How can we maximize the opportunities arising from digital technologies to improve the quality of life in our cities and create new job opportunities?

At the same time it is aimed at facing the problems described above and at reaching the identified objectives. To this aim, two main focus areas have been identified, considered (by the all actors participating in the Strategy definition) as crucial and strategic, also able to positively influence other focus areas.

The Municipality will be the starting point of this path, providing governance and leadership, while we considered the infrastructures and their improvement as a fundamental element supporting the whole system.

*Digital Municipality (the First Challenge) **

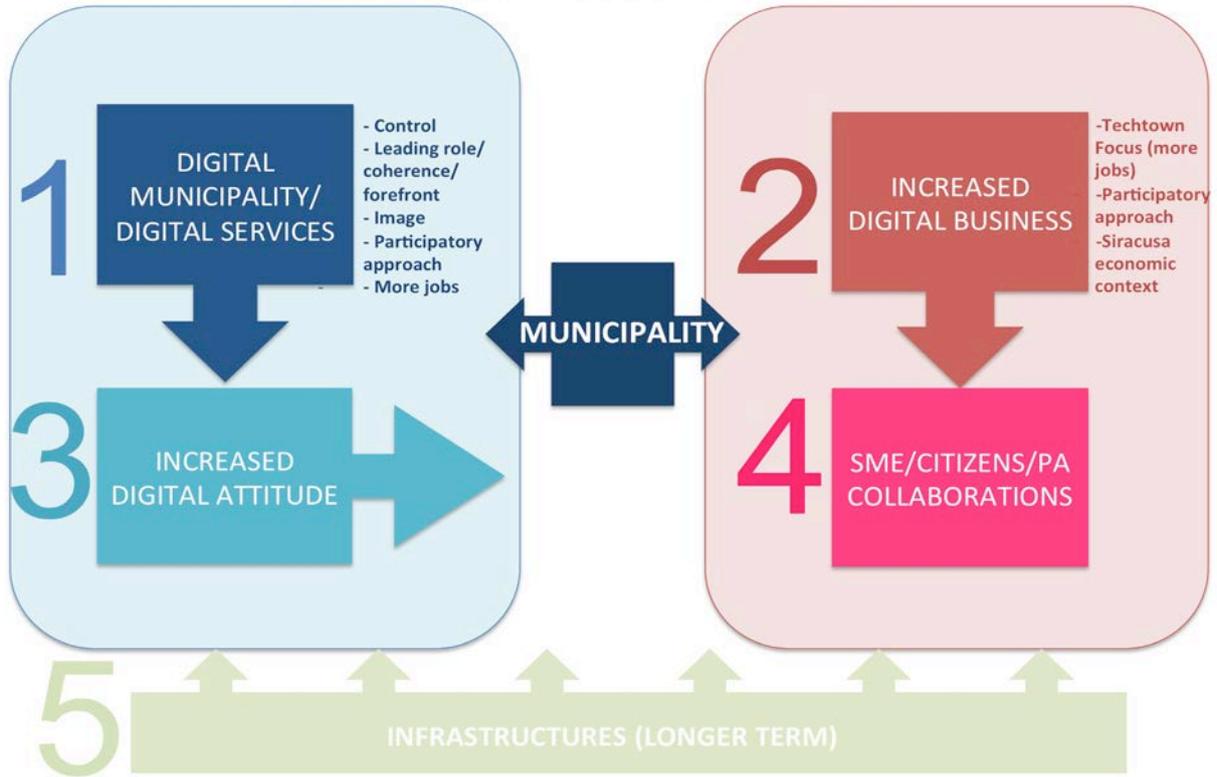
“Digitally enabling the Municipality is the first step. This starts to both modernise the Municipality and also engages citizens in shaping digital services within the city. It is important that all the visible “features” of the city create an image of a place that is digitally enabled and tech-savvy. Transforming the way the Municipality interacts with citizens and businesses is crucial in order to update its own image as a C21 organisation. This in turn supports future marketing efforts - the city will be able to better present itself as a modern organisation, supporting a flourishing digital city.

Changing the way those in the city interact with the Municipality will also increase the normality and exposure to digital interactions and services. Citizens working digitally will start to increase their digital skill levels within the city and the expectation to use these skills more and more on a daily basis. The first step in this action is to run an open innovation challenge via the Genius Siracusa approach, to engage citizens in defining what future digital services the Municipality should provide.

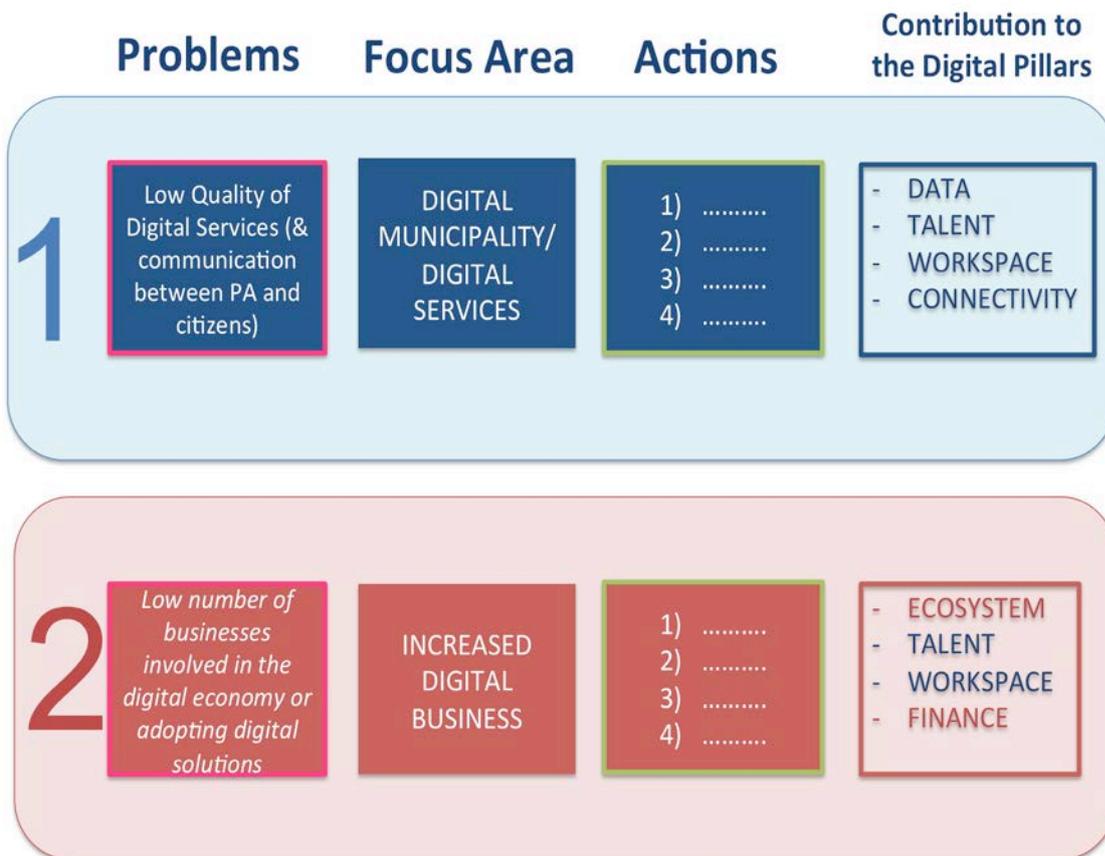
Digital Businesses (The second Challenge)

Supporting the attraction, inception and growth of businesses in the creative, digital & tech sectors was the focus of a second open innovation challenge. This will kick-start activities around supporting businesses in a better way, potentially further building on the changes provided by a digital Municipality, as well as initiating other activities to grow and support the local economy”*

SIRACUSA DIGITAL STRATEGY



DRY



Short-Term Infrastructures *

“Alongside the above two actions, the Municipality will also begin to review its existing infrastructures (connectivity and spaces) and seek ways to make quick improvements to their quality and accessibility. Some of these requirements for improvement will likely come as needs expressed by citizen or business, via the open innovation challenges. Those areas with quick solutions can be identified and enacted. In the light of an explicit longer-term strategy to improve the underlying infrastructure foundations, the potential for making temporary or short-life arrangements increases, as the city will be able to see that it is not the final aim, but something to improve services in the short term, while a permanent and better solution or improvement is sought.

Examples of this could include connecting community buildings or including terminals in satellite offices or sites to allow citizens to interact with the municipality through digital channels without needing to travel to the central offices. This would not achieve the ultimate aim of them

interacting via their own devices, from home, but it would increase access and digital literacy in the meantime, while also reducing the time and expense of actually going to an office.

Some of the infrastructures (in terms of premises) that can support the strategy are already being developed, such as the new Urban Centre, in a central location, just outside the historic district of Ortigia. This new centre offers huge potential for collaboration, co-working and a different type of relationship to be developed among key actors in the city. Harnessing the potential of such assets is crucial for success”*.



DRAFT

3.4 Governance as the Horizontal Pillar

Governance at the Municipality level

A new approach to deliver public services allowing the involvement of citizens and various other actors, with a new form of Governance, is actually required. A process of transformation based on open innovation and collaboration – also thanks to a digital platform – is needed and should be supported and accompanied by an open and inclusive governance and a new ecosystem experimenting innovative formulas.

As clearly showed by the First Challenge selected, the priority is to deliver better public services. To this aim, public administrations need to work closely with other actors, enabling the participation of all relevant communities in the co-design of the services themselves. This will ensure not only a better quality of life but also a reduction of the digital divide and the inclusion of many actors in the process of democracy, as well as the creation of new skills and job opportunities.

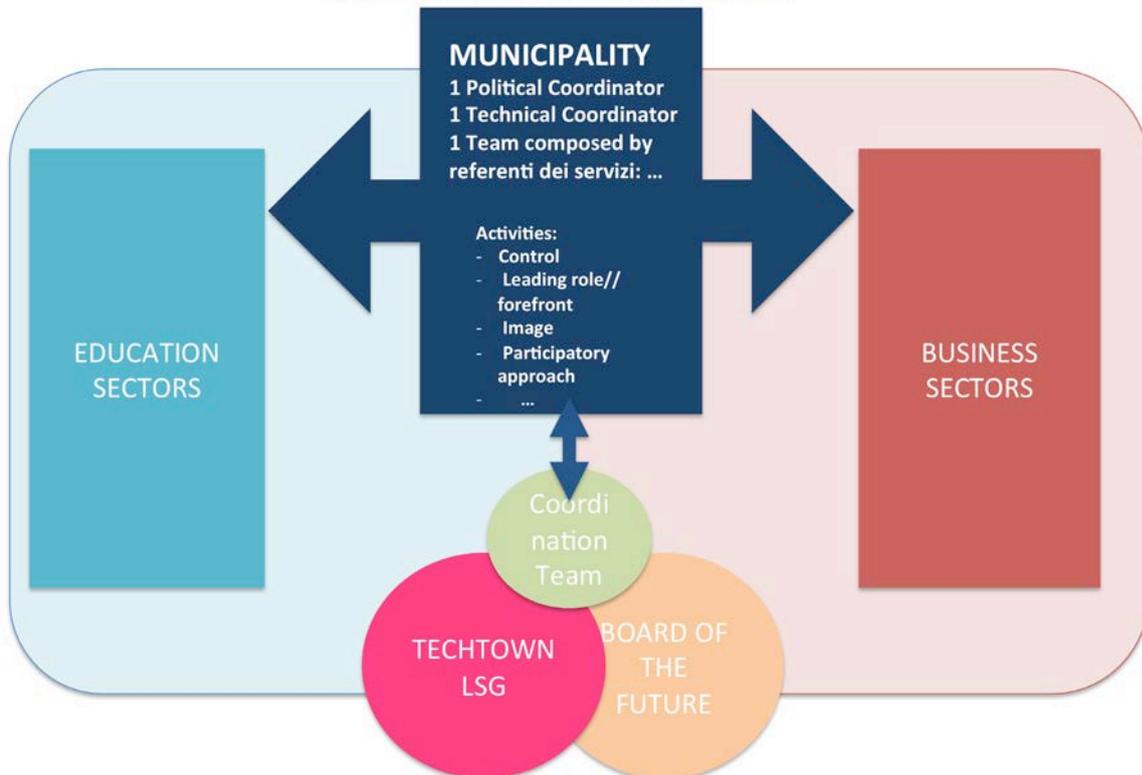
We do not believe that democracy should rely only on digital services, but we certainly believe that the role of ICT can implement an open and inclusive governance, lead by the public sector as the guarantor of democratic values in the shorter and longer term.

Governance for the Implementation of the Strategy/Action Plan

The structure of the governance that will support this Digital Strategy – as agreed with the LSG during the meeting of the 16th of November 2017 – is based on a crucial and central role of the Municipality (see the scheme below). A task-force, within the Municipality, will be composed by 1 Political Coordinator, 1 Technical Coordinator and 1 representative of each Municipal Sector. This task-force will work in collaboration with an external 'Tech Team' of stakeholders composed by a selected number of members belonging to the TechTown LSG and The Board of the Future (a table institutionalized following the IBM Smarter City Challenge). The 'TechTown team' will be formally established by the Municipality through a Legal Act in March 2018. The task-force will continue to lead a participatory process – also thanks to the brand-new Urban Centre – and in collaboration with the external 'TechTown Team' involving actors belonging to the sectors of education, business and services with the aim of implementing the Strategy (i.e. participation to public calls to fund projects; monitoring the Strategy implementation; etc.)

The document signed in March 2018 also takes into account the 'Siracusa 2030 Digital Strategy' in order to support its implementation in the next future with the 'TechTown team', and also to 'resist' the political changes.

SIRACUSA GOVERNANCE FOR THE DIGITAL STRATEGY



DRY

3.5 Siracusa's Digital Action Plan

The **Integrated Action Plan** presented through this Strategy provides, first, a set of specific Pilot Actions related to the priorities identified at a national level by the Agency for Digital Italy, such as electronic payments, single registry, interoperability of services, etc. Also, the priorities set out in the "Digital Growth Strategy 2014-2020" must not be neglected; as well as the "Three Year Plan for Public Information Technology in Public Administration 2017-2019". This document deals with a user-based service system based on "digital first", actually the need to redesign or implement services for citizens using digital technologies and considering the needs of citizens and businesses as the basis for the creation of new innovative services.

The first Challenge: Digital Municipality

With regard to the first challenge on digital services, whose **Specific Objective** is:

DIGITAL MUNICIPALITY

During the first Open Innovation Event (10th November 2017) N. 6 Pilot Projects have been defined, following the method described in the Section 4 below.

The 6 areas of interest/domains that emerged thanks to the online and offline discussion about the Challenge are:

1. Open Data
2. Mobility
3. Families/Citizens
4. SMEs
5. Culture and Tourism
6. Communication PA/Citizens

The co-designed Pilot Projects focussed on the possibility of **sharing public services** with different actors (public, private and third sectors) in order to achieve efficiency, effectiveness, simplicity and safety (in terms of knowledge, access and use) through collaborations. Each Pilot Project aims at

different specific results, taking into account roles and responsibilities of public authorities as well as other key-partners delivering public services, and also considering the new shared governance. Each Pilot Project – designed by a multifaceted team of participants – shows the complexity of the 6 focus areas identified but, at the same time, responds in a simple and exhaustive way.

The Second Challenge

With regard to the second challenge on digital services, whose **Specific Objective** is:

Digital Businesses, Supporting the attraction, inception and growth of businesses in the creative, digital & tech sectors was the focus of a second open innovation challenge.

During the Second Open Innovation Event (9th February 2018) N. 4 Pilot Projects have been defined, following the method described in the Section 4 below.

The 4 areas of interest/domains that emerged thanks to the online and offline discussion about the Challenge are:

7. The Enterprises of the Future

8. The digital ecosystem

9. Gender gap in the digital sector

10. The jobs of the future