ASPECTS TO BEAR IN MIND IN RELATION TO INFORMATION PROCESSING

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INFORMATION FROM EXTERNAL SOURCES

1. INTRODUCTION

In order to gain an accurate idea of the socioeconomic situation of our cities, which in turn will enable us to establish coherent objectives, it is vital that we use all the information available in order to identify both their strong and weak points.

This information should be gathered and processed by means of an External Information System responsible for collecting data regarding socio-demographics, economics and the job market. Thanks to this, the local administration will have a more thorough knowledge of the job market, the economic fabric and its evolution, something which in turn will lead to a more efficient management of employment promotion policies.

2. DESCRIPTION OF THE EXTERNAL INFORMATION SYSTEM

The establishment of a system for gathering information, storing it on the computer, carrying out statistical analyses and presenting the results, through a periodically updated system of indicators.

3. OBJECTIVES OF AN EXTERNAL INFORMATION SYSTEM:

- To gather, analyse and generate qualitatively reliable information which offers a wide-ranging view of the city and its evolution, and to establish a system of indicators which is updated on a periodical basis.

- To carry out diagnostic studies.

- To gain in-depth knowledge of the productive structure, job market and other areas which make up the socio-economic fabric of our cities.

- To disseminate the information and make it available to all those working in the socioeconomic field.

- To provide information regarding different areas of the cities, making sure it is immediately available and easily accessible, in order to ensure greater efficiency with regard to job market intervention programmes and activities designed to boost the development of the economic fabric.

- To develop computer instruments designed to aid dissemination, in order to facilitate both access to and understanding of the information available.

4. METHODOLOGY

4.1. CHARACTERISTICS OF THE INFORMATION TO BE GATHERED AND INFORMATION SOURCES

Information sources include all those that provide as much information possible about the local environment as frequently as possible.

The variables obtained are quantitative and the attributes all those available for each variable. The indicators to be used are designed so as to enable diagnoses to be carried out regarding the territory in question, and to ensure a high level of transparency as regards the socioeconomic fabric, its relations and decision-making processes.

The information is gathered from different sources and can have various levels of compilation. The principal reference is the information compiled and produced by official statistical information organisations.

A number of local sources of non-compiled information will also be used:

- Indicators already established by other organisations working in this field.
- Primary information sources (non-compiled) from public and private organisations.
- The information generated by the Local Administration during its everyday activities (for example, the municipal register of inhabitants, business tax, etc.)
- The information generated by the Local Administration through its services, for example, by the Employment Guidance Service (quantitative and qualitative information regarding unemployed people in the local area).

In order to achieve the objective of gaining access to the information available on a more individual level, contact should be made with information producing entities. For this reason, the process of negotiation with different organisations in order to ensure that the information provided to the External Information System is sufficiently broken down, will constitute a key element in the work to be carried out.

Phases and tasks for the setting up of an External Information System

The **initial phase** will focus on the most accessible reliable quantitative information, generated both by Local Administration Services and other public institutions which produce statistical information about the city.

This phase will involve the following main **tasks**:

- Initial contact with the different organisations which generate information, with the aim of establishing collaboration agreements for the periodical supply of information.

- Periodic contacts with different organisations in order to define exactly what quantitative and qualitative information they can provide.

- Gathering of statistical information and loading onto the computer.

- Computer processing to transform the original files into databases that can be recognised by statistical programmes.

- Statistical processing of the information.

- Statistical exploitation of the data.

- Analysis of the statistical information.

- The design work carried out prior to the exploitation of the information. Contact with different computer consultants and the selection of the most suitable offer.

- Contacts with website design companies for the subsequent posting of the 'City in figures' application on the Internet, (local council website).

- Compilation of thematic reports.

The **second phase** will focus on setting up the different products and services that were prepared during the initial phase. This phase will therefore require continuous attention to any possible improvements or modifications.

The **tasks** to be carried out during this phase are:

- Continued search for collaboration agreements with public and private entities that generate information.

- Completion of the indicators required by the project, and the improvement and adaptation of those established during the first phase.

- Initial assessment of each of the products and services set up, and the implementation of any improvements or fine tuning deemed necessary.

- Carrying out of studies based on surveys of the specific information requirements of the Employment Promotion Services.

4.2. AREAS OF ACTIVITY AND INDICATORS

The **areas of activity** about which information should be gathered are as follows:

AREA	SUB-AREA
DEMOGRAPHY AND SOCIAL HABITS	- population - births - deaths - migratory movements - family structure
JOB MARKET	- activity - occupation - unemployment - job incidence - unemployment benefit - pensions
ECONOMIC ACTIVITY	- services (commercial, tourism, services financial, etc.) - industry - construction and housing - other sectors
EDUCATION	- training centres - universities
PROTECTION AND SOCIAL WELLBEING	- living conditions - health - crime - income, inequality and poverty
NEW INFORMATION AND COMMUNICATION TECHNOLOGIES	- computers - mobile telephones - internet

Each and every one of the aforementioned areas is indicative of the level of development, social wellbeing and operation of a local economy. Therefore, any effort made to gather and analyse information will lead to a better understanding of the local context.

The list of possible **indicators** is endless. It is therefore best to select only those that best describe the local situation in the target area. Below is a list of possible indicators for each area of activity.

4.2.1. DEMOGRAPHY AND SOCIAL HABITS

Indicators:

AREA	INDICATORS	INFORMATION SOURCES	FREQUENCY
DEMOGRAPHY AND SOCIAL HABITS	- Total population with distribution according to age and gender. - Trends and changes in the population. - Percentage of the population under the age of 16. - Population according to origin: municipality, region, state, abroad. - Population density. - Life expectancy according to gender. - Infant mortality rate. - Population according to age, educational level, relation with employment, socioeconomic category, marital status. - Family structure. - Total number of families. - Average house size. - Single-family families. - Single-family families with pensioners. - Employment rate (gender, age, education, neighbourhood, etc.). - Etc.	Each technician should look for information sources in his or her city, from where to gather the data. For example, in San Sebastián, these sources would be: - Population census - Population surveys in relation to employment - Etc.	Frequency may be monthly, weekly, annually, biannually, etc. and is determined in accordance with the criteria established by the local technicians responsible for the task.

These indicators offer an insight into the local population. We should focus not only on the current population, but should also bear in mind recent trends and compare our data with those from other regions. The idea is not to extrapolate activities and measures from one municipality, region or country to another simply because they worked in the original context. Rather, we should always strive to act on the certainty that the new target population shares many of the same characteristics.

The technicians in each city should search for **information sources** which offer these types of indicators about their cities. For example, in the city of San Sebastián, these sources would be:

- POPULATION CENSUS. This type of information is gathered at a municipal level at intervals of no more than 5 years. The censuses offer detailed information about the structure of the population both at a municipal level and in the different districts or neighbourhoods.

- POPULATION SURVEYS IN RELATION TO EMPLOYMENT. This is a censual information source in which a group of houses are selected on the basis of the information provided during the population census. The survey offers more detailed information regarding the population, housing, the structure of each home, the relation with employment, migrations and education.

4.2.2. JOB MARKET

Employment is without doubt one of the priority areas at both a local and world-wide level. For example, some **indicators** that focus on this type of information would be:

AREA	INDICATORS	INFORMATION SOURCES	FREQUENCY
JOB MARKET	• Employment rate. • Unemployment benefits. • Number of unemployed people. • Unemployment rate. • Youth unemployment rate. • Type of contracts. • Remuneration. • Working hours. • Etc.	For example, • Public Job Centres • Statistical studies and published works • Internal sources • Etc.	Frequency may be monthly, weekly, annually, biannually, etc. and is determined in accordance with the criteria established by the local technicians responsible for the task.

When analysing the job market, it is important to bear gender in mind in order to carry out an accurate analysis of the indicators and the socioeconomic situation of unemployed women. Therefore, any of the aforementioned job market indicators can be broken down and a comparative analysis carried out between men and women.

Gender discrimination can take a number of different forms. For example:

• Remunerative discrimination: men and women are paid different salaries despite carrying out the same task.
• Discrimination as regards employability: all else being equal, employers tend to choose a male candidate over a female one.

4.2.3. ECONOMIC ACTIVITIES

It is important to gain an in-depth knowledge of the economic activities in the target area, in order to adapt the employment demand to the needs of the local economy and to anticipate possible changes that may occur in the future.

Indicators in this field may include:

AREA	INDICATORS	INFORMATION SOURCES	FREQUENCY
ECONOMIC ACTIVITIES	• Per capita GDP • Sector • Number of people employed per sector • Etc.	For example, • Companies featuring in the company tax register • Internal sources	Frequency may be monthly, weekly, annually, biannually, etc. and is determined in accordance with the criteria established by the local technicians responsible for the task.

Within the general field of economic activities, each sector has its own indicators which characterise it and which should be borne in mind.

4.2.4. PROTECTION AND SOCIAL WELLBEING

Indicators which offer information regarding social services, social wellbeing, inequality as regards income, poverty etc. should be considered. Some examples of indicators which focus on this type of information are:

AREA	INDICATORS	INFORMATION SOURCES	FREQUENCY
PROTECTION AND SOCIAL WELLBEING	• Number of homeless people. • Average house price in relation to average salary. • Number of registered crimes. • Etc.	For example, • Social services survey • Survey on public spending • Social Wellbeing Department	Frequency may be monthly, weekly, annually, biannually, etc. and is determined in accordance with the criteria established by the local technicians responsible for the task.

4.2.5. EDUCATION

The following are some examples of **indicators** that can be used for assessing this area:

AREA	INDICATORS	INFORMATION SOURCES	FREQUENCY
EDUCATION	• Number of public and private centres. • Students according to educational model. • Level of later employment according to educational channel and employment sector.	For example; • Universities • Statistical studies • Ministry of Education	Frequency may be monthly, weekly, annually, biannually, etc. and is determined in accordance with the criteria established by the local technicians responsible for the task.

4.2.6. NEW INFORMATION AND COMMUNICATION TECHNOLOGIES

When developing the concept of a digital society, we should anticipate and assess the impact of this change on the standard of living enjoyed by the population. There are a number of groups of **indicators** that may help assess the degree to which we have moved towards the information society. The following are just some examples:

AREA	INDICATORS	INFORMATION SOURCES	FREQUENCY

NEW INFORMATION AND COMMUNICATIONS TECHNOLOGIES	• Infrastructures**:**
	- Basic telephone lines per 100 inhabitants.
	- People with a mobile telephone per 100 inhabitants.
	
	• Access terminals:
	  - People using PCs in companies.
	  - Use of laptop PCs, PDAs, consoles.
	  - Homes with: PC, video, television, etc.
	
	• Services:
	  - Homes registered with cable or satellite services, etc.
	  - Users with Internet access.
	
	• Uses:
	  - Average mobile telephone consumption per registered person.
	  - Transactions per capita carried out with a banker's card.
	  - Schools that are connected to the Internet.
	  - Spending on electric goods per user.
	
	• Contents:
	  - Companies with a website.
	  - Online press audience.
	  - Advertising investment on the Internet.
	
	• Social framework:
	  - Civil liberties.
	  - Readers of daily press.
	  - Freedom of the press.
	  - Proportion of students in secondary school.
	  - Proportion of university students.
		For example:
		
		• Companies working in the field of new technologies
		• Universities
		• Studies carried out by telephone companies
			Frequency may be monthly, weekly, annually, biannually, etc. and is determined in accordance with the criteria established by the local technicians responsible for the task.

5. DISSEMINATION OF INFORMATION

The dissemination products are:

- ➢ 'The city in figures' computer application in table format.

- ➢ Reports and studies:
  - On the evolution of the city and its economic situation.
  - On the situation of the job market.
  - Customised studies and consultations.

Characterisation of the information dissemination products:

♦ *'The city in figures' computer application.*

A computer application which presents the statistical information in the form of tables. Its aim is to enable users to carrying out specific, independent consultations regarding a wide range of themes relating to cities. Two versions can be compiled:

- **A version aimed at transmitting the information via internal requests from the different departments of the Local Public Administration.**

  - The programme would be available to all the departments of the Local Public Administration, and the selection of the indicators and statistical data included would strive, as far as possible, to meet the potential needs of those departments.

  - The data would appear without any analyses and would not be accompanied by diagnostic reports regarding the situation or evolution. The programme would simply provide the statistical information that can be used for a number of different purposes, depending on the department from which the consultation originates.

- **A second, smaller version which would be available on the Internet for use by the general public.**

  - This would enable the general public to consult basic statistical information independently over the Internet.

  - The contents of the programme would be restricted to a selection of the most significant statistical indicators, which offer an overview of the city in all the areas described above.

This version would look similar to the example given below, in which the user can obtain information over the Internet regarding the municipal indicators posted on the net.

MUNICIPAL INDICATORS –SAN SEBASTIAN	
ECONOMIC ACTIVITY	
SAN SEBASTIAN CITY COUNCIL	ADDRESS FOR EMPLOYMENT, COMMERCE AND ECONOMIC DEVELOPMENT
GUIPÚZCOA PROVINCIAL COUNCIL	EUSTAT
BUSINESS ACTIVITY TAX	ECONOMICALLY ACTIVE POPULATION: newly active and no longer active
COMMUNICATION & TRANSPORTATION	LANGUAGE INFORMATION
EDUCATION	NEIGHBOURHOOD FACILITIES
YOUTH	

ECONOMICALLY ACTIVE POPULATION BY NEIGHBOURHOOD--2003			
	APRIL-JUNE	JULY-SEPTEMBER	OCTOBER-DECEMBER
AIETE	678	862	735
ALZA	1122	1255	1155
AMARA BERRI	2682	2803	2810
AMARA VIEJO	233	240	239
ANTIGUO	1258	1365	1342
AÑORGA	500	539	612
BIDEBIETA	524	550	530
CENTRO	3884	4049	4108
EGIA	1057	1232	1125
GROS	2956	3134	3101

ECONOMICALLY ACTIVE POPULATION BY NEIGHBOURHOOD--2003			
	APRIL-JUNE	JULY-SEPTEMBER	OCTOBER-DECEMBER
HERRERA	140	44	132
IBAETA	925	783	1083
IGELDO	169	182	198
INTXAURRONDO	828	764	935
LOIOLA	577	605	607
MARTUTENE	483	492	535

♦ *Reports on the evolution of the city. Job market and economic situation.*

In this field, the analysis of the situation and evolution of the job market in the city, and the economic situation in general, are particularly important. The information is compiled in periodical analyses presented both on paper and on the website of the local administration.

The presentation on the website contains a list of the reports that are available. If the user clicks on any of them, the complete report will be displayed on the screen. The site could look something like this:

Studies and Reports :

➢ Urban Revitalisation
➢ Industrial Land
➢ New Technology
➢ Work-related Death Toll
➢ Business Infraestructure
➢ Study on Earnings, Expenditure and Consumption
➢ Study on New Communication and Information Technology in homes
➢ Study on the Implementation of New Communication and Information Technology in micro-businesses

Reports can be compiled on the following areas:

- **Report on the job market:** The main focus of the content is centred around an analysis of the situation and evolution of the job market in the cities.

Based on information regarding job supply and demand and their characteristics, the job market is monitored on a periodical basis, with the information being broken down and an in-depth analysis carried out as and when the main sources so permit.

The employment demand will be broken down to as close as possible to the individual citizen level. In this area, the unemployed population is characterised in accordance with variables such as specific training, last job, length of time unemployed, etc., and is related to other population characteristics such as availability and training needs, etc. This enables us to identify the employment areas in the cities, and to establish their profiles.

As regards the employment offer, use will be made of information regarding the number and type of contracts signed and the jobs filled, etc., in order to establish a guideline for the planning of local administration services. As historical information is gathered, the evolutionary trends can be identified for both specific production sectors and in relation to unemployment.

These reports are targeted at a wide range of different groups:

- Training centres in the cities.
- Technicians working in these areas.
- Organisations working towards the social wellbeing of the population, associations working with disadvantaged groups in the cities, etc.
- The unemployed.
- Any other interested organisations.

- **Reports on the economic situation:**

The initial aim is to compile a presentation of the sectorial structure of the cities' economic activities and the changes undergone over recent years, using existing bibliographies and historical series of statistical data as the main sources of information.

Subsequently, information will be offered regarding certain city activity indicators and the evolution of the economic cycle. This analysis will be carried out on the basis of the interaction between the different economic stakeholders involved: production companies, institutional activities, job market, consumption by families and intermediate goods. In this sense, we can forecast the development of some of the city's most significant variables.

This ongoing analysis will also enable us to detect long-term trends, which will in turn make it easier to plan more suitable activities in the light of possible changes that may affect the job market.

The target public will be:

- The business sector and employers' organisations.
- Associations working towards the social wellbeing of the population.
- Other interested organisations.
- Etc.

- **Customised studies and consultations: the aim is to respond to requests for statistical information regarding the city. The service will be open to the general public and will be presented on the website through the 'City in figures' programme. The aim of the service is to expand on the information offered on the website by responding to specific requests.**

The service could have the following format:

If you wish to ask a question or make a comment or suggestion, please fill out the following form:

Name	
Surname(s)	
Telephone	
City	
Country	
E-mail	
Questions, Comments, Suggestions	

INTERNAL INFORMATION

2.1. INTRODUCTION

One of the principal aims of the local administrations is to promote, co-ordinate, implement and inject new life into active employment support policies, and to promote the economic development and the industrial fabric of the local cities.

In order to carry out all these functions as efficiently as possible, local administrations need to set up a Computer System which enables the automatic management of all the activities carried out and provides the information required regarding the external associations with which they have established specific agreements.

The steps to follow when setting up an Internal Information System are:

- Determination of the functional structure of the local administration.

- Establishment of objectives.

- Determination of the technological environment.

- Identification of subsystems.

- Establishment of interfaces with other systems.

- Making the new system available on the Internet (optional).

2.2. DETERMINATION OF THE FUNCTIONAL STRUCTURE OF THE LOCAL ADMINISTRATION.

Before implementing an Information System in a local administration, the functional structure of that administration must first be established.

First of all, the organisational chart of the local administration should be defined.

Although each local administration will have its own organisational chart, the following one can be taken as a general example:
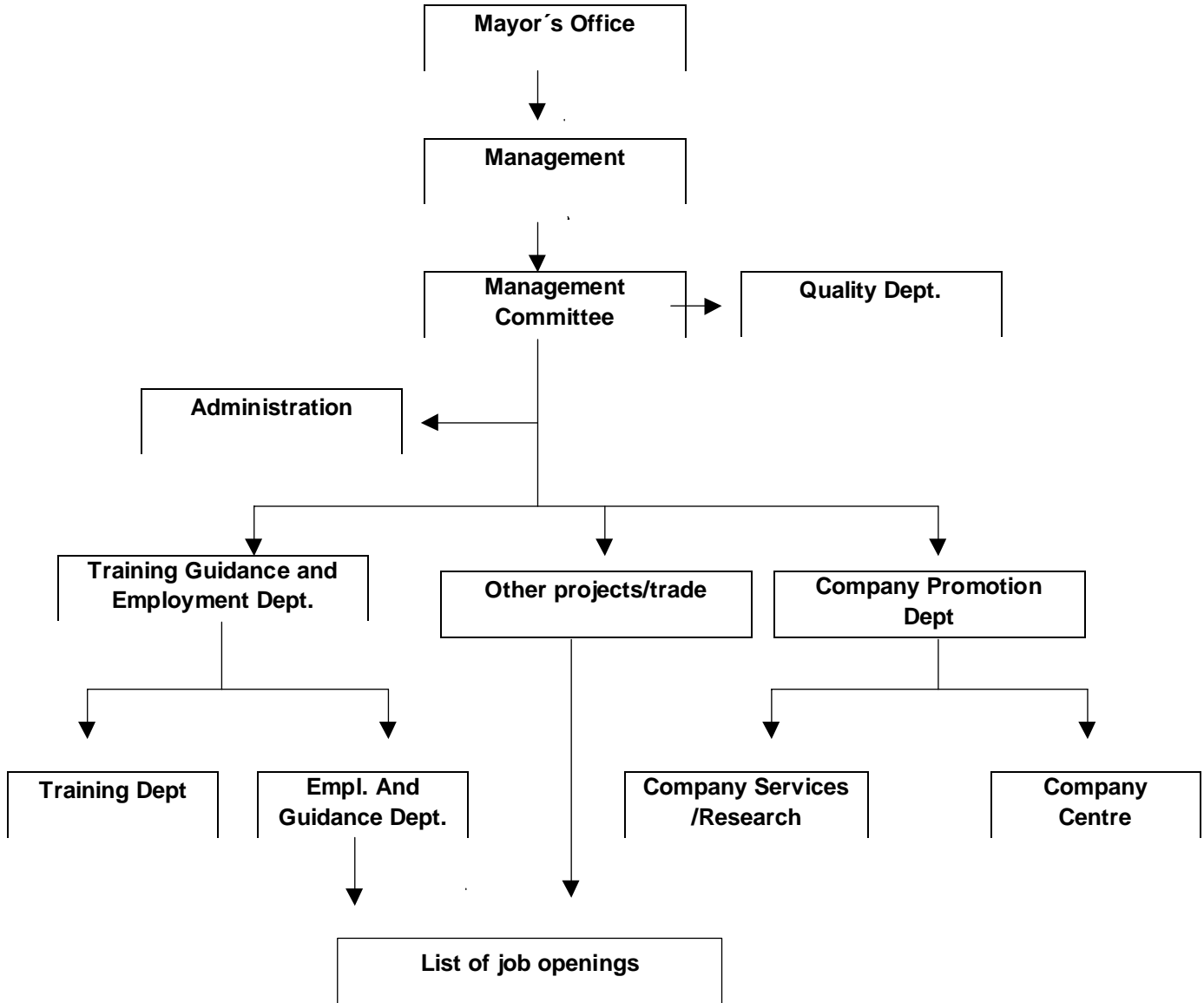
Next, the areas linked to the target beneficiaries should be identified.

Finally, a flow chart should be compiled outlining the tasks to be carried out by the different technical groups, and defining their relation with other members of the local administration or external stakeholders.

FLOW CHART
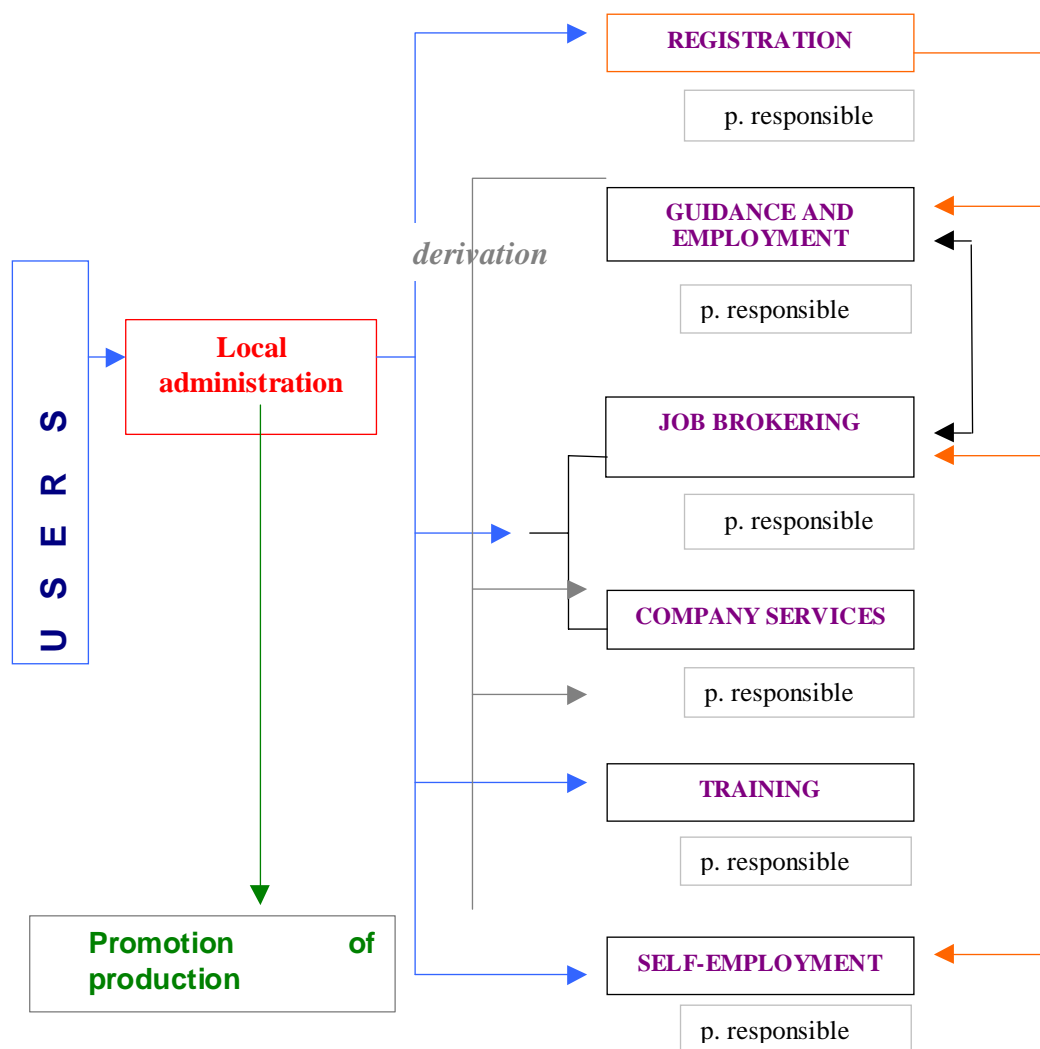
2.3. ESTABLISHING OBJECTIVES

The **ultimate objective** is to unify the management of all the information into a single platform.

Other objectives include:

- To automate the management of all activities related to the promotion of employment and the economic development of cities.

- To gather and use the information required regarding external associations with whom activity agreements have been signed.

- To obtain all the information possible regarding the activities of the local administrations within the tasks related to the promotion of employment and economic development, in their different areas of activity.

- To make the management indicators required for an ongoing, continuous assessment of the established objectives available to the organisation.

- To develop a medium which will enable relevant information to be registered, systematised and used in an operational manner, and to make it available to staff.

- To develop an open information system, available to all.

- To obtain relevant information that can be used to analyse the job market and the profile of the unemployed population, as well as attitudes to job search activities, in order to determine possible areas of activity.

2.4. DETERMINATION OF THE TECHNOLOGICAL ENVIRONMENT

This area should be developed by a computer consultancy firm. An example of a technological environment (that of the city of San Sebastián) would be as follows:

ASPECTS TO BEAR IN MIND IN RELATION TO INFORMATION PROCESSING.
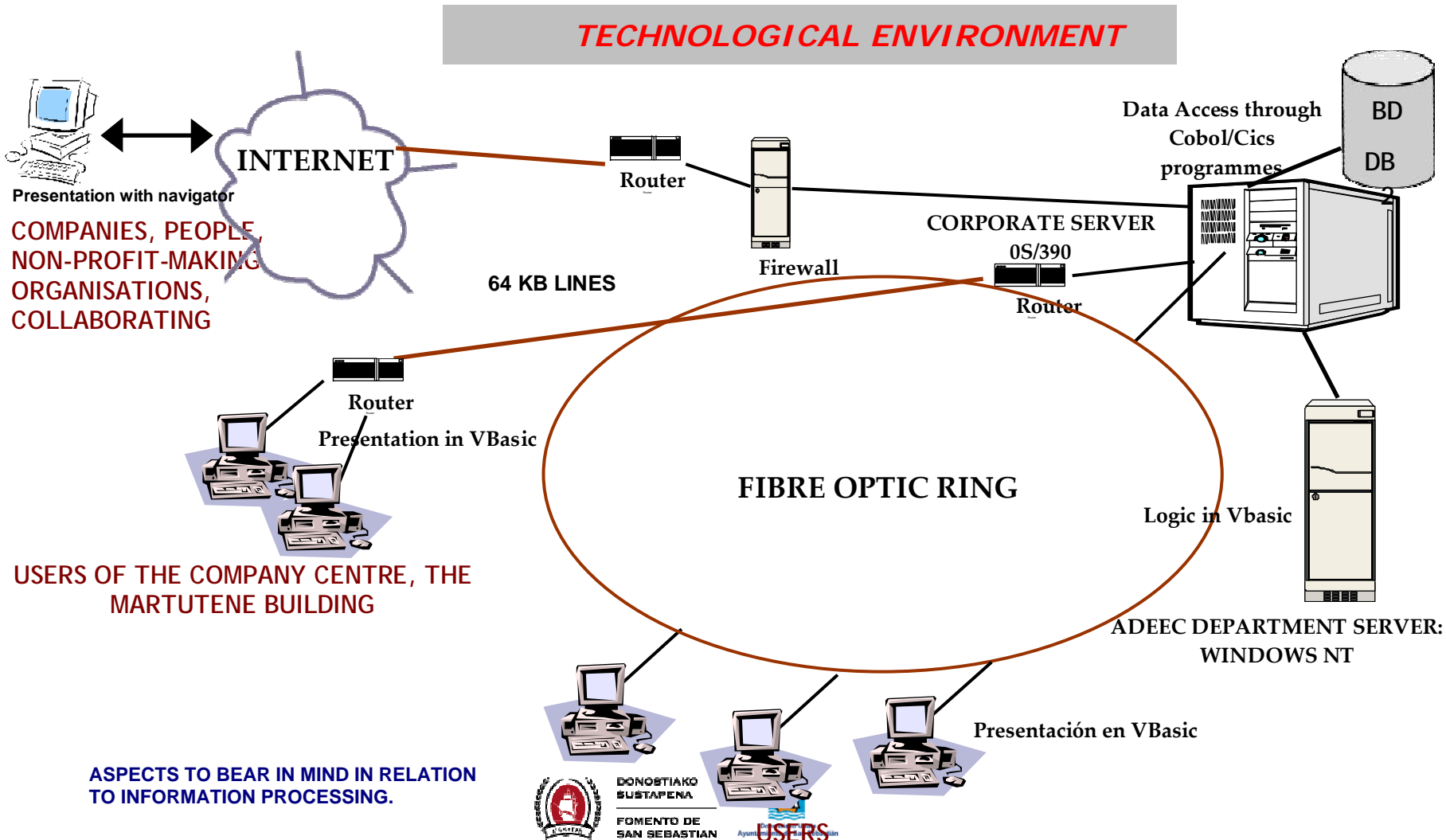
2.5. IDENTIFICATION OF SUBSYSTEMS.

Subsystems are identified on the basis of the different areas or policies implemented by the local administrations in relation to all the different activities aimed at promoting employment and economic development.

The following **subsystems** can be identified:

- Employment and Job Guidance
- Entrepreneurs
- Company Services
- Training
- Job Brokering

There is one series of user data that is **common** to all the subsystems, and a number of others that are specific to each one. An example of the common data collected from individuals is given below:

INTERVENTION-TASK	CARRIED OUT BY	INFORMATION GENERATED
INFORMATION	Administrative staff	• Personal details (Name, surname/s, etc.) • Areas of interest
REQUEST : register	Administrative staff	- Identification: name, age, gender, address. - Training details: qualifications and courses (date, centre), languages and computer skills (level and qualification). - Professional experience (company, activity, duration, position). - Employment situation: unemployed, reasons, duration, benefits.

2.5.1. EMPLOYMENT AND JOB GUIDANCE

This area is responsible for the management of all the processes and functions linked to Employment and Job Guidance. It encompasses all activities aimed at the unemployed population of the city, relating to information, guidance and support during the job search procedures. The technician responsible will decide upon the **specific data** to be gathered. As a guideline, however, the following data could be gathered in a table such as the one given below:

INTERVENTION-TASK	CARRIED OUT BY	INFORMATION GENERATED
INFORMATION	Administrative staff	
REQUEST		
REGISTER	Administrative staff	
MEETING	Administrative staff	• Date called • Date of interview • Service requested
INTERVIEW- DIAGNOSIS	Technical staff	1. Control data • Date and duration • Related programme 2. Employability and employment focus data • Current income and minimum needs • Availability (mobility, salary, timetable, working day) • Preferential jobs

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INTERVENTION-TASK	CARRIED OUT BY	INFORMATION GENERATED
GUIDANCE		
MOTIVATION	Technical staff	
DEFINITION OF A PERSONAL JOB-FINDING PLAN	Technical staff	1. **Control data** • Date and duration • Related programme 2. **Content data:** *Objectives and areas covered* • Identification of abilities and social and communications skills. • Identification of possible suitable jobs *Results* *Proposals*
JOB SEARCH TECHNIQUES	Technical staff	1. **Control data** • Date and duration • Related programme 2. **Content data** *Objectives and areas covered* • Tools offered (job search channels, CV, interview and letter of introduction) • Training in the use of these tools *Results* *Proposals*
DEVELOPMENT OF A JOB-FINDING PLAN	Technical staff	1. **Control data** • Date and duration • Related programme • *Objectives and areas covered* • Identification of possible jobs • Identification of those things preventing the candidate from finding a job *Results* *Proposals*

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2.5.2 ENTREPRENEURS

This area manages all the different subsidies aimed at promoting and aiding the setting up of new companies, and supports the definitive consolidation of recently incorporated firms. It is also responsible for offering advice and support to developers in order to help with the entire process of creating a new company. The technician responsible will decide upon the **specific data** to be gathered.

2.5.3. COMPANY SERVICES

This area manages business research activities and company services. Studies will be carried out of the business market, in order to enable the department to collaborate with different companies in which the need for training, guidance, human resources or other tasks managed by the local administration is detected. The technician responsible will decide upon the **specific data** to be gathered.

2.5.4. TRAINING

This area manages all the different training programmes, each with its own individual characteristics in accordance with the group at whom it is principally targeted. The technician responsible will decide upon the **specific data** to be gathered.

2.5.5. JOB BROKERING

This area oversees the process which aims to match job openings to suitable candidates. It is responsible for managing job offers, selecting suitable candidates, monitoring selection processes and carrying out business surveys, etc. The technician responsible will decide upon the **specific data** to be gathered.

2.6. MAKING THE INFORMATION SYSTEM AVAILABLE ON THE INTERNET

A study could be carried out of the possibility of making certain aspects or functions of the Information System available in totally open (Internet) or semi-open (Intranet) environments.

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