The Study on Best Practices from Cities and Territories has been the basis to develop the programme of the Bilbao activities in the Catalyse Project and has been essential to define the cases, as well as the speakers that presented their examples of cities and regions as ecosystems for culture in the RAW and Forum d’Avignon Bilbao.

Apart from this internal report on European Experiences, we have also taken advantage of the information available through the collaboration of local entities in the initiative, such as Alhondiga Bilbao, Bilbao Ekintza or the Institute of Leisure of Deusto University, among others.
Contents:

1. THE DYNAMICS OF CULTURE
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1. THE DYNAMICS OF CULTURE
Culture is recognized as a crucial multipurpose aptitude and resource as we move from a reliance on natural to knowledge resources. The evidence shows that culture helps drive economic performance, overall well being and it increases levels of innovation and creativity. Culture is still too often associated only with the arts, although this is changing. Social, administrative and others forms of culture are increasingly being recognized. And for any city and region culture is seen as crucial to face global attractiveness and competition.

Culture as a resource
Culture needs a purpose and aim. This is to help the city region future proof itself, become more prosperous and enhance its well-being by developing its ‘cultural ecology’. Today there is a premium on culture. For the first time in history, the imagination of the mind, its resulting knowledge and art, and the produces obtained from it represent the primary source of economic productivity and problem solving. We have evolved from a world where prosperity depended on natural advantage (arising from access to more plentiful and cheap natural resources and labour) to a world where prosperity depends on cultural advantage, arising from being able to use and mobilize brainpower to innovate and produce in areas of specialised capability, including art, more effectively than other places. In the 21st century, the engine for growth is the process through which an economy creates, applies and extracts value from its culture and subsequent knowledge and art.

Success depends on the capacity of places to identify, nurture, harness, support, promote and orchestrate and mobilize their cultural resources. The culture of people is the precondition for innovation. A divergent process it generates ideas and potential.

Qualities & characteristics
Culture is a general and opportunity creating capacity. Its essence is a multifaceted resourcefulness. Equally it helps a process of discovery through the supple capacity to imagine possibilities, to conceive and originate concepts and ideas and downstream to help bring them into being. In this way it enables potential to unfold. It is applied imagination using qualities like intelligence, inventiveness and reflexive learning along the way. It is valuable in the social, political, organizational and scientific field as well as in technology and the economy. It is not confined to the arts and can be applied to all spheres.

A new organizational ethos is shaping up. It differs from the more simplistic efficiency and effectiveness paradigm associated with the late 20th century. The characteristics and operating dynamics of the progressive early 21st century corporate or public bureaucracy include being resourceful, strategically agile, responsive and imaginative and all of them are in a way or another included in culture.
Dynamics & drivers

Essential inputs change as economic drivers alter. Each metaphor such as the ‘the innovation economy’ or ‘the creativity driven economy’ provides a helpful lens from which to understand and gauge the shift in the primary means of wealth creation, the basis of competition, the social and cultural priorities and the measurement of success or failure. Even though culture, the ability to use the brain in a flexible way and to produce elements attractive to the senses of the human being, always existed its importance has been reassessed. Every shift in the means of economic wealth creation provokes a new social order, a new organizational paradigm, new ways of learning and things to learn and new settings in which learning takes places and the demand for new kinds of facilities. It requires different cultural capabilities.

Value creation is being reconceived. Currently two notions predominate. First is the idea of the ‘experience economy’. Here businesses focus on orchestrating memorable products and events for their customers, which is the "experience" and sectors such as film, design, music and new media are central in creating these. The 'creative economy' highlights how money is made out of ideas and how value can be added to all businesses through media, design and performance. New underlying trends in knowledge capitalism such as open source innovation are evolving based on user driven product development and co-creation. The development of new IT platforms and web 3.0 with its immersive, interactive, ubiquitous and experiential focus will exacerbate this shift to co-creation as well as the changing nature of new products and services.

Economies, societies and cultures evolve and new necessities emerge. The quality imperative, the added value of design, the need for innovation and now creativity and culture show the shifting focus in highlighting how organizations, cities and regions can become successful. Together they form part of a new common sense. They are competitive tools. The aim is to embed these attributes into the genetic code. Deeper drivers explain their significance. Quality requires conscientiousness, attention to detail and the maintenance of high standards. The threshold of necessary ‘quality’ has risen. It highlights the ideal of reliability, consistency and predictability and the concept of continuous improvement and just in time production. Total quality management highlights the idea of alertness, adaptability and responsiveness. Now it is not simply continuous improvement that is required, but breakthroughs in how people think and solve problems. In the quality paradigm improvement is regarded as step by step or one-dimensional change, while innovation is seen as multidimensional sometimes involving breakthroughs. Delivering a solution that is unique is becoming more important than delivering a standard solution with near perfect quality. The quality of design or the innovation becomes the differentiating factor. Design differentiation creates competitive advantage. Design links functionality and aesthetics. It is a bridge to turn creative and cultural ideas into innovations. The desire to generate rich experiences makes good design a prerequisite for success.
Firms always needed to innovate. What has changed is the speed at which they must do so driven by the pressures of global competition. In addition the scope of innovations has broadened beyond product innovation in private companies to include innovations in the public sphere such as in healthcare or social services or new forms of service delivery or governance.
2.

INTERNATIONAL BENCHMARKING ON CULTURE & IDENTITY
Apart from the elements mentioned before, the objective of this diagnosis is to analyse what is the cultural identity of a city and how culture and identity can activate the attractiveness of territories.

Looking at the current marketing campaigns of some famous cities, there are lots of slogans world-wide known as tourism claims. However, a deeper analysis reveals how difficult the marketable reduction of complex identities actually is. In cases in which we cannot rely on ready-made clichés, we tend to lose ourselves in generalities or uninspiring factuality.

The aim of the Bilbao edition of the Forum d’Avignon is to explore the extremely complex and multi-layered identities of some European cities. This undertaking is based on the understanding that cities are simultaneously both real and imaginary places. Indeed, to quote James Donald, it is the interplay between imagined city and ‘real’ urban environment, the ‘traffic between urban fabric, representation and imagination [that] fuzzies up the epistemological and ontological distinctions and, in doing so, produces the city between, the imagined city where we actually live’.*

*James Donald, Imagining the Modern City (London: Athlone, 1999), p. 10.

This concept of the city between real and imaginary is what we are trying to define and it is dependent on the distinctive heritage of a given city, on the network of historically transmitted cultural resources. These include, not only the political history of the city but also its literature, music, its myths, street names, architecture and even the way it is represented by the media. Our knowledge of this ‘collective image archive’ of urban images channels and makes an influence, whether we are conscious of it or not, on our perception and experience of a city – and as such it is just as ‘real’ as the built environment in which we move.

By looking into some of the major European cities’ ‘archives of images’ we set out to expose the ‘interpretive filters’ through which we perceive them. Some of the questions that should be faced are: what narratives are shaped out of these archives of cultural resources? By whom? What do they reveal? What do they cover up? What is the relationship between public image and personal experience? And how do different genres or media of cultural production interpret city identities?

In this document as well as in the bases of the work developed by the Bilbao edition of the Forum d’Avignon, we have made a selection and included cities that in one way or another, represent the five values chosen for their strategic perspective for the revitalization process of Metropolitan Bilbao: Bangalore (professionalism); Nagoya (identity); San Francisco (openness); Singapore (community) and Tampere (innovation)

Bilbao, the main case-study of this project, has based his identity and international image on its recent revitalization process, transforming itself from a declining industrial city to a cultural international reference. This transformation counts also
on an iconic element that has contributed to make this story more consistent for the imaginary of people, which is the Guggenheim Museum.

What gives a city its identity has received multiple responses worldwide: for most of the people surveyed (60%) the identity must be recognized by all citizens. Owning an internationally recognized brand or be tied with 14%, while the memory for something concrete is voted by 10% of respondents.

If we consider that the identity is defined as the set of traits of an individual or a collectivity that characterize it in front of others, what comes to be a shared project. In this case, it is necessary to generate a sense of ownership and belonging to the city by individuals, generating values of participation and social commitment from the membership, and the sharing of a common set of values. It is also considered important to foster this sense of belonging of individuals to their city, through various mechanisms, such as the creation of a brand that articulates the identification of individuals with the city.

The brand is distinctive and made visible to the city as a generator of those infrastructures, services, and activities that ultimately generate the living environment of people. It also raises the role of certain areas to promote, develop and hold these feelings of identity which operate in turn as visible elements of that identity.
BANGALORE

Bangalore is the capital of the Indian state of Karnataka. Located on the Mysore Plateau in southwestern Karnataka, Bangalore has an estimated metropolitan population of 10.2 million (2014), making it the third largest city and fifth largest metropolitan area of India. Historical references to the city date back to 900 BC, although a written history of the settlement exists only from 1537, when Kempe Gowda I, who many regard as the architect of modern Bangalore, built a mud fort in the city and established it as a province of the empire of Vijayanagara.

After India gained independence in 1947, Bangalore evolved into a manufacturing center for aerospace and defence industry, heavy industries especially for the public sector. The establishment and success of high technology firms in Bangalore after the liberalization of the Indian economy has led to the growth of the industry of information technology in India. Bangalore is called the Silicon Valley of India and accounts for 35 per cent of software exports from India. It is home to universities and prestigious research institutions; the city has the second highest rate of education among metropolitan areas in the nation. However, as it becomes a large metropolis, Bangalore continues to struggle with problems such as air pollution, traffic congestion, and crime.

An economy of U.S. $ 8.8 billion makes it an important economic center in India. In the 2002-2012 foreign direct investment in Bangalore was U.S $ 9.3 billion, the third highest for an Indian city. In the 40’s industrial visionaries such as Sir Mirza Ismail and Sir Mokshagundam Visvesvaraya played an important role in the development of the manufacturing and industrial base in Bangalore.

Bangalore is home to some heavy manufacturing industries such as Hindustan Aeronautics Limited (HAL), National Aerospace Laboratories (NAL), Bharat Heavy Electricals Limited (BHEL), Bharat Earth Movers Limited (BEML) and Hindustan Machine Tools (HMT). In June 1972 the Indian Space Research Organisation (ISRO) established its headquarters in the city. Bangalore is called the Silicon Valley of India because of the number of technology companies located in the city, contributing to 33% of the U.S. $ 24 billion software and information technologies export market of India. Also for its investment friendly image in terms of venture capital and available support system for entrepreneurs.

The industry of information technology in Bangalore is divided into three main clusters (Software Technology Parks of India, Bangalore (STPI); International Technology Park Ltd. (ITPL); and Electronics City). Infosys and Wipro, the second and third largest software companies in India, have been established in Electronics City. As the home of many of the global SEI-CMM Level 5 companies, Bangalore’s place on the global map is important. The growth of information technology has brought a unique challenge to the city.
In addition, biotechnology is a rapidly expanding field in the city. Bangalore accounts for 97 of the 240 biotechnology companies in India. Biocon, which has established its headquarters in Bangalore, is the leading biotechnology company in the nation and ranks sixteenth in the world in revenues. The Bangalore Stock Exchange is the largest in South India.

Tens of technology companies worldwide have moved there part of their production processes. As a result of globalization, countries like India have started competing in areas such as chip and broadband. In Bangalore there are more than hundreds of multinational companies of all kinds that have a common denominator: they have made information technology, affordable skilled labour and telecommunications become their competitive advantage internationally. It is possible that this effect was conceived between 1998 and 1999, setting the "Year 2000". It required good professionals, and groups like Wipro, based in Bangalore, which is devoted to make this work for companies around the world. In a second phase, more jobs and new developments came, so information technology and business process outsourcing represented 25% of the country's total exports in 2007–08. The information technology sector has increased its contribution to India's GDP from 1.2% in 1998 to 7.5% in 2012.

To get all this gear to work there should be companies that create and feed systems, and thousands of qualified professionals. Both Europe and the United States are increasingly transferring there all kinds of productive activities: from call centres to software developments for windows or maintenance of bank applications for large representatives of this sector or for stock issues: there are hundreds of Indian workers that are performing stock analysis for large Wall Street firms.

Another important factor in the professionalism of the people of Bangalore is their level of education: each year there are 600,000 applications for admission to the Indian Institute of Technology. And each year, 300,000 new Indian engineers are licensed in training centres. So much so that, for Juergen Schubert, former CEO of Siemens India: "India is the largest producer in the intellectual world".

Along with this, there is another important factor: the desire to thrive for hundreds of thousands of Indians, in a country with over one billion inhabitants where English is a common language. English is considered as a legacy of British colonialism, which has allowed the Indians to go out, study in the best universities and be a skilled professional for foreign companies that settle in Bangalore. It has a peculiar way of pronouncing English, Hinglish, a mixture of Hindi and English.

Parallel to the level of training they desire to learn. This strong determination is an important part of the professionalism of the people of Bangalore.

Cities, businesses and society as a whole require the value of professionalism with creative people able to adapt to the changes that the environment requires, which are new habits and new strategies.
Cities must also be seen as catalysts and generators of values that guide the behaviour and strategies of society, through their individual members. Values related to professionalism such as: effort, will, the desire and attitude to know and learn, teach, share, change and innovate, are those that Bangalore has included in its identity.
NAGOYA

Nagoya is the third largest city in Japan, home of the Shogun and Toyota headquarters. Located on the Pacific coast in the Chubu region, central Honshu Island, Nagoya is the capital of Aichi Prefecture. It is also the Japanese capital in the automotive industry.

In 2011, the city had a population of 2,266,249 inhabitants, with a density of 6,943 inhabitants per square kilometer in an area of 326 square kilometers. The metropolitan area had 8,923,445 inhabitants.

The city was founded on October 1, 1889, being completely destroyed during the bombing of 1945.

Nagoya and the surrounding area is the industrial centre of Japan. Its production focuses solidly based on automobiles, general machinery, metal products, ceramics, and electrical applications. As the economic links between nations continue to strengthen and expand, Nagoya strives to establish itself as an international production and economic centre.

The Nagoya industry traces its roots back to 1600 when the area prospered as a manufacturing region of cotton cloths, pottery and timber products. In the mid-1800s, the manufacture of fabrics, wristwatches and clocks and other light industries gained new life with the restoration of the Meiji era.

By the 1900s, factories for textiles, ceramics, automobiles, steel, and clocks were built in the suburbs and founded the bases for the industrial development of Nagoya. The Taisho period saw a radical change in the industrial picture in Nagoya. The traditional light industries led to military production. Heavy industries, particularly engines, vehicles, machinery, chemicals, and aircraft production took centre stage.

With the end of World War II in 1945, Nagoya industry refocused its objectives, and the production of airplanes and military equipment switched to consumer products that were in high demand at the time. The mechanic and precision tools, fabric machinery, automotive and chemical industries settled around the port of Nagoya.

In the past three decades, the industrial structure has changed dramatically in Nagoya. In the 70s, the number of employees in the manufacturing sector declined, while workers and service distribution reached high levels. In the 80s, the industry moved into a phase of high technology. There was a greater demand for high quality products in Japan and overseas.

However, outside the retail sector, the service industry continued to grow, including information and communication sectors. Recently, technologies such as information
processing, communication, intelligent transportation systems, disaster prevention, and biotechnology are being explored and developed. Therefore, businesses in these fields are enjoying unprecedented success.

The automotive industry is the main economy in Nagoya and Aichi Prefecture. The matrix and a big number of production plants of very well-known cars in the world, such as Toyota, Honda, and Mitsubishi are located in the area. Specifically, in Nagoya, where it is one of the plants of Toyota, there is a town called Toyota City.

The Aichi Expo 2005 took place at a time when the Chubu region, whose centre is Nagoya, has captured the attention of the whole country by its economic strength. Nagoya, which has traditionally been somewhere between Tokyo and Osaka, the two economic capitals of the nation, seems to have assumed a new dynamism in recent years. Among other things, the seemingly unstoppable growth of Toyota Motor Corporation, closely identified with the Nagoya region, is the main source of economic strength in the region.

Nagoya is an example of how an industrial region has become the engine of the new Japanese economy. In this landscape so much like Detroit with their automotive plants, blast furnaces and workshops, manufacturers have managed to produce something that their U.S. competitors do not have: solid growth.

The industrial heart of Japan located in the centre of the country is booming, so much so that is helping to revive the world’s second largest economy after a slump that has lasted 15 years. Real estate values in the capital of this province are increasing.

The rest of the country tries to discover the lessons of "Nagoya boom". Nagoya economic engines are the same industries that other developed countries wryly described as "sunset industries": cars, machinery, steel, ceramics and chemicals. But in Nagoya, these industries thrive despite the global competition for low costs.

Among developing countries there are many manufacturers that try to snatch business to Japan, which has the highest costs in Asia. Nagoya manufacturers have kept them at bay with a move that many Japanese producers are copying. They moved the production of lower quality abroad, but still making high quality lucrative products at home. The demand for these products, ranging from car engines to hybrid micro robots for industrial use is increasing. And to maintain its competitive edge, Nagoya invests heavily in research and development. Other countries have tried this tactic, but with much less success. For example in the U.S., many companies find it difficult to invest in research and development due to pressure from shareholders to obtain the ROI. And, so far, companies from South Korea and China have not been able to mimic the Japanese technology. In fact, some of the largest customers of the ultramodern machine shops of Nagoya are other Asian manufacturers. Richard Jerram, economist at Macquarie Securities in Japan,
attributes the success of Nagoya to its "breakthrough in added value curve, especially in areas such as cars and machinery".

The boom is creating economic numbers not seen in Japan since the early 90s when the Japanese stock market began its long decline and the economy began to stagnate.

The manufacturers of the region now represent half of Japan's trade surplus with the U.S. In management seminars, consultants talk about the business practices of Nagoya. Bookstores offer titles like "The all-powerful methods Nagoya traders".

Since the seventeenth century, manufacturing has been vital to Nagoya. The region, located between Tokyo and Kyoto, the former imperial capital in the south, has a long and proud tradition of "monozukuri" or crafts. With industrialization, the region began to become the industrial heartland of Japan. Today, Toyota is one of the largest economic engines in the region.

Former Toyota president Katsuaki Watanabe said that the rise of Nagoya "is not just a matter of Toyota". About 60% of industries in the region do not have to do with cars. The tool manufacturer Makita Corp. and the steelmaker Daido Steel Co. are located near Nagoya, as well as the fax machines and printers company Brother Industries Ltd. and Yamaha Corp., one of the largest manufacturers of musical instruments in the world.

Nagoya Large furnaces produce all kinds of products, from industrial to fine porcelain tiles. Large and diversified industrial companies, including Mitsubishi Heavy Industries Inc., also target aerospace divisions from that region.

Nagoya is conservative and tends to exclude aliens. In the board of Toyota, for example, there is no non-Japanese manager, despite getting about two thirds of its U.S. operating profit.

Toyota was the largest automobile manufacturer in 2012 (by production). Toyota is the world's first automobile manufacturer to produce more than 10 million vehicles per year.

Similarly, the Company is considered the first brand for its quality, reliability and durability of their vehicles, framed within the philosophy inspired by founder Kichiro Toyoda, who won the vision to find a product with zero defects.

Toyota became the largest automaker in the world, re-inventing their production process. The traditional American system was cost-effective only for large volumes that the Japanese market could not sustain. The founder of Toyota recognized this reality, so he devised a new process that would allow the creation of different models on the same production line. Such innovation has been the key to the success of the company.
In this regard, the company constantly works on research in order to produce vehicles comfortable, well equipped, with high ranges of active and passive safety, high strength and environmentally friendly.

Toyota leads programs for the use of alternative fuels as a means of propulsion, with a view to achieving, in the not too distant future, zero-emission car.

The Company works, too, with a corporate philosophy extends to the communities where it performs its industrial and commercial activities, under the principle of "being a good citizen of the world". In keeping with the above, develops philanthropic programs in different countries of the world, through which supports educational programs for communities and people of limited economic resources, encourages research and provides special support for sports activities.

Although, since the bursting of the economic bubble of the 80s, sacred practices of Japanese corporate culture, and lifetime employment and seniority charges have started to become obsolete, Toyota is reluctant to change his conduct. While three of the five major Japanese firms Motor, Mazda, Nissan and Mitsubishi, have been or are led by foreigners, Toyota is, along with Honda, the one that rejects foreign capital. The company philosophy is to produce the majority of vehicles in the markets they are intended not only to increase sales in a particular market but to off the Japanese brand.

This paradigm, such as the Zero Defects, is an attitude or way of life at Toyota, which is still valid, and that many years later are still very competitive basis to further deepen these same concepts, rather than go jumping fashion to fashion.

This has become a hallmark of the company, and the "made in Japan", which may well have originated in the Toyota of Nagoya.
SAN FRANCISCO

San Francisco is a city and a county in California, USA, to the shore of the Pacific Ocean. Its population in 2013 is 837,442 inhabitants, but the metropolitan area (San Francisco Bay Area) has 8.5 million people in total, and is the fifth largest in the country. Other major cities in this area are Oakland and San Jose. The city includes several islands in the Bay and the Farallon Islands located 27 miles offshore in the Pacific Ocean.

The first Europeans to settle in San Francisco were the Spanish in 1776. With the advent of the Gold Rush in 1848 the city entered a period of rapid growth.

The city is famous for the Golden Gate Bridge, the Transamerica Pyramid, the trams that run its steep streets and its Chinatown. It is also known for its liberalism and as an alternative culture center in the U.S. In the 60s it was one of the cities of the hippies who gave birth to the so called "Rock of San Francisco", whose main exponents were the Jefferson Airplane and others.

In the bay lies Alcatraz Island and not far from the town is the famous Silicon Valley. It features the San Francisco International Airport, which in 2011 handled nearly 41 million passengers.

The population density of the city of San Francisco is the highest in the country after New York. The city is a melting pot of diverse cultures that give it a cosmopolitan character. English is the language of 54.6% of the population, followed by Chinese (18.6%), Spanish (11.7%), Tagalog (3.5%), Russian (1.5%) and other languages with fewer speakers.

San Francisco hosted 16.9 million visitors in 2013. These visitors spent $9.4 billion in local businesses.

This massive infusion of dollars from visitors directly supports local hotels, restaurants, shops, attractions and cultural institutions. Hanging from it indirectly also virtually every segment of the economy of the city, and has a large positive impact on government finances.

San Francisco is a city open, with many visitors each year, and famous both for its tolerance and its accessibility, and its cosmopolitanism. To this is added a high concentration of technology companies and industry. There it exists an openness in "technological sense." Communication is an essential value in society today, but it will be even more tomorrow. This concept has enriched humanity establishing living, participatory and open to knowledge societies.

As a digital city, San Francisco tries to make its citizens be safer with a social and more immediate and effective assistance. It is also an economic city, able to sell its
resources in the world, attracting investments and avoiding, in this way, that young people have to emigrate by employment growth. In short, a city that believes in the democratization of information and participatory pluralism.

The opening of San Francisco is a model that focuses on eliminating the so-called "digital divide", promoting free software and facilitating access internet through wifi systems.

The emergence of this new global context poses a challenge for the cities to combine its own identity with new realities that come from different backgrounds and have to find a place and be integrated into the city and its dynamics. An opening oriented city would be one that on the one hand, knows how to place itself in the new global context, and, moreover, knows how to successfully combine and integrate aspects and factors of such global context.
Singapore is situated between Malaysia in the north and Indonesia in the south. This island is connected with two bridges to Malayaapor peninsula. The first leads to the border town of Johor Bahru in Malaysia. The second, further west also connects to Johor Bahru in the districts of the region of Tuas.

Singapore is also formed by other sixty-four small islands, among which the most important are Jurong (devoted to industrial activity); Sentosa (dedicated to tourism); Pulau Ubin and the largest one, Pulau Tekong. Since Singapore is a single city, the administrative division corresponds to the constituencies, which are reviewed each term to take into account demographic trends.

Singapore, a country that gained independence from Malaysia in 1965, is a city-state. The city is spread over the entire surface of the island. Thus, in addition to the centre located in the south of the island, there are several villages, linked to the centre by subway or MRT (Mass Rapid Transportation) of avant-garde design and great efficiency, as well as by a complete and modern network of highways.

Singapore has a free market and prosperous economy, characterized by an open and free of corruption. Have stable prices and one of the highest GDP per capita in the world. The economy depends mainly on exports, particularly electronic and industrial sector.

In 2001, the global recession and the collapse of the technology sector significantly affected the country's economy (GDP fell by 2%). The epidemic of SARS (severe acute respiratory syndrome or SARS), started in 2003, which extended the recession. To counteract this slowdown, the government launched in December 2001, a financial oversight committee, whose results were published in February 2003.

The largest oil refinery in Asia is located in Singapore. Similarly, Singapore has the seaport which handles more cargo annually, both in tonnage and number of containers in the world.

The 2013 Index of Economic Freedom ranks Singapore as the second freest economy in the world, behind Hong Kong. According to the Corruption Perceptions Index, Singapore is consistently ranked as one of the least corrupt countries in the world, along with New Zealand and the Scandinavian countries. Singapore's population in 2013 reached 5.4 million people, with a density of 7,540 inhab./km. After Monaco, Singapore has the highest population density in the world. The 85% of its people live in public housing built by the House Development Board (HDB).

The ethnic diversity of the population is very marked: Chinese constitute 74.2%, 13.4% Malays, 9.2% Indians and the rest come from various countries, mainly
Western. Ethnic diversity is also reflected in the official languages, despite being a very small country has four languages with official status: English, Chinese (Mandarin), Tamil and Bahasa (both the Indonesian and Malay). The entire population must be bilingual, learning English and one of the other three languages, depending on the origin of their parents. If neither parent belongs to any of the ethnic groups who speak one of the official languages (other than English), they can then choose which of the other three languages your children learn in school.

Singapore has an ethnically mixed population of a Chinese majority, with Indian and Malay communities. While almost all Malays are Muslims, the Chinese population is Buddhist and Taoist, but also Christian, and the Indian population is partly Muslim and partly Hindu. The government is very careful in promoting social cohesion and has obviously been successful with this policy. After the violent race riots of 1964, the country is enjoying ethnic and communal harmony during the last decades. They are an example of community, as they share a long-term project by some citizens, who constitute a group of people with common interests.

The city is sharing spaces for businesses, citizens, and institutions that form a community, and the activity of each reverse in the other two. Thus, it is expected that the activity of companies positively reverse to citizenship and institutions. Companies are thus generating positive externalities in the city, in the sense that generate services that institutions and citizens can enjoy.
TAMPERE

The Finnish city of Tampere is located 170 kilometers north of Helsinki, in the inner part of the country, in the province of Western Finland, belonging to the region of Pirkanmaa.

The city has a population of 220,609 people (2014), being the third city in Finland by population, and the second largest urban area in the country (after Helsinki). Its area is 690.6 km², and its population density is of 420 inhab./km².

Tampere was founded by King Gustav III of Sweden, on October 1, 1779, on the isthmus between two lakes, Näsijärvi and Pyhääjärvi, and the city is divided into two parts by a rapid river flowing from the first to the second. Cataract produced electricity for a cotton plant, established by the Scottish James Finlayson in 1820. The town grew around the plant to become an important center for the manufacture of fabrics. Its industries also produce locomotives and other railroad equipment, engineering, processed wood, plastics, footwear and book printing.

Today, Tampere is an active and dynamic city with two universities: the University of Tampere (Tampereen yliopisto) and the Polytechnic University of Tampere (Tampereen teknillinen yliopisto). It also has several Professional Training Centers and Institutes. In the field of culture, Tampere is known for its long literary and theatre tradition. Some of the most important writers of Finland have emerged from this city (Väinö Linna, Kalle Päättalo or Hannu Salama). Many have portrayed in their works the reality of the working class, as Tampere was during the last century an industrial city. The theatre tradition is also deeply rooted in the city, which celebrates every August Teatterikesä Tampereen, a prestigious international festival.

In 2004, the city of Tampere appeared in the first place in a survey of image comparing the largest cities in Finland. It was also the most attractive to the Finns who planned to change location. The unemployment rate in the central region of Tampere is slightly higher than the national average, by about 14.7 percent.

In Tampere we can highlight the Nokia Research Center. Nokia was born in this city and is a symbol, engine and pride of the Finnish economic boom in the late 90s. Until that time Finland was a country suffering inflationary remnants of the breakup of the USSR, which has always been closely linked in all aspects. With the incorporation of the European Union in 1994 and its economic aid the situation was transformed. Meanwhile, Nokia's origins are known for its success (a manufacturer of tires and paper that became a world leader in telecommunications), and shows the effects of a national long-term planning based on education, research and deregulated industry that created conditions conducive to the development of the telecommunications industry.
Nokia became world’s largest vendor of mobile phones and one of the leading companies in the telecommunications sector. Being headquartered in Keilaniemi of Espoo (Finland), Nokia is one of the best known brands within and outside the European Union (EU). In September 2013, Nokia sold its Devices and Services division (mobile phone business) to Microsoft. Following the sale, Nokia will focus on three core business units; its Here mapping service, its infrastructure division Nokia Solutions and Networks (NSN), and on developing and licensing its "advanced technologies".

Based on the Economist Intelligence Unit report released in September 2011, Finland has clinched the second place after the United States on Benchmarking IT Industry Competitiveness 2011 which scored on 6 key indicators: overall business environment, technology infrastructure, human capital, legal framework, public support for industry development, and research and development landscape.

Finland is today a world leader in the development of the information society. Manuel Castells and Pekka Himanen in the book "The welfare state and the information society" (2002, Alianza Editorial), located Finland as one of the three main models of the Information Economy with Silicon Valley (California) and Singapore, each with different views. According to Castells:
- Silicon Valley is market society + democracy
- Singapore is authoritarian market society + authoritarianism
- Finland is market society + democracy + social state

In this context, Tampere has made a very high investment in development and research in relation to the GDP. The authors place leadership in innovation culture as an engine of economic development in Tampere, linked to advanced technological production.

According to Castells himself (2002) the key elements of the Finnish model were:

1. A very active policy on innovation, from a high investment in research and development.
2. Business innovation, encouraged by public measures themselves, but based on the ability of companies to recruit, maintain and use efficiently the talent of its teams of R & D.
3. Innovation of hackers, what Himanen (2002) called hacker ethic, driven by talented individuals who often enjoy the support of public and university systems.

All this is felt in a special way in Tampere with a very rich and productive university system, first level technical infrastructures and people very willing to learn and work.

Apart from the strict history of the company, this is the environment in which Nokia could transform itself and become the world leader in mobile telephony. It
was no accident. Nokia could face this transformation in this enabling environment that met its needs. Without it, business success would not have happened.

Very possibly, but not as the only factor, Tampere innovation has come from the hand of Nokia. But innovation in a city should not be understood only as technological.

As a summary, Tampere has based its identity on innovation. An innovative place is one where entrepreneurs feel very much at home. They have social recognition. It is a place where an idea can become reality quite quickly. It is a place where you can make mistakes and you are not too severely judged. There are extensive support systems from advice to access to funding and risk capital. There is a higher than average level of innovation and R&D and the place has a reputation for its design-led distinctive products and services. There is a business and industry culture that respects experimentation and investigation and this is valued by the community at large. The creative industries play a significant role. This is what the identity of Tampere can offer.
3. THE CASE OF BILBAO
THE REVITALISATION PROCESS

Bilbao, capital of Biscay, is strategically situated on the Bay of Biscay and located in the middle of the Atlantic Arc, to the west of the Pyrenees, on the north coast of Spain and only one hour by car from the French border. Its metropolitan area groups together a population of one million inhabitants, although if we consider its hinterland within a radius of 400 km, the population included rises to more than 16 million people.

The origins of Bilbao and its’ metropolis are linked to this strategic location, the sea, trade and its gradual conversion into the great economic reference of the Basque Country and one of the largest in the state. A major economic development took place in Bilbao and its metropolitan area during the second half of the nineteenth and early twentieth century, due mainly to the emergence of the iron and steel industry, of shipyards, of port activities and iron ore mining, reaching levels that made Bilbao a point of reference at a European level.

However, industrial decline began in the second half of the 70's and during the 80's, which left Bilbao and Biscay in deep crisis. Unemployment rose significantly reaching as high as 35% in some municipalities in the metropolitan area. The crisis left behind a physically and environmentally severely affected environment due to the previous industrial development, as well as emigration processes, stagnant population and the emergence of social exclusion problems.

This bleak picture for Bilbao and Biscay was defined by elements such as economic crisis, characterized by the obsolescence of the productive sectors that should be adapted to new modes of production incorporating clean technologies, the lack of infrastructures capable of responding to needs and contingencies of the inhabitants of the metropolis and an unattractive urban environment therefore not conducive to investment and economic development of the area.

The crisis scenario in which the Metropolitan Bilbao was immersed in 1988 required a rethinking of the future development of the metropolis capable of regaining the city's protagonist role that it had reached thanks to its pioneering position in the industrial development. This required the construction of a post-industrial city in which services and new technologies would play a central role in the new economic development, with the physical and urban environment as a variable not previously considered but now essential to take into account for future plans in order to ensure high quality of life for citizens and a high degree of international competitiveness. In short, a reflection about a profound transformation of the economic base of Bilbao was necessary. Economic strategic planning as well as the metropolis’ own infrastructures and services were needed.

a) 1991-2000. Infrastructures
The Strategic Plan for the Revitalisation of Metropolitan Bilbao
Established the need to initiate the transition to **post-industrial city**, the guidelines for future urban development were laid down through an **ambitious renovation** that would cover the entire lower area of the Nervion estuary in order to develop it as a modern metropolis. The Strategic Plan for the Revitalization of Metropolitan Bilbao was developed within the organisation of Bilbao Metropoli-30, **being the City of Bilbao one of its founding members**. It aimed to establish a coherent set of short and long-term objectives that would summon the will and coordinate the activities of the different institutional levels.

The Strategic Plan of Metropolitan Bilbao defined eight critical subjects for the revitalisation process:
- Human Resources
- Advanced services in a modern industrial region
- Mobility and accessibility
- Environmental regeneration
- Urban regeneration
- Culture centrality
- Public-private cooperation
- Social Action

The Strategic Plan was not an isolated initiative; it coincided with other activities at different levels that conveyed the importance of Bilbao’s revitalization of as a critical factor in the development of the Basque Country. This **multiplicity of initiatives and points of view** evidenced the sensitivity of society and its institutions towards the role to be played by Bilbao. A deep concern was felt about the distance of Bilbao from the modern urban metropolis and their articulation axis and, above all, the unequivocal will to become consolidated in the future was expressed. As Ieoh Ming Pei stated, "If you want to attract the kind of people more qualified to work and live here, you need to build buildings, not from the architectural or aesthetic point of view, but to improve their quality of life in general" (Pei, 1992).

The Strategic Plan for Metropolitan Bilbao would be the instrument for change, extending the bridge between past and future, thus making the metropolis an environment prepared to meet future challenges.

The **objective** pursued with the implementation of the plan was twofold. **First of all**, obtain, from a global reflection perspective of the city and its surroundings, a **diagnosis of the situation** at the time that synthesized, from the internal point of view, the strengths and weaknesses to be examined in light of the area’s tendencies expressed in the form of threats and opportunities. On the other hand, an external analysis that was of great importance to compare Bilbao’s situation with competing cities in order to evaluate its position. The main contribution of this analytical effort was the identification of a reduced number of critical issues around which both the Strategic Plan and Bilbao Metropoli-30 would concentrate on.
Secondly, involve organisations and individuals in the revitalization project. For this, the idea was presented to the main economic, social and political players, therefore earning their adhesion. The Strategic Plan was set up as a city project that allowed commitment from bottom up of all influential bodies in the metropolitan area's future.

The scope of regeneration was both physical and socioeconomic, based on the eight main axes for intervention. Some axes such as external accessibility and internal mobility of the metropolis, or environmental and urban regeneration are more concerned with the physical or urban fields, whereas others, such as investment in human capital and technological investment, or cultural centrality and social action, correspond to the socioeconomic sphere.

In short, over the past years the revitalization of Bilbao has become an international reference model for those cities affected by industrial decline that need to reinvent the foundations of their prosperity, by defining and implementing innovative strategies.

Angel Jordan already speculated about the success of the revitalization process, when he mentioned that: "In light of our experience and knowledge of the work being carried out in Bilbao, the revitalisation process the entire metropolitan area, if it continues to work with enthusiasm, based on this combination of public and private sectors, has no choice but to succeed." (Jordan, 1992).

Prestigious institutions such as the DG REGIO of the European Commission, the OECD and World Bank have highlighted the achievements of this revitalization process, rooted in a strong collaboration between government, businesses, universities and the third sector.

The Guggenheim effect
The image of Bilbao known only for its industry, its shipyards and steel mills has been left behind. Following the celebration of the seven hundredth anniversary of the city receiving its founding charter, it burst into the new century with the presentation card of culture and infrastructures that place it among the most advanced of European cities as regards services and standards of living. The transformation of the city has been a task requiring perseverance, in which both citizens and institutions have been totally involved. Different projects, in the hands of prestigious architects, are changing the face of the city, turning it into one of the leading centres for trade, tourism and culture in Europe.

There are numerous ways of explaining the deep-reaching urban, social and economic changes. However, in this transformation there is one turning point that marks the eruption of the capital of Biscay onto the international scene and its opening up to the world. Without doubt, this was the inauguration of the Guggenheim Museum Bilbao in 1997, an event that catapulted the cultural image of Bilbao at international level. The magnificent titanium building designed by Frank
Gehry has been, to a great extent, the responsible for the thousands of visitors who travel to Bilbao captivated by this work of art and its exhibitions. This modern museum has drawn the attention of a significant part of the planet towards one of the oldest cultures in Europe, allowing many people to discover the peculiarities of this small country.

The renovation process has meant the opportunity to open up several fields of development in the metropolitan area of Bilbao. Apart from the Guggenheim Museum Bilbao, culture lovers can discover several of the other delights the city has to offer, such as the recently extended Fine Arts Museum, one of the most important art galleries in Europe. Another of the attractions is the Euskalduna Conference Centre and Concert Hall, a building inaugurated in 1999, which recalls the last vessel built at the shipyards that one stood on the site, anchored on the bank of the River Nervión.

The Guggenheim Museum and Euskalduna Palace share the same setting: the Abandoibarra riverside complex, a former industrial and port area covering 400,000 square meters. Its regeneration, an ambitious project that includes business centres, housing and extensive green zones, is transforming the heart of the city. The Port of Bilbao left Abandoibarra years ago and ever since has been working to reclaim land from the sea. The extension achieved has given one of the most important ports in Europe an even greater mooring and storage capacity.

The Bilbao regeneration process has also taken into account its public transport, fundamental in any leading city. The construction of one of the most modern underground rail systems in the world, Metro Bilbao, designed by Sir Norman Foster, is a milestone in easing traffic in the city, making it possible to initiate the process of “returning” the city to pedestrians. Moreover, the new Bilbao has recovered the figure of the tramway, a modern light rail system that takes more than one nostalgic person back to bygone days. With regard to air transport, the Airport of Bilbao opened in 2000 a new terminal located 9 km. away from the city centre, designed by the architect Santiago Calatrava.

Therefore, Bilbao has very good communications by air, land and sea, enabling it to meet the travel requirements and preferences of its visitors. Several airlines operate regular services between Bilbao and major European capitals, and it is also connected to European railway and road networks. Moreover, the Port of Bilbao has a regular ferry link with the United Kingdom and is an occasional stop on many Atlantic cruises.

On the other hand, the Nervión river estuary has been and still is the main axis and heart of Bilbao and, therefore, intimately linked to the history of the city. For this reason, the Integral Clean-Up Plan holds a place of preference among the far-reaching environmental recovery projects of the Bilbao Biscay Water Authority.
The urban adventure of Bilbao is the history of a population that has always believed in itself and has found intelligent ways of overcoming the difficulties that have arisen. Even the very first residents of the city, mainly fishermen, ironworkers and artisans, knew how to take advantage of the privileges offered to them by Don Diego López de Haro, in the year 1300. At that time, the Lord of Biscay granted them the trading monopoly on the river estuary, which meant that all vessels that passed through it were obliged to do business with Bilbao. The industrialisation process that Biscay’s capital underwent several centuries later, thanks to its overseas trade, the iron industry and mining activity, transformed the appearance of the city. The river, therefore, continued to be at the very core of this development. Today, with the port located at the river mouth, looking increasingly towards the outer breakwaters, and without shipyards on its city stretches, the river estuary has become the centre of the main urban development. The city is incorporating the old industrial and port land into itself, opening onto a river that it had turned its back on, in spite of its being its raison d’être and main driving force.

b) 2001-2010 VALUES

“Bilbao 2010”. Strategic Reflection and the Strategy

Bilbao’s situation at the end of the century was very different from the crisis situation it had gone through ten years ago. The city was now strongly supported by the public administrations, counted on broad social collaboration and catapulted, by the commitment in its Strategic Plan, had undergone a vigorous revitalization process in all areas.

However, the success of the revitalization process was not itself a guarantee, and it became necessary to investigate the constraints imposed by the evolution of the global socio-economic context, together with historical, social and cultural characteristics of the metropolis itself, to be able to identify a leitmotiv, a basic idea, capable of exploiting the inertia of the past and serve as an engine to provide a strong impetus for the future.

About 1,000 professionals representing Bilbao Metropoli-30’s members, as well as nearly 200 world-class experts came together to study the changing global environment, the new knowledge society and analyse the city’s strengths. The aim was to identify, through a Strategic Reflection process, the basic idea for the future by 2010, which properly nurtured and strengthened, would allow the city to gain higher levels of quality of life for all residents, advance in the pursuit of excellence and become a city of global reference.

The result was the identification of a vision, the key that would help achieve high levels of growth, wealth creation, improved quality of life and global recognition for the city. This would imply seeking, identifying and taking advantage of our own or foreign ideas to turn them into concrete realities. Ultimately create and take advantage of opportunities that came up in the global market.
We needed to build a city in which all ideals are possible; a Bilbao capable of identifying, attracting and materialising good ideas in benefit of all the community; a Bilbao in which ideas are fostered and flow. In short, a place that welcomes dreams and is an ideal city for people who love new ideas and identify with them.

Consequently, based on the Strategic Reflection, the document “Bilbao 2010. The Strategy” was drafted. The strategy is based on three basic elements: people, the activity of the city and the attractiveness of the metropolis.

At the end of the previous decade, the development of infrastructures in Metropolitan Bilbao were completed, the projects identified in the Revitalization Plan transformed the urban environment and significantly improved business competitiveness and quality of life of its inhabitants. However, in the case of urban environments, and taking into account that physical infrastructures are essential, it is the activity of people and their behaviour that really allows to value infrastructures and turn the city into a suitable setting for personal development and satisfaction of citizens, creating an environment conducive to the generation of services and activities.

In other words, physical infrastructures are needed, but it is the intangibles in the city that really bring forth added value. Intangible are based on skills, attitudes and activities of individuals or groups.

As a result of the previous Strategic Reflection a series of fundamental values for the competitive and sustainable development of Bilbao were defined. These values were the basic concepts for the International Values Forum that took place in 2006 and can be identified as follows:

- **Innovation**: Capable of being ahead of changes, introducing novelties and new ways of doing things.
- **Professionalism**: Person or organization’s ability to carry out its activity with the relevant capacity and application.
- **Identity**: Individual or collective’s set of traits that characterise them.
- **Community**: Sharing a long-term project with a group of people with common interests.
- **Openness**: Open to other ideas, cultures and creative differences.

The objective of this second phase was the **change of paradigm of infrastructures to values**, the culmination of Bilbao’s regeneration process thus consolidating on an international scale its strategic development process. It aimed to explain to the society and its leaders the importance of values for the long-term development of cities, and in this particular case, Bilbao. The development of these values in society requires a progressive strategy. In addition, **leadership, exemplariness and credibility** of the people who promote them are indispensable.

c) 2011-2030 PROFESSIONALISM
The only key to success for the Metropolitan Bilbao in the next 20 years is to have committed people guided by shared social values.

Leadership and professionalism are specific terms belonging to the infrastructure paradigm and even the values phase that have helped define a series of assets that are tied to our area and that have enabled Bilbao to become an environment of opportunity. We still believe that these values are important, but that they need to be re-modelled in order to incorporate elements related to the phase of ideas, emotions and, ultimately, of the human city of the next 20 years.

Professionalism and leadership as facets of the concept of a person are transformed and combined within a cycle where motivation, brought together with talent, foster creativity. If that creativity takes place in a conductive environment, innovation arises and is translated into an improvement in quality of life for the whole community. This is what we call the virtuous cycle of people and the environment; this should be a possible "utopia" for Metropolitan Bilbao in 2030.

The difference between a person and a professional is likely to become increasingly blurred in the future. Private and working lives are seen as different aspects, but increasingly of the same coin. Therefore, personal motivations and attitudes enrich professional activity and, in turn, fulfilment and happiness of the individual are increased by professional development.

More generally and from the perspective of the environment, another line that is blurred is that which separates individual assets from collective intelligence. Increasingly, the new virtual interconnections and the huge transfer of information enrich the individual who, in turn, returns to the community what he/she receives. A system of "altruism or generous information" is created that dispels the prior barriers of "information is power and not to be shared".

On the other hand, the absolute transparency of the system in general and the trend that all information is public, bring about the need to implement organizational systems at all levels that inevitably must meet these parameters of transparency and publicity. Recent events have made it clear that we are not yet prepared locally or globally to meet this challenge, but meanwhile it is unavoidable to prepare for a complete transformation in this regard.

Finally, the environment should position itself within the following possibilities: a global perspective in which quite likely there will be reactive mechanisms to the system and therefore, will become a “wagon”; or other alternatives in which the local becomes part of the global and therefore options for pro-active actions of the environment may act in some cases as “tractors”. Both options have their risks and opportunities.

**How are we going to achieve it? The race of life.**

a) Commitment and willingness
In this context, the only tool able to regain the metropolis’ competitiveness is to assume that amongst each of one’s potential capacity and that of our environment and the final development that we achieve, our willpower enables us to innovate, sparkle ideas, implement projects, create enthusiasm and to work with passion, to sacrifice and to take risks. Perseverance, tenacity and commitment form the basis of the utopia of Bilbao.

If we bring this concept to the community level in a competitive race between environments like the one we live in, the alleged winners will probably not be those that choose to relax because they are convinced that they have an advantage over others, nor those who accept their role as losers and give up. At the end of the long journey, those who will succeed are those willing to run with all their possibilities, although limited, without looking at the rest and never accepting defeat, knowing that they will achieve up to where they are willing and able.

The difference amongst ordinary people in everyday life is not IQ, or social skills, or age, or appearance, but the effort, commitment and energy one is willing to sacrifice.

In the world we live in, it is easy to repeat the difficult nature of a crisis, the tragedy of wasted capacity and above all the curse of idleness, laziness and apathy. Someone who fails is that who does not try over and over again. Failure is legitimate and honourable, abandoning without trying is sad and shameful. Schiller said: "The will of man is his happiness".

Professor Charles Handy also advocated for tenacity when he mentioned in 1992: "Cathedrals need time and faith to be built. What you must do in Bilbao is starting to build human cathedrals that we will never see finished, and will not know how they can finish. But this does not imply that they should not be started "(Handy, 1992).

b) Uniqueness and talent: the person

Competitiveness, desire, drive and ambition to achieve recognition associated with securing a particular employment have been defining features of entrepreneurship and of the courage that past generations have proved in order to overcome challenges during critical times. The capacities, knowledge and skills of these professionals were used to position Bilbao where it is now.

However, today it is not enough to replicate this model. In the Bilbao of the next 20 years, each person should release his/her own talents and skills, allowing each one to fulfill themselves as a person and professional and, therefore, to achieve happiness. Professional performance should provoke enjoyment, learning, initiative, passion and ability.

In order to do so, one must unavoidably perceive and take advantage of the peculiarities and uniqueness of each person from their identity and unique personality. "Believe to create" possibilities and opportunities. The distinctive
identity of people and their choice of fate are essential in the pursuit of maximum growth of Bilbao’s capacities. We must believe and trust in our ability to overcome the tendency towards determinism.

Our goal here is to convey the high expectations and dreams that we pursue. We are certain that only in this way we will improve our hopes and results, but also will achieve our best performance, grow efficiently and harmoniously, and in short, will be happier. If we truly believe in ourselves, we will be rewarded. Our confidence in success is based on the kindness and capacity of our people. Like in the Pygmalion effect: “Treat me like someone exceptional and I will be one”. Bilbao believes in this.
THE BILBAO-BIZKAIA CREATIVITY INDEX

Thanks to the collaboration of Charles Landry, Founder of Comedia and an internationally prestigious reference in terms of creativity and cities, Bilbao and Bizkaia (B&B) showed courage by asking itself the question whether it is creative in 2010. No many cites and regions have yet asked themselves this question in a comprehensive and honest way.

We include herewith the main conclusions of this audit, carried out with over 120 key figures interviewed and which looked across the spectrum from the private, community and public sectors and areas within it such as education to the creativity of individuals, groups, industry sectors and clusters, networking in the city, the city itself as an amalgam of different organizational cultures and the region. A ‘creativity index’ was established focusing on 10 domains for which there were groups of indicators. These are:

- Political & public framework
- Distinctiveness, diversity, vitality and expression
- Openness, tolerance & accessibility
- Entrepreneurship, exploration & innovation
- Strategic leadership, agility & vision
- Talent & learning
- Communication, connectivity & networking
- The place
- Liveability & well-being
- Professionalism & effectiveness

While the headings and the questions generally speak for themselves, those assessing the answers will often be looking for a strong showing in the following qualities:

- Motivation
- Tenacity
- Awareness
- Clarity of communication
- Broad thinking
- Inspiration
- Adaptability
- Dynamism

- Openness
- Participation
- Design awareness
- Sensory appreciation
- Professional pride
- Leadership
- Vision

Collectively and in combination these represent the creative ecology of a place and assess whether there is a culture of creativity. The overall external consultant’s assessment on these was that B&B scores 64% out of 100% and the internal assessment by interviewees is 61.5%. The average is 50%. This was clearly a good
score especially given B&B’s recent context. Few European cities do better. In the assessment there are unlikely to be more than 20 city regions in Europe that score above 60%. It was considered, in a rough assessment, Amsterdam to be the best in Europe at 72% with Helsinki behind at 67%. Internally B&B is judged to be slightly less creative internally than by the outsiders. Each element within the proposed indicators was also assessed. These assessments should be treated with the appropriate caution. Inevitably there will be argument about some of the overall scores. Yet the interview programme over the 8 month period of research was quite extensive involving, as mentioned, over 120 interviews covering many sectors and leadership groupings. Importantly the aim is to use this scoring method, which is simple to grasp, as a way of generating public discussion. That process of debate in turn should help to focus and improve problem areas.

Bilbao and Bizkaia’s current level of creativity and future potential is a reflection of, response to and result of its history and its culture. Through centuries B&B has reacted to and exploited its circumstances, its location on the sea, yet nestled within mountains, and its natural resources. It has had to confront vicissitudes of climate and the Atlantic Ocean and earn itself a living in difficult conditions. This required a range of attributes that have benefitted B&B throughout its history, such as the need for reliability, hardiness and attention to detail to name but a few. For B&B to become what it is it always had to connect to the outside world, to trade and to travel. In this sense B&B has always been internationally oriented, yet simultaneously fiercely proud of its distinctive Basqueness.

Throughout these times it has on occasion had to adjust dramatically and rethink none more so when it acknowledged the decline of its steel and ship building industries more than 30 years ago. Those industries and the infrastructures required to make them work internationally gave B&B a set of important legacies from engineering schools, a finance infrastructure to business acumen. This has given it a stronger economic position within Spain than might be expected from a city region on the edge. It is reflected, quite rightly too, in the topics the universities are most known for engineering, economics and law.

All of this shapes the ongoing and evolving culture and mindset. Standing back for us the term the ‘culture of engineering’ encapsulates best what is good and yet potentially challenging for B&B in the future. Many of its qualities are admirable. Engineers tend to make things work, bridges stand up, buildings do not fall down and solutions are found, usually in a step by step approach. Incremental innovation often based on trial and error is a common feature. As described a culture good at innovation is somewhat different from a creativity driven culture. The only point to highlight here is that a strong engineering culture will tend to focus on the hardware of the city, its built fabric and infrastructures rather than the software elements. These are more focused on how people think or the values to be encouraged, as well as how to relate, connect, network, communicate or market. It focuses too questions like vibrancy and vitality. Equally it may be less good at crossing boundaries between
disciplines and meshing skills. The engineering mind tends to like the tangible, the graspable and the clear.

The new physical setting of B&B created within the last 20 years is a admirable measure of the value and values of engineering a city into a new age ready for the new economic conditions. Here the city plays a different role namely as a node of sociability, as a meeting place, a zone of interaction and exchange. Its function is to act also as an emblem, an attractor and an image. What has been achieved is a tangible indication of B&B’s recent creativity and boldness. Within that achievement are hidden other forms of creativity, such as the ability to gain the consensus to build something like the airport, the metro or the Guggenheim as well as the strategic ability to conceive and shape the city region for its new roles. Ironically, that same success according to some is creating a culture of complacency and a reduction in entrepreneurial spirit amongst the young.

B&B in comparison to similar places in Europe, which have sought to come back, such as Liverpool and Merseyside or Glasgow and the Clyde, remains in a different stronger league. Yet in spite of B&B’s strong efforts there are signs of weakening acerbated by global dynamics and politics beyond B&B’s control. Talent and high level skill may be drained from B&B as are those with strong aspiration. Therefore for B&B the retention and attraction of talent is the central question for its future.

One of the basic conditions of creativity is openness and it is nicely reassuring that the surveys of Ikuspegi reported in Panoramica are very positive for B&B. Residents appear to be very open to immigrants and incomers do not feel threatened in terms of their own identity. They believe they contribute to well being and innovation. For instance, 55.7% agree that it is good that Basque society is made up of different cultures, ethnicities and religions and similarly large numbers are highly tolerant of other cultures within the region. Immigrants working in B&B represent approximately 2% of the total population. Out of these we estimate that only 2,000 of the 24,000 (8% of them or 0.16% of population) are working in non-menial jobs. There is a challenge to attract high level talent.

B&B has an excellent track record in civic creativity especially in developing the support infrastructures to adapt its economy to the needs of the new economy ranging from cluster initiatives to technology centres. Each element in the value creation chain has appropriate mechanisms of support. This institutional framework is on one hand, extremely impressive, but it may has become too complex.

Given the willingness to undertake extraordinary investment in clusters and technology parks is it worth considering a range of other niches such as a global urban renewal institute where the credibility is high. These could be part of a variety of softer initiatives. The most important could be an urgent focus on the creative industries. Encouraging these industries will have a whole series of spin-off effects, such as helping to foster B&B’s identity, self-representation and image, enriching the cultural offerings to include more alternative activities to match to more formal
ones, and supporting the tourism industry. It will also create over time a greater buzz on the streets, which is one visible indicator of vitality. Finally the culture of Basqueness is in itself a factor for the creativity agenda.

**What is a creative place?**
A creative place is somewhere where people can express their talents which are harnessed, exploited and promoted for the common good. Things get done. These talents act as a catalyst and role model to the development and attraction of further talent. It is a place with myriad, high quality learning opportunities, formal and informal, with a forward looking and adaptable and highly connected curriculum. The physical environment functions well for its inhabitants, it is easy to move around and connect with each other. Its high level urban design inspires, stimulates and generates pride and affection. The architecture, old and new, is well-assembled, and the street pattern is diverse and interesting. Webbed within the ordinary is the occasional extra-ordinary and remarkable. It is an environment in which creators of all kinds are content and motivated to create and where there are outlets and channels for the sale of their work. It is a natural market place, where people exchange ideas, develop joint projects, trade their products, or work in its advanced industries. It offers rich, vibrant experiences through for example gastronomy, the arts, heritage and its natural surroundings, including thriving mainstream and alternative scenes and a healthy network of third spaces. Opportunities abound: the place is welcoming and encouraging. Its dynamism makes it a magnet and so generates critical mass that guarantees longevity.

The political and public framework within which this exists has a clarity of purpose and direction, and understands the importance of harnessing the potential of its people. It is lean, clear and focused. Its workings are easy to navigate and it is accessible, open and encourages participation. Public employees here are focused on the job at hand regardless of departmental boundaries. Differences are a natural part of this discussion culture. They are debated, accepted, negotiated and resolved without rancour. Its leadership has vision and is strategic yet is grounded in day to day reality. It is respected and trusted and recognizes its vital role in continuously identifying new opportunities and future-proofing. The society it rules over has a high degree of cohesion, is relatively open to incomers and to new ideas, even though these can sometimes be uncomfortable – indeed, creative places are often not that cosy and can be somewhat edgy. This society enjoys its status as a creative hub and the physical environment in which it exists. Levels of crime are in general low, the place feels safe and standards of living are relatively high. It is socially alert and seeks to avoid ghettoizing its poorest. Social organizations are active, well funded and constructive.

Industry is innovative and design aware, with a strong focus on new trends, emerging technologies and fledgling sectors such as developing the green economy or creative industries. It is well networked and connected and its commitment to research and development is well above average. Cross fertilization across even the most diverse sectors occurs as a matter of course. The business community is
entrepreneurial, has drive and is forward thinking. It understands and utilizes well its natural resources, it harnesses existing talents and acts as a breeding ground for new skills. Business leaders are respected figures in their community and give something back. The community in turn is proud of their products and the reputation they bring to the place. Good use is made of its effective communications systems including local and international transport, high speed internet access and connectivity to the world at large.

Overall, as in all creative places, this place is unlike any other. You can feel and sense the buzz, it is obvious to residents and visitors alike. It accentuates its distinctiveness in a relaxed and unthreatening way. It is at ease with itself. Its history, culture and traditions are alive, receptive to influence and change, absorbing new ideas which in turn evolve and develop its distinctiveness and culture.

**Political & public framework**

A creative place has a political and public framework that combines a sense of purpose and ethics with a desire to get things done. It is relatively transparent and accessible to the population it serves. The bureaucracy is light, lean, and responsive, adapting itself to changing circumstances as required. Citizens are able to interact with and navigate it in a relatively simple way: the ethos of the bureaucracy is to be enabling and facilitating thereby removing barriers wherever possible. Rather than centralising power and decision making it tends to devolve, allowing easy entry points for interested participants. Its thinking is strategic, it is in tune with the interests of its constituencies, and its task-oriented approach encourages cross-departmental working which is carried out with energy and passion. It fosters a healthy voluntary and community sector, which itself imaginatively responds to social, cultural and economic issues. It has good links with business, and recognises the benefit of and so fosters communication across all sectors. It is good at attracting and retaining quality staff who are motivated more by achieving excellent work rather than by job security. The public sector does not impose greater restrictions on employment than any other sector.

**B&B Assessment:** The political and public framework is purposeful and active, but the strength of political divisions cause some difficulties and a somewhat adversarial atmosphere that can make the discussion of difference problematic. The framework itself is reasonably transparent, perhaps partly because it has to be due to those strong oppositional political opinions. While fairly accessible and with a good degree of devolution of powers, especially at the more local levels of government, this sector has perhaps insufficiently embraced the newer iterations of the concept of open democracy or open administration (cf. Apps For Democracy below). The bureaucracy feels convoluted, with many layers of government, too many different bodies and organisations, a tangled web which inevitably results in duplication and overlap of tasks and functions and which makes navigation more difficult. Nevertheless, there has undoubtedly been a positive side to this: innovative collaborative structures have developed, things have got done here, and in a very
impressive way, and with the full support of the political sector and the involvement of the public administration.

B&B has much of the same red tape that exists throughout Spain but with seemingly an additional layer. Efforts are currently being made to reduce this. Yet it is of concern that, for example, in terms of time taken to start a business, according to the World Bank study, B&B rates alongside Algeria, Honduras and The Gambia. The public administration subscribes to fairly tightly defined departmental thinking and organisational protectiveness so that collaborative working does not necessarily take place as a matter of course and duplication being more likely. Cultural attitudes within public bodies and even in politics (and the private sector) could be more progressive and less traditional, with a dominance of older men in positions of power and the more junior posts being filled by graduates whose main objective, many say, is to find a “job for life” rather than stimulating work. Further, the ability of the public sector to attract talent from outside is in part limited by the need to have competence in the Basque language, although multilingual skills have proved to be an asset for creativity.

There are mechanisms providing reasonably good links with business and industry but they are principally via organisations or quangos so that contact is, in a sense, one step removed. However, these organisations have been able to achieve an enormous and impressive amount and they provide both practical and robust solutions at the same time as mapping out visions for the future, in a way that would probably not be possible without them. It is perhaps in the voluntary or community sector that more challenges now lie and more development is needed.

**External assessment: 45%**

**Internal assessment: 50%**

**Distinctiveness, diversity, vitality & expression**

A creative place has a clear identity which results from the dynamism of its culture. Its citizens have a relaxed self-confidence in their attitudes and values, even pride in their well-known products, their cultural and other public facilities and resources, and particularly the specialisms developed there. This self-assurance encourages receptiveness and openness: this is a culture which has evolved by absorbing and melding influences over a long period of time, rich and inclusive and able to accommodate a diversity of cultural perspectives. Built on a deep heritage but without retrenching into the past, it is vibrant, vital and unique. As a result there is a great variety of experiences, choices and opportunities, and many channels for people to express themselves.

The mainstream and the counterculture, high art and the fringe, popular culture and the classical, the professional and the amateur, these oppositional forces mix healthily in this exciting and resonant atmosphere. There are myriad meeting places or venues from the intimate to the large within which thrives an accessible culture of
critical thinking and debate, a sort of *tertulia* which comfortably and maturely accommodates differing viewpoints.

There is always something new to do and old to return to – there is a wealth of activity in the arts, a variety of festivals, and many sporting and civic events. Also its science, heritage, gastronomy, attractions, parks and even its relationship with its natural environment all add to its vigour. It is a good environment in which the creative industries flourish, being design-aware and plugged in. Even the high street expresses individuality with its independent shops and quirky offerings and outlets for its local products, and there are specific local channels of communication.

**B&B Assessment:** The classic image of the Basque is traditional, hierarchical, and oriented to hard values. To quite an extent it remains true today despite vast changes in recent decades, and it is emphasised in the hierarchical structures and practices extant in both the public and private sector. There is clear and strong identity, possibly too strong. It is a “serious” place, based on a deep and long “culture of engineering”, the populous is solid and reliable, people who get things done. But this unfortunately makes it somewhat one-sided and less dynamic. It could loosen up, become more playful, get some lighter elements – those that there are seemed to have been “helicoptered in”. An essential creativity is somewhat missing, a human element.

There is pride and self-confidence here, pride in the specialisms of engineering, gastronomy, urban regeneration, in having adapted from an industrial economy to a technology and innovation economy – but perhaps too much pride, attitudes are not relaxed enough, even complacent and self-satisfied, not opening up and not mixing the creative elements in with the engineering at which they are so good (a combination that would be compelling and powerful). For example, the technology parks are advanced, successful and impressive economically – but they are barren places and in need of another element.

There is a strange kind of mix of openness and of blockage at the same time: here is a place of substance and depth, with a strong illustrious heritage while forward looking and modern, yet it lacks some “buzz” and vibrancy. Despite the txokos, the excellent gastronomy, the lively *café culture*, and the tremendous urban landscape, the range of experiences is too narrow, too embedded in the mainstream without the oppositional challenge of a counter-culture. Of course there are some tremendous festivals, the exuberance of which goes some way to counter this but they are momentary, a temporary break in proceedings before everyone goes back to being serious again. The creative industries are thin on the ground and the arts scene is generally under-developed, there are not even many commercial art galleries. There is a poorly developed creative economy – the environment and ambience in B&B is ideal for this but it is like a blind spot, an economic sector too intangible for the engineering mind.
In the urban environment there is a good feeling of vitality and distinctiveness, especially in Bilbao. The cityscape is beautiful, remarkable and inspiring and the ambience is relaxing and calming. There are individual stores and restaurants and bars, and chain culture has been largely resisted here. There is a sense of plenty of places to meet and talk, be that a formal venue or a café or a bar and the streets are vibrant and friendly.

In general, B&B has a tremendous distinctiveness and diversity, the visibility of which has only come apparent in the last decade or so. The built environment is a tremendous gift to hand down but now we need more emphasis on activities and people rather than buildings. Likewise the experimental needs nurturing over the mainstream.

**External assessment:** 60%

**Internal assessment:** 65%

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**Openness, tolerance & accessibility**

A creative place is open minded and welcoming and as a result many people from a diversity of backgrounds have made it their home. This atmosphere of openness pervades the way public institutions, the business environment and civil society operates - there is openness in the public, private and community/voluntary sectors, as well as an openness of public space. This creates an enabling environment where opportunities are facilitated and consequently it is easier to get projects going, to follow things through and to transact. It is a gateway to and from the world, it is well connected. Many locals work abroad and vice versa, but to all this place remains their home. This openness has produced greater understanding of differences and created an inter-cultural dialogue which helps it to remain in the vanguard of latest developments. This attitude is echoed in the inviting way facilities work.

**B&B Assessment:** B&B is open and welcoming and is clearly aware of the importance of openness. As examples, it has made a very visible point of welcoming key foreign architects to design its regenerated public realm and it is a member of the Open Cities Network. Although immigrants appear to be as ghettoized as anywhere, people seem to become committed to B&B once they get there, and any visitor generally feels immediately welcome.

In common with the rest of Spain, however, and indeed with Mediterranean countries in general (which B&B purports not to be), it is not as open as it could be: it is institutionalised and many of the institutions are “closed” with the result that it is not easy to achieve things. And in private life, there is a sense that people value and protect their own private space into which it is not easy for an outsider or visitor to be invited or welcomed. Moreover, it is hard to see foreigners in evidence, other than low-paid migrants from Latin America.

Its transport systems make it relatively physically open to the rest of the region and to Spain but internationally it is more poorly served, the air routes to both Europe and further afield being cumbersome and requiring transiting through a major
European hub: for this reason alone you could not describe B&B as a gateway to the world.

But overall this is a relatively welcoming place and, if the troubles were eradicated, Bilbao itself would be ideally placed to be humanistic city, a place for all good people wishing to meet and refuel, a city on a human scale.

**External assessment: 60%**
**Internal assessment: 70%**

**Entrepreneurship, exploration & innovation**
A creative place is one where entrepreneurs feel very much at home. They have social recognition. Here is a place where an idea can become reality quite quickly. It is a place where you can make mistakes and you are not too severely judged. There are extensive support systems from advice to access to funding and risk capital. There is a higher than average level of innovation and R&D and the place has a reputation for its design-led distinctive products and services. There is a business and industry culture that respects experimentation and investigation and this is valued by the community at large. The creative industries play a significant role.

**B&B Assessment:** Here is an entrepreneurial culture without any doubt, a place where entrepreneurship is recognized and accorded value. It has an excellent supportive infrastructure which, in comparison to a Singapore, is in part blighted by the Spanish / Mediterranean style of bureaucracy. This limits the time taken from idea to reality and at times may even inhibit it altogether. Furthermore, it appears that the culture does not tolerate mistakes well. There is not a forgiveness culture so experimentation has to be made with caution. Access to funding and risk capital is not as easy as in high achieving European cities and countries, but nevertheless this is relatively well developed, particularly in comparison with Spain which has traditionally had one of the smallest shares of venture investment in seed and start-up enterprises among OECD countries. Here funding is mostly publicly seeded and the missing area currently seems to be private venture capital or business angels.

In comparison with the highest ranking Nordic countries, levels of innovation and R&D are above average but not spectacularly, they are confined to certain sectors, and despite an awareness of the importance of a culture of design is less apparent than other countries such as Germany or the Nordics. B&B actually poses a competitive paradox: while innovation is reasonably high (55th out of 202 in OECD terms) its GDP is in the top ten (second only to Navarra and Madrid within Spain). This could be connected with the embedded engineering culture which has its own way of learning and thereby innovating, partly through experience: innovation through experiential learning and interaction.

It may be that a different methodology for measuring innovation is called for here as Basque enterprises seem outside of the box of standard measures. Moreover, a great majority of the innovation and R&D here is in the broad world of engineering,
whether manifested in renewables or bio-sciences; the exports from B&B are engineering and engineering is what is done here.

The creative industries are not very apparent in B&B, there are businesses based on that sector of the economy, but it seems few people are working in the arts generally. This is a place more used to the world of large scale corporates, where SMEs although extant are not a major economic force (though it must noted that, through the Mondragon system there is a significant level of cooperative enterprises). But this is probably the area which needs most expansion, it is a logical one to pursue, it will add strength to the engineering culture and provide wider opportunities for its population. B&B is one of the worst casualties in Europe of the demographic time bomb with a declining labour force, declining birth rate, and increasing elderly sector: to deal with these requires more innovation, better productivity and enhanced immigration.

**External assessment: 65%**
**Internal assessment: 85% but declining to 65%**

**Strategic leadership, agility & vision**
A creative place has many leaders and many levels of leadership. There are dynamic and forward looking people of quality in every sector providing a strong sense of vision for the place, meaning that there is deep awareness of current trends and emerging developments and their implications. Their style is noticeably inspiring, able to delegate and be empowering to others. They are accessible. These leaders describe an achievable yet ambitious future that acts as a compelling and involving story, which could be a vision for the city or region, or a business venture or educational programme.

Their thinking is strategic: they are looking at the future in the broadest terms and see the planning process as continuous and intrinsic. They exhibit foresight and awareness beyond the confines of their own field and are conscious that they are helping to future-proof their place. They understand the broader context and how they fit in, working with other leaders creating motivated partnerships. They ensure that there are good mechanisms to gather information on best practices and innovative solutions from around the globe, such as research centres, think tanks and collaborative devices such as clusters networks, specialist hubs or technology parks. They are strategically agile knowing when and how to seize opportunities, for which they have already created a state of preparedness.

The decision making communities in public and private walks of life have a forward focus, whether they are teachers, public servants, transports chiefs, middle and higher management in industry and business, or community organisers or those in the artistic world. They are always alert and scan the horizon in their respective sectors, actively looking out for the next important thing in their respective domains – for example, at the present time there is likely to a significant involvement in things green. Their pride in place helps them to share a common agenda.
B&B assessment: The totality of what B&B has been able to achieve in a variety of spheres despite the acknowledged problems and troubles is impressive. This involved implementing a raft of well orchestrated initiatives some of which challenged vested interests as the region moved from an older industrial economy to a more innovation driven one where urban attractiveness plays a central role. To make this possible required an unusual set of alliances who needed to agree on some central issues. In considering the detailed steps required a combination of vision, policy and planning skills and the ability to deliver were necessary. B&B’s particular strengths lie in its long term preparation and paced and purposeful approach in developing policy mechanisms to deliver the support infrastructure and regulations and incentives regime to shift the economy in addition to the hardware infrastructure such as technology parks. B&B seems switched on, more Nordic than Mediterranean in outlook.

The 1990s regeneration is the most visible and easily compelling part of this story. The Guggenheim was a result of a series of previous initiatives and the difficulties in achieving this aim showed a high level of ‘strategic opportunism’ - the ability to strike and seize opportunities when it really matters. The beauty of this is that it is visible and tangible. It is there for all to see. It is tangible. Yet to make it happen required a set of largely invisible actions such as cajoling diverse partners to work together. Clearly much politicking was involved in this, especially as the politics of the country is complex and has led to what some call the ‘organizational spaghetti’. This tangled web at times is difficult to untangle. Some organizations played their part in encouraging ways forward though.

The special quality of B&B’s leadership has been to recognize the broader context and to draw in global advice from people such as Michael Porter to ensure it is abreast of good practices as well as ahead of the game. It understood strategic mechanisms from clustering to shared learning forums early on and this early work is paying dividends. It responded to inherent weaknesses and in response was able to develop innovative solutions like the creation of cross-sector organisations.

If there are weaknesses they relate to the mindset and culture which still has a strong somewhat traditional, top-down hierarchical approach, that in many respects has benefits but that over time may become less effective. One aspect is that people feel less at ease with boundary crossing and meshing disciplines. There is a tendency to err to hardware at expense of software as the mindset prefers the tangible rather than invisible. Whilst B&B leadership groupings are alert, they do have blind spots. The leaderships appear better at dealing with the large scale and are perhaps less adept at dealing with small-scale creative initiatives, which is why the creative industries have taken so long to get onto the agenda. In addition many of their products are intangible which the engineering mind finds difficult. Leadership in some sectors seems underdeveloped. Given the frustration in so many sectors about
education why has it been so difficult to achieve the equivalent that was achieved in terms of physical renewal?

Given what has been achieved a central question is ‘what is B&B’s story for next decade’. Could B&B become leaders in green technology, but in such a way that there is evidence of being green everywhere from shop bags to low emission vehicles. Can B&B emulate the Nordics and Germans who are streets ahead? Can B&B be the Freiburg of the Mediterranean? Its greenhouse gas emissions are in the worst five of Europe, though a little better than Spain. This is a useful strategic challenge – just the kind the B&B likes.

**External assessment: 80%**

**Internal assessment: 75%**

**Talent & learning**

A creative place values learning and knowledge. All talents are nurtured, fostered, promoted, rewarded and celebrated. There is a diversity of learning options, this enables people to find their right vocation and metier. There are ladders of opportunity that help take people from one level to the next. There are both places that teach the core skills as well as centres of excellence that are globally recognized. There is professional pride in teaching and lecturing and this is infectious. Learning is prestigious. The education institutions strive to be the best in their field and they are connected internationally. The modern and constantly evolving curriculum is in tune with the needs of business and is aware of global trends – providing qualified people in the required areas of specialisation and also providing skills training in specialisations which are as yet in their infancy. This system is excellent at growing and retaining talent locally, and there is a two way flow which places that talent abroad when appropriate and brings other abilities in as needed.

**The B&B assessment:** The predominant view in B&B of the overall learning system is one of deep frustration and dissatisfaction. Most interviews regardless of background and sector and including those within education itself pointed to enormous failings stretching across the whole spectrum from primary education to the tertiary level. Clearly there are exceptions. Some teachers are inspirational as are many projects. The same applies to the universities. Although the European wide and global rankings put the Basque universities low, there are also examples of global reputation.

Sadly the glory days of Bilbao as Spain’s law, economics and engineering centre of excellence have gone and have not been replaced by other specialisms. Unfortunately the troubles coincided with internationalising the education sphere, when the system was least able to respond. It is perhaps the biggest victim of the troubles.
The problems, however, appear to be systemic and many of the necessary changes are dependent on national government. This lack of control exacerbates the frustration especially as the Basque country is acknowledged as a place that values learning and knowledge. Figures show there is a huge desire to learn, well above the Spain average but the system does not deliver. This desire to learn is perhaps based on the focus on equality within the education system, which some argue can be at the cost of high achievement.

Furthermore it is surprising these problems exist given that secondary level teaching is very well paid and comparatively one of the highest in Europe, yet there still seems to be a lack of suitably qualified teachers. Is this brain drain or is teaching not desirable? The education system it seems has greater resistance to change than other sectors. It may indeed be that families and Basque traditionalism influence this further on the basis that ‘my education served me well, so why should it not do for my children’.

The criticisms focus on a series of issues. There is a tendency for professors to run the university system for their own ends rather than based on the evolving needs of B&B or emerging global trends or concerns. It is seen as somewhat old-fashioned, not future oriented or relevant. It is more modular and not geared to self-organization and problem solving. In some schools there is even still rote learning driven. There is little flexibility and complacency. There are insufficient connections to business and their needs. Some courses especially in the humanities are obscure and benefit very few, but again exceptions exist.

Certain forms of knowledge are still valued more than others, which reflects the engineering culture of B&B. Perhaps as a consequence art and design education does not have very good reputation and is not well developed. This is important given the increased significance of the creative industries.

The location of the main University Campus is away from the hub. You do not have a sense that university life infuses the city as with Harvard, Philadelphia, Amsterdam, Bologna or Helsinki. However, there are efforts to build university infrastructures in the city centre and Zorrozaurre represents an opportunity for business and industry connections, but there is an urban design issue to ensure the educational park integrates and weaves the education system into a living community.

Everyone is aware that the Bologna process is a wake up call. This seeks to create a European higher education area by making academic degree standards and quality assurance standards more comparable and compatible throughout Europe. A key feature is that it will be easy to move from one country to the other to study. This makes education far more competitive with the most talented most likely to move where they perceive education to be best. This will happen in a context where, in spite of the stay at home mentality, talent is leaking out. There is little evidence of two-way flow and although some initiatives are good at dealing with and attracting very small numbers of high level people there is a long way to go to create a counterflow. One way to begin the process is to develop significant niches where
B&B can be a global player. One specialism would be to become a leader in teaching high level courses on urban regeneration, where Bilbao itself is a global model and the other green engineering. In both cases these should become small centres of excellence drawing on global lecturers and organized as a new hybrid model of learning based outside the university system.

**External assessment: 35%**
**Internal assessment: 40%**

**Communication, connectivity & networking**
A creative place is well connected internally and externally, physically and virtually. It is easy to get around, it is walkable, places are accessible and communities are less ghettoized enabling chance encounter. Social mobility is more possible. There are high quality public transport systems. They offer much more than merely radial connections so linking its various parts. The place and population is wired and happy using the sophisticated IT and communications infrastructure. It travels at home and abroad taking advantage of the excellent rail and air services which make a gateway for receiving outsiders. Speaking foreign languages is common place. Business to business and cross-sectorial links work well, there are clusters, hubs, focal points and knowledge exchanges. Full advantage is taken of the natural location in communicating and conducting trade. The place is outward looking and makes contact at all levels abroad, creating joint ventures, research projects, product development and civic partnerships.

**B&B assessment:** B&B is internally very well connected physically and with the new road and rail plans some of the remaining weaknesses will be dealt with. The urban areas of B&B are largely walkable. In addition social networks are reasonably tight. This makes it easier to reach people, connect and to collaborate. However, there is discussion as to whether they are too tight and whether there is enough vertical and horizontal movement. – some call this the quadrilla syndrome, where things can become too cliquey where networks then lack permeability. While broadband take up is high and ahead of Spain which is itself in top five of Europe there is not the sense of wifi ubiquity which one finds in the Nordic countries. This may indeed be for good reasons namely face to face contact is somewhat stronger.

The social networking intensity seems internally stronger than external connections and non-local links. Many of new networking techniques such as ‘first Thursdays’ or ‘first Fridays’ or Pecha Kucha as well as social media seem less apparent or popular. These are mechanisms to share ideas, build networks, develop projects, joint ventures and companies. The technological possibilities of Web 2.0 and now Web 3.0 with its interactivity allow the creation and exchange of user generated content. This is an important aspect of the open source movement that that has implications for both the private and public sector. There is a raft of new initiatives in the digital cities networks which are experimenting with new ways of connecting citizens to the city and elsewhere as well as solving problems. Two important examples are Apps
for Democracy in Washington and Forum Virium in Helsinki. In both cases the vast data streams are made available in easily accessible ways including real-time crime feeds, traffic flows, school test scores, and poverty indicators. They believed outsourcing problems to a single supplier would probably not deliver a good product and felt combining with citizens’ talent would be far more effective. The rule was to use open source with creative commons licensing so the results could be shared. The aim was to crowd source problem solving. The first edition of the Apps contest cost Washington $50,000 and returned 47 iPhone, Facebook and web applications with an estimated value in excess of $2,600,000 to the city. They include: A car pooling organizer, new biking maps, an application called ‘Aware Real Time Alerts’ on crime reports, and updates on building permits.

Another dimension of connectivity is foreign language ability. In principle this should be easier for Basques given many know Spanish and Basque and so learning a third language is easier. Yet whilst English speaking seems higher than in Spain in comparison to the rest of Europe excluding the UK there is some way to go.

Formal cross-sectorial partnerships involving the public, private and community sectors are well developed. However cross-disciplinary and cross-boundary working, such as joint projects tapping into combined science and art insights, seems less evolved. Again this may have to do with the engineering mindset that tends to break issues down into their component parts.

**External assessment: 60%**

**Internal assessment: 50%**

**The place**

A creative place, as any other place, is made up of hard and soft elements. Here, however, both mesh well with each other, the one encouraging the other. The hardware, or built environment including the public realm and architecture in general is human centric and sensitively conceived and implemented: one is aware of the positive emotional effect of the buildings upon people. Human interaction and activity is encouraged by this physical environment rather than being blocked by physical barriers. It acknowledges and respects and blends well with its natural environment, its surrounding landscape, and its green areas and is aware and responsible regarding its ecological footprint. There is attention to detail and the small things are done well, seamlessly creating a streetscape in which the software (the human activity) creates a real buzz and genuinely reflects the distinctiveness of the place. When you are there you want to be there but its reputation drew you there in the first place – it has a critical mass and a magnetism which enables it to compete well with other places which have similar mass and attraction.

**B&B assessment:** Bilbao and Bizkaia is only on the global map because of its famed regeneration. The physical transformation of Bilbao is highly impressive and the
standards adopted for physical infrastructure all over B&B are very good. The quote made by a Bilbaino speaker: ‘you only have a once in a lifetime opportunity to renew the physical infrastructure, at a minimum it should be international class and a norm world-class’ has a strong resonance. The renewal has been conceived as an urban design project as distinct from being purely architect driven. The individual architecture nestles in well within an urban design template.

The arched, long sweep along the Nervion from Teatro Arriaga to the Maritime Museum is a pleasure to look at and use. Iturriza Casilda Parkea and its surrounds near the Bilbao Museum of Fine Arts is a delight reflecting urban life at its best with different age groups, ethnicities and backgrounds mixing. Interspersed there are other good examples of public space such as Bizkaia Plaza or Plaza Nueva, which anchors the captivating old town. There is an encouraging lack of multinational chains, which increases the sense of distinctiveness. The city is well maintained, it is clean, there is not much graffiti and public services are good. In some of these respects it feels Nordic, not Mediterranean. In general, things have been kept to a human scale, which in a large part has to do with the dominance of early 20th century buildings in the core. This engenders positive emotions. Movement is easy and there are innovative and varied transport systems from the Puente Bizkaia in Getxo to the nearby open air escalators to Foster metro system, the tram and the Calatrava airport.

As the city spreads out into the metropolitan area from the centre and along the river towards the sea places are in need of refurbishment and the city knows this is a priority. Some of the technological parks although modern and functional are somewhat soulless. It is as if they were put together mechanically as an engineering project rather than building a community of researchers. There are too few facilities. There are surprisingly few old buildings being reused for new industries such as in the creative sector. There is a sense that the past has been erased apart from the occasional crane along the Nervion. Almost every old building has been removed in Zorrozaurre, yet this remains the future opportunity to blend old and new.

Overall there is little visible evidence of B&B’s green commitment to the environment. No buildings show their green intent.

The terrain in Bizkaia is quite dramatic and difficult for creating urban settlements. Yet usually they blend in well with the mountainous surroundings. Bizkaia, however, as a whole remains an industrial area and inevitably older factories scar the landscape interspersed by newer cleaner looking structures. Coming into B&B from the various directions you encounter a combination of the delightful and quite attractive places like Guernika or Etxebarri to declining somewhat depressing settlements.

There is a buzz about B&B and especially urban core Bilbao, it does feel unique, different and individual, but something is missing. Maybe it is a lack of artiness.
Perhaps there is a focus on hardware the assumption being that place making is essentially engineering driven where the software can take care of itself.

**External assessment: 85%**

**Internal assessment: 80%**

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**Liveability & well-being**

A creative place has an exceptional quality of life. GDP is high and services work well and are of a high standard. People are generally happy to live and/or work here, appreciating the low levels of crime and violence and feeling generally safe. There is a good atmosphere and people help each other more willingly. While class barriers of course exist, there is less ghettoizing and the poverty gap is narrower than elsewhere. People enjoy the connectivity, accessibility and openness, the facilities and activities on offer, the first-rate transport and communications. The civic leadership is mostly respected and trusted.

**B&B assessment:** A series of studies conducted by a diversity of agencies, for instance OCU, ranks B&B quality of life highly as do local satisfaction studies. GDP is high, crime apart from those associated with the troubles is low, drug related problems comparatively few, social exclusion is quite well contained, the streets are clean, public services work well. The physical environment is predominantly attractive, recreation possibilities are extensive. Inevitably there is a flipside side of good liveability and urban renewal in that prices rise that over time can in the future cause problems of social integration.

Again we come to some element missing. There is a touch of heaviness and lack of playfulness. This may have deep historical and cultural roots and be a response to circumstance and the need to carve out a living from an unforgiving environment as well as the endless challenges to asserting Basque identity. Fostering the contemporary arts in all their forms may be one way of adding an extra layer to the B&B experience.

**External assessment: 65%**

**Internal assessment: 60%**

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**Professionalism & effectiveness**

The creative place works well, things happen and are achieved. There is pride in being professional and doing things with quality. Standards are high and benchmarks are frequently set here. Companies, organisations, individuals and products are often given awards. This is a centre of expertise in a range of specific areas – attributes such as reliability, punctuality, efficiency or accuracy are highly respected. Professionals are confident in their own ability and not afraid to work in partnership with others and to delegate authority, breaking with conventional rules of hierarchy.
B&B assessment: The city-region works well. Its professionalism, clarity of purpose and ability to deliver is one hallmark of its identity. It is one of the best qualities of the ‘culture of engineering’, where things should not be allowed to fail. There is a culture of continuous improvement, where trust in others and their expertise is crucial and where sticking to your word, loyalty and reliability become important attributes. Things are achieved and at a high level and on a grand scale to high standards of quality. The global benchmark B&B has set for urban regeneration is an example as is the steady transformation into an innovation driven economy. B&B’s areas of specialism and expertise mainly based round engineering such as renewables, aviation, automotive, biosciences all require the focused, conscientious and dependable qualities, standards, structures and codes associated with being a professional.

The shift to a creativity and design driven economy may present future challenges to B&B’s particular form of professionalism. There is an apparent looseness and intangibility about the creative approach, where design, marketing and communication are central features. The people of B&B can feel uncomfortable with these requirements. It seems superficial to them and merely concerned with self-promotion something the B&B character resists. In the new environment there is also a greater blending of skills within an interdisciplinary approach rather than the multidisciplinary approach, where people approach problems from within the authority of their expertise, standards and codes which engineering focused disciplines prefer.

External assessment: 85%
Internal assessment: 70%