eman ta zabal zazu

universidad   euskal herriko
del país vasco   unibertsitatea

Departamento de Economía financiera II
(ECONOMÍA FINANCIERA Y CONTABILIDAD,COMERCIALIZACIÓN E INVESTIGACIÓN DE MERCADOS)

UNIT 1:
Marketing Research and the Marketing Information System (MIS)

Jon Charterina-Abando

CONTENTS:

I. Aims of the unit

II. Presentation

1.1.- Concept and components of a Marketing Information
      System
1.1.1.- Introduction. Information systems in an organization
1.1.2.- Definition and elements of a MIS
1.2.- The Internal Data Sub-system
1.3.- The Marketing Intelligence Sub-system
1.3.1.- Definition and importance
1.3.2.- Organization and functioning.

CONTENTS:

CONTENTS:

III. Summary and Conclusions

IV. Suggestions for further learning

I. Aims of the unit

I. Aims of the unit

1. To understand that without information it would be impossible to take clever marketing decisions.

2. To understand that information is a vital resource that has to be adequately administered.

3. To know what does a MIS consist of, its main components and the different types of information.

4. To know the potentials of marketing intelligence, internal data management, and marketing research tools.

5. To learn the basics of the marketing research process.

II. Presentation

1. Concept and components of a MIS
1.1. Introduction. Information Systems in an Organization

✓ Information has become a critical factor, a vital resource.

✓ Experience and Intuition are not enough if we are to take a decision.

✓ Companies are facing an ever more difficult environment.

Reasons for which information has become an essential resource:

1. There is less time to take decisions

2. Internationalisation of markets

3. Intensification of competition

4. Customers are ever more selective, demanding, informed and changing

5. Ubiquity of knowledge as a resource
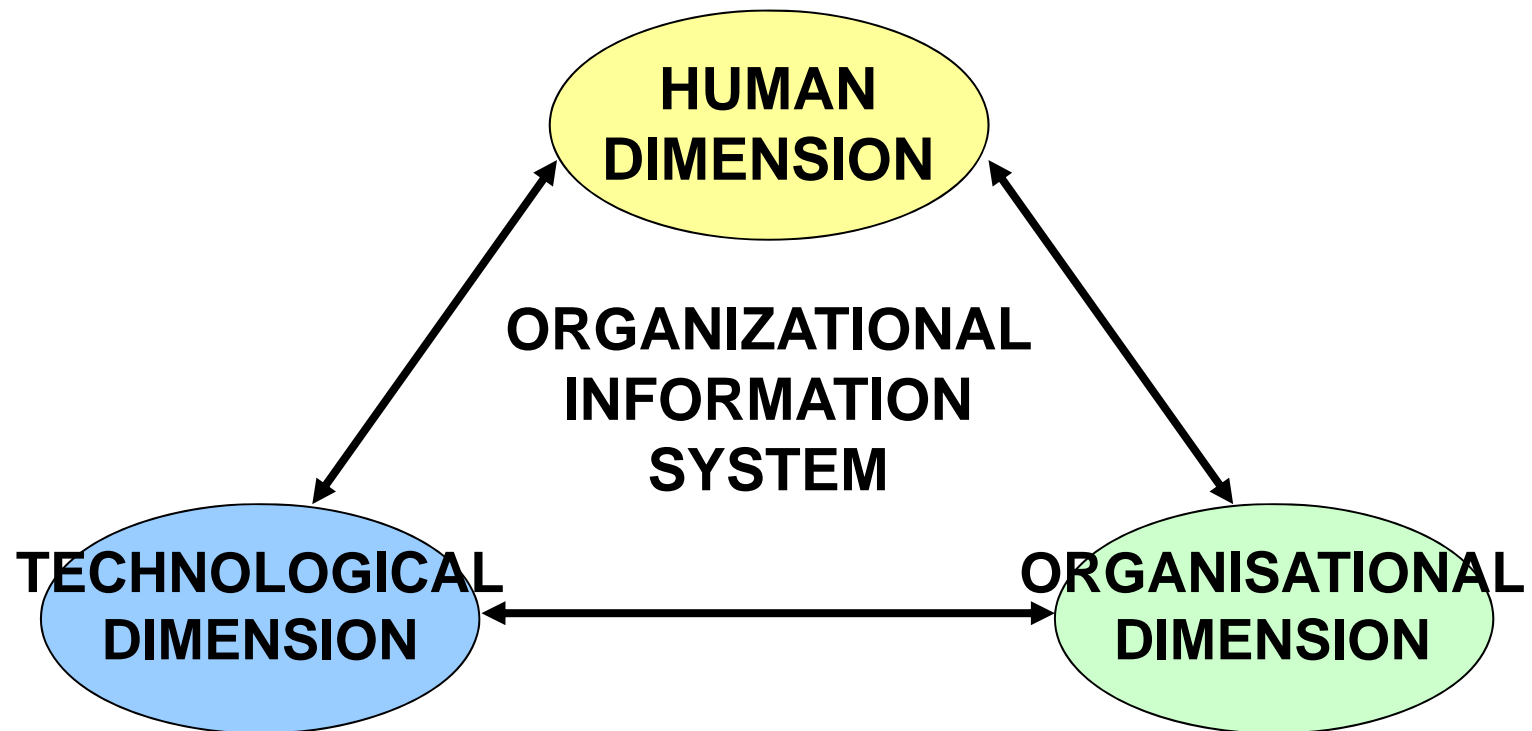
1. Concept and components of a MIS
1.1. Introduction. Information Systems in an Organization

Definition of an Organizational Information System:

Set of elements from the firm that interact among themselves, with the rest of the organisation, and with its environment, in order to provide to the managing staff with the information that is necessary to take decisions.

1. Concept and components of a MIS
1.1. Introduction. Information Systems in an Organization

FUENTE: Adaptación de GÓMEZ, A. y SUÁREZ, C. (2003): *Sistemas de Información. Herramientas prácticas para la gestión empresarial,* Ediciones Ra-Ma, p. 3
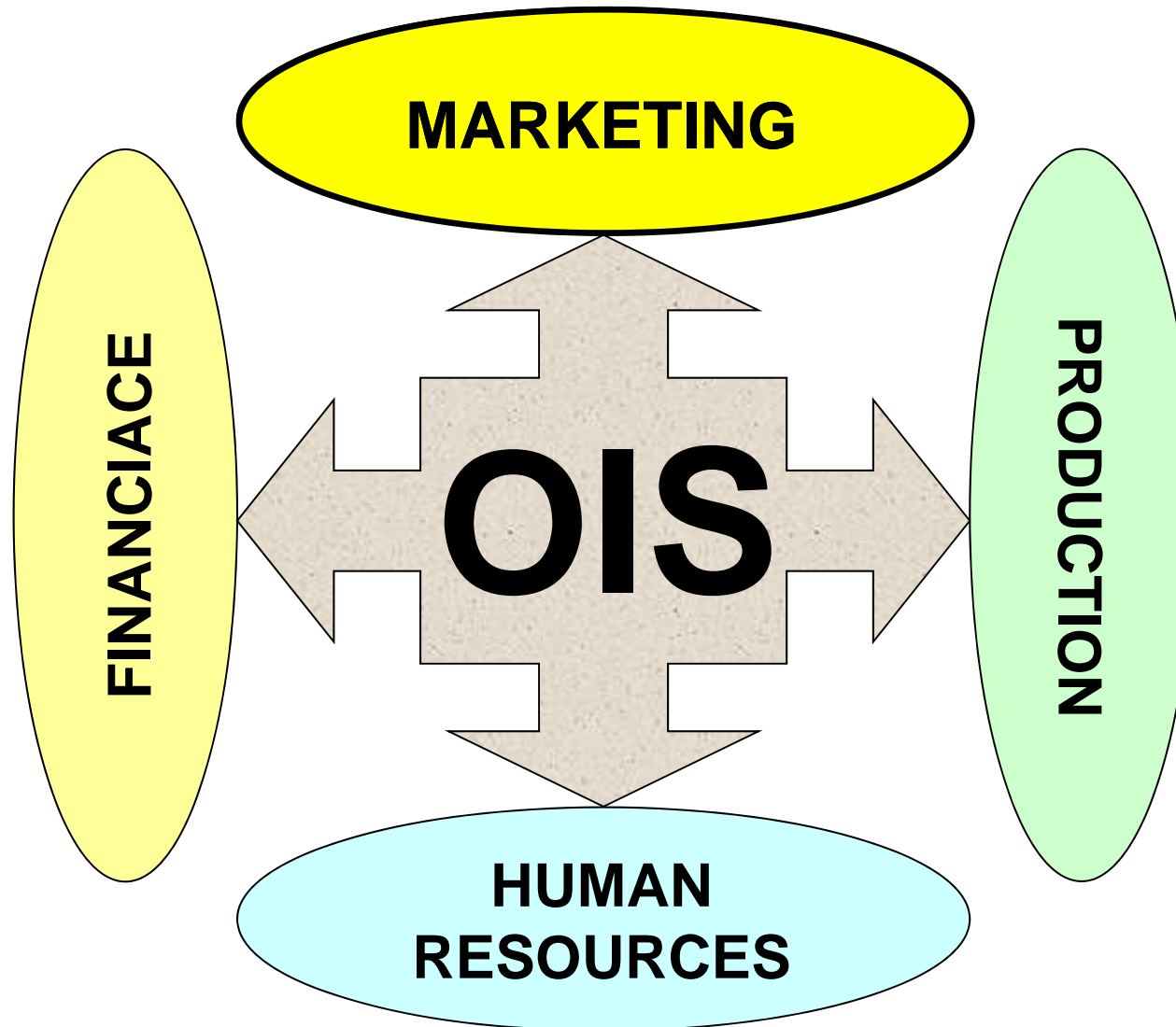
1. **Concept and components of a MIS**
   1.1. Introduction. Information Systems in an Organization

In an OIS, information from all the functional areas of the company doesn't have *necessarily* to be centralized and put as a single block. Rather, it can be separated in several sub-systems that are quite autonomous one from the other.

1. Concept and components of a MIS
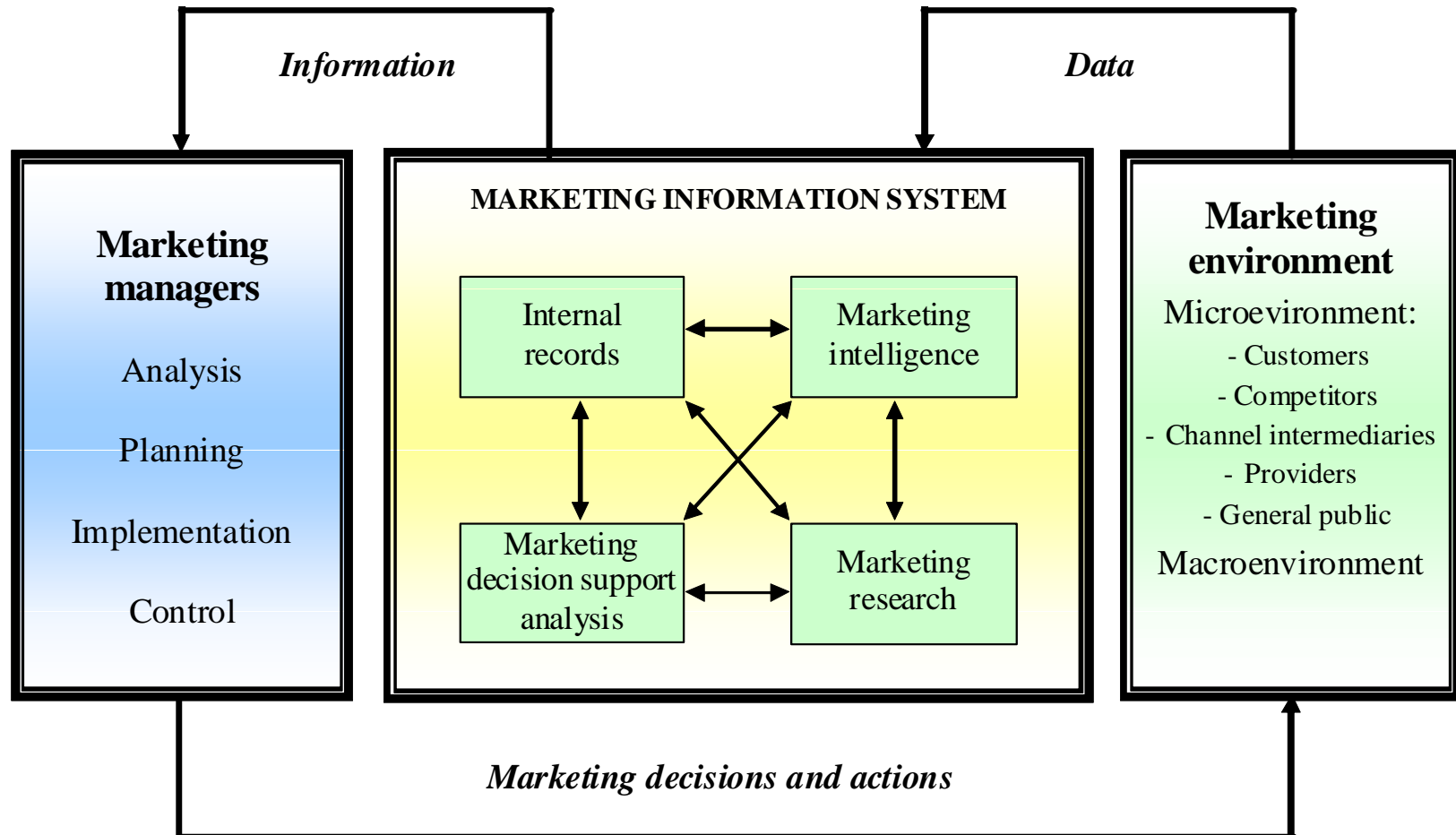## 1.1. Introduction. Information Systems in an Organization

1. Concept and components of a MIS
1.1. Introduction. Information Systems in an Organization

It is the set of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely and accurate information to marketing decision makers.

Information

Data

Marketing managers

Analysis

Planning

Implementation

Control

MARKETING INFORMATION SYSTEM

Internal records	Marketing intelligence
Marketing decision support analysis	Marketing research

Marketing environment

Microenvironment:
- Customers
- Competitors
- Channel intermediaries
- Providers
- General public

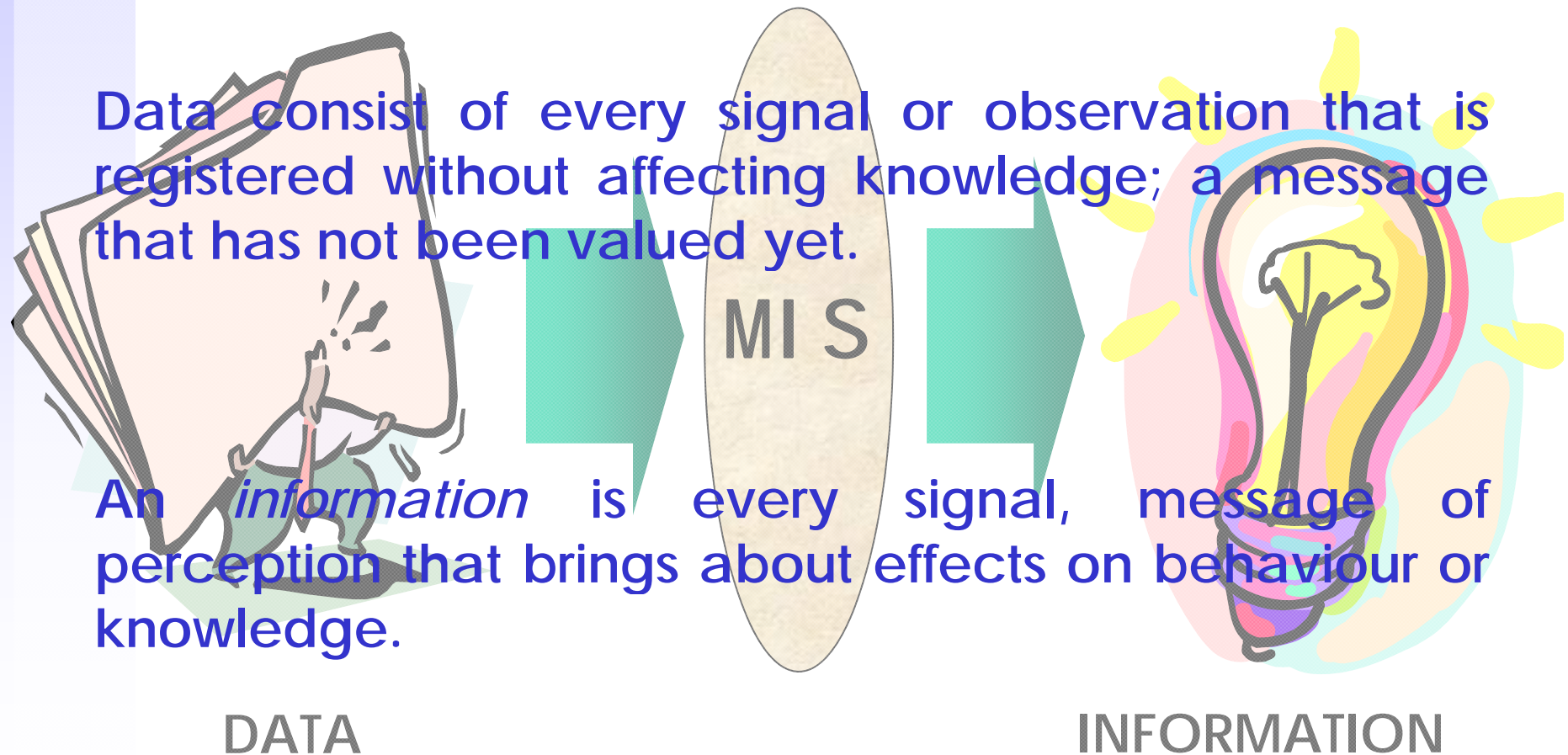Macroenvironment

Marketing decisions and actions

Source: KOTLER, P. (1991): *Marketing Management: Analysis, Planning, Implementation and Control*. 7th Edition, Prentice-Hall International Editions (Englewood Cliffs, NJ)

1. Concept and components of a MIS
     1.1. Introduction. Information Systems in an Organization

Definitions for DATA and INFORMATION:

Data consist of every signal or observation that is registered without affecting knowledge; a message that has not been valued yet.

MI S

An *information* is every signal, message of perception that brings about effects on behaviour or knowledge.

DATA   INFORMATION

Basic principles for arranging an effective and efficient MIS:
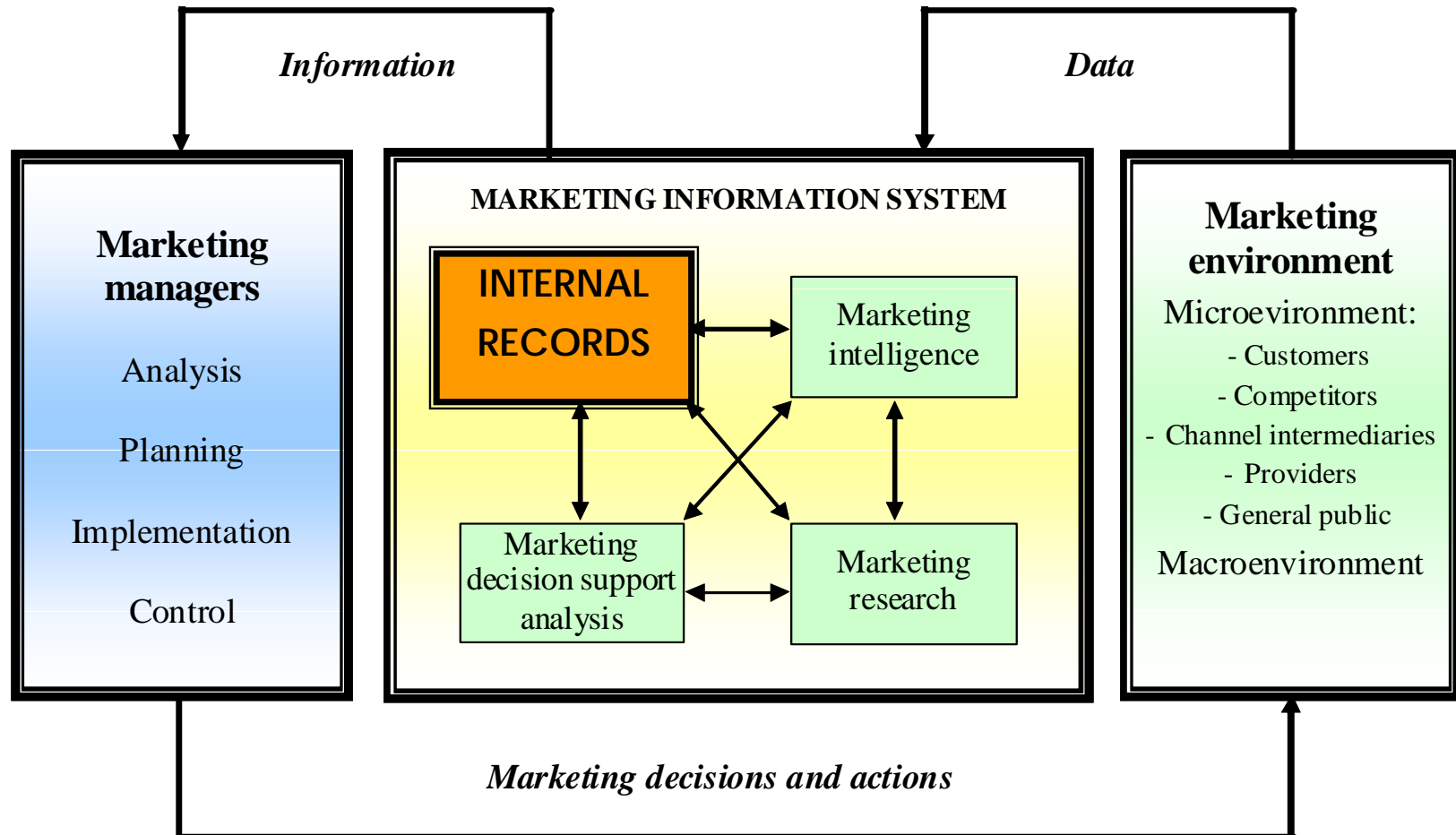
1. Determine which are the information needs.

2. Balance these needs with the resources and capabilities available in the firm.

1. Concept and components of a MIS
1.1. Introduction. Information Systems in an Organization

It is the set of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely and accurate information to marketing decision makers.

Information

Data

Marketing managers

Analysis

Planning

Implementation

Control

MARKETING INFORMATION SYSTEM

INTERNAL RECORDS

Marketing intelligence

Marketing decision support analysis

Marketing research

Marketing environment

Microenvironment:
- Customers
- Competitors
- Channel intermediaries
- Providers
- General public

Macroenvironment

Marketing decisions and actions

Source: KOTLER, P. (1991): *Marketing Management: Analysis, Planning, Implementation and Control.* 7th Edition, Prentice-Hall International Editions (Englewood Cliffs, NJ)

2. The Internal Record System

MAIN CHARACTERISTICS:
✓It deals with and provides the basic information on the commercial activity of the firm.

2. The Internal Record System

SOME BASIC DATA FOR MARKETING MANAGEMENT:

Customer's name and address

Reference No. and No. of Units

Date of order

Selling price. Applied discounts

Pre-paid amount

Shipping address

.   .   .

2. The Internal Record System

MAIN CHARACTERISTICS:

✓It deals with and provides the basic information on the commercial activity of the firm.

✓It the most basic part in a MIS. Without it, management would not be possible.

2. The Internal Record System

MAIN CHARACTERISTICS:

✓It deals with and provides the basic information on the commercial activity of the firm.

✓It the most basic part in a MIS. Without it, management would not be possible.

✓Its main information flows are :

- The Order-Shipping-Billing System

- The System of Sales Reporting

2. The Internal Record System

THE ORDER-SHIPPING-BILLING CYCLE:

➢ It is the flow of information related to the attention and selling to any customer, within the enterprise.

➢ It represents the core of the Internal System.

➢ Each company will have an Order-Shipping-Billing cycle according to its circumstances.

2. The Internal Record System

CUSTOMER DATABASES:

The improvements experienced in the Information System Technologies have made possible for many companies:

- A more intense information interchange with customers,

- A more complete knowledge on them,

- A means for their fidelity towards the company, and as a consequence,

- An opportunity to create and maintain a long-standing and stable relationship with them.

2. The Internal Record System

NOWADAYS, THE INFORMATION ABOUT CUSTOMERS THAT A FIRM CAN MANAGE IS MUCH LARGER THAN MERELY THE ORDER-SHIPPING-BILLING CYCLE

1. It does not necessarilly refer to a single transaction

2. It is a much more complete information

2. The Internal Record System

For example:

In a typical CURRENT CONSUMER DATABASE:	
Basic data on identification:	
Telephone	Address
Name	E-mail.
Socio-demographical data:	
Date of birth and age	Social class
Family type	Estimated income level
Categoría según el lugar de residencia	Profession
Data on product demand:	
Services or products not belonging to the firm,	Outlets used and usual buying process
But relevant for marketing policies	Time consumed. Usual date, hour and place
Media consuming habits	for his/her buys
Psychographic profile:	
Life-style category	Psychographic segment
Leisure habits	Most selected touristic destinations
Pre-sale communication actions:	
Total No. of pre-sale contacts	Promotion actions with this customer
Type of information solicited	Response to marketing communication actions:
Communication channels used	e-mails, mail catalogues, promotoinal letters…
Clasificación según objetivos relacionales:	
Life value of this customer	
Customer life-value category	

2. The Internal Record System

For example:

In a typical CURRENT CONSUMER DATABASE:	
Relevant Data on Buying behavior:	
Classification from type of prods. and services bought by this customer	Time elapsed from 1st purchase.
	Customer's buying record
Frequency of buys	Total amount of buys, expenditure/time unit...
Data on post-sale behaviour:	
Returned buys	Satisfaction index
Reasons for return	Recency index
Information on finance:	
Payment mode	Incidencias de débito producidas
Bank	Compra aplazada sí/no
Classification according to Risk of non-payment	
Customer's Beliefs, attitudes and perceptions on his/her relation to the company:	
Company's General image	Image of competitors
Complaints and suggestions	
Post-sale communication record:	
Communication channels used by customer	Cost and Effectiveness on communication
History of Calls initiated by the firm	

FUENTE: Adaptación de REINARES y PONZOA (2002), pp. 239-240

2. The Internal Record System
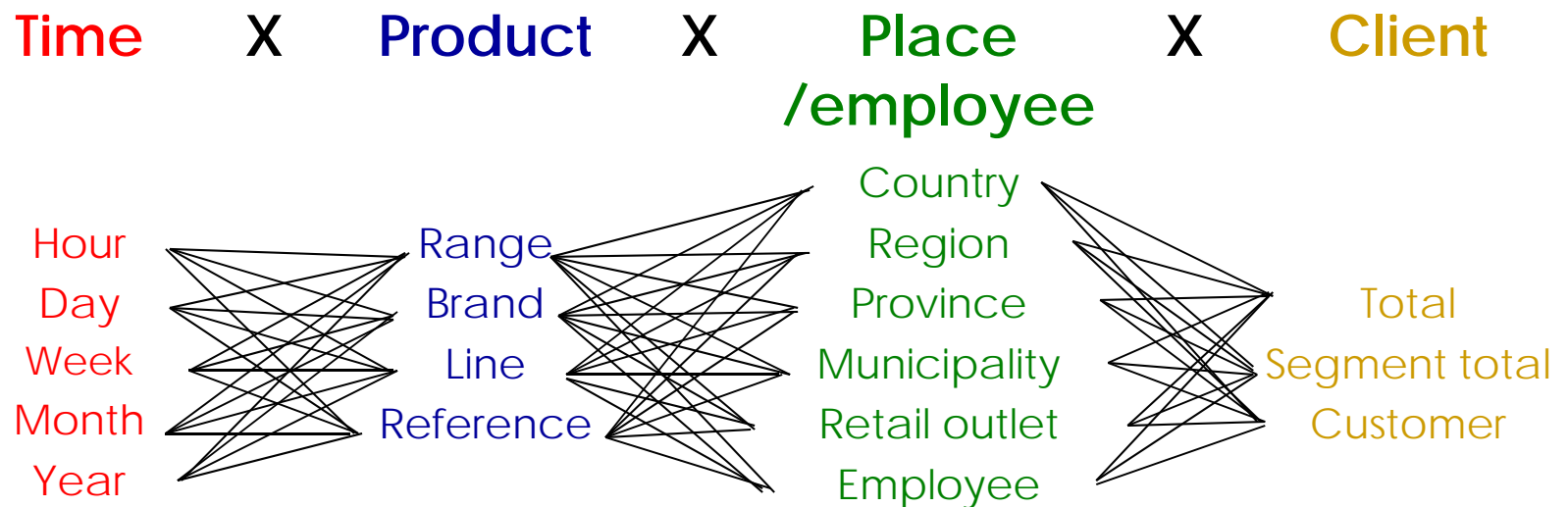
THE SALESFORCE REPORTS:

➢ They ussually are documents on the firm's marketing data, that have been qualified by the salesforce

➢ They deal with data on: productivity analysis, market response indicators, decisions on prices, investments on advertising, public relations and communication in general, promotions, etc.

➢ They cover a great amount of the Marketing Management team's information needs.

➢ The required information can be broken down into areas, products, etc.

2. The Internal Record System

With the help of a good IRS, it will be possible to get information and knowledge on these <u>variables</u>:
- **Sales,**
- **Gross and Net profits,**
- **Applied discounts,**
- **Communication costs,**
- **Prices,**
- **etc.**

...and combine them together:

Time   X   Product   X   Place /employee   X   Client

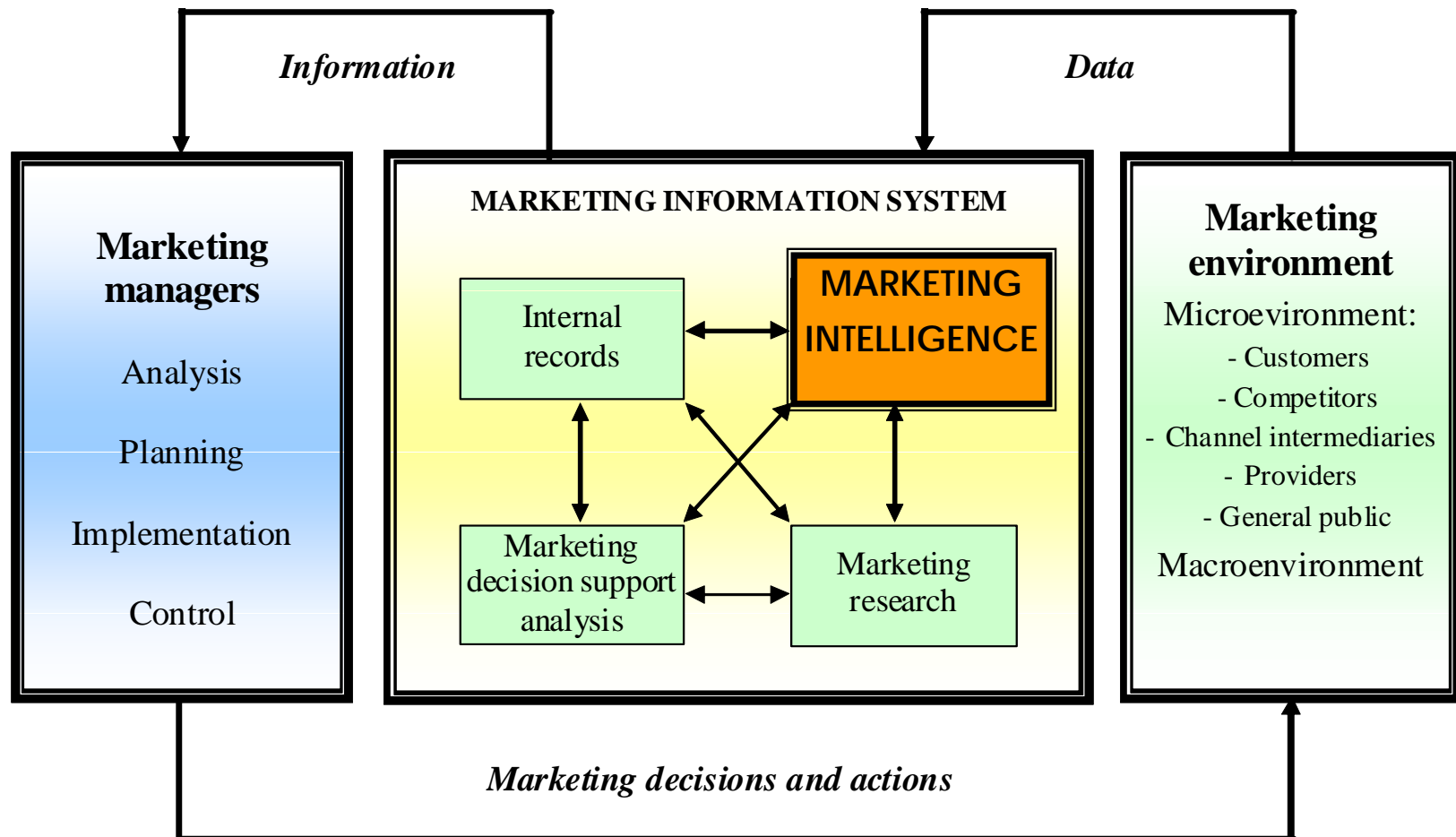| Time	Product	Place /employee	Client
Hour	Range	Country	
Day	Brand	Region	Total
Week	Line	Province	Segment total
Month	Reference	Municipality	Customer
Year		Retail outlet	
		Employee	

1. Concept and components of a MIS
1.1. Introduction. Information Systems in an Organization

It is the set of people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely and accurate information to marketing decision makers.

Information   *Data*

Marketing managers	MARKETING INFORMATION SYSTEM	Marketing environment
Analysis	Internal records ↔ **MARKETING INTELLIGENCE**	Microenvironment:
Planning		- Customers
Implementation	Marketing decision support analysis ↔ Marketing research	- Competitors
Control		- Channel intermediaries
		- Providers
		- General public
		Macroenvironment

Marketing decisions and actions

Source: KOTLER, P. (1991): *Marketing Management: Analysis, Planning, Implementation and Control.* 7th Edition, Prentice-Hall International Editions (Englewood Cliffs, NJ)

The firm will have to be capable for detecting every change signal from the environment, as well as controlling the day-to-day activities of the most outstanding actors inside and outside its economic sector

Being capable for reacting on time thanks to an alert system that keeps an eye on every news that is relevant for the company

3. The Marketing Intelligence System
3.1. Definition and Relevance of the MItS

DEFINITION:

It is the set of sources and tools that make it possible for the marketing managers to get continuous information on the evolution from the environment.

3. The Marketing Intelligence System
3.1. Definition and Relevance of the MItS

What does it consist of?

It does not only consist on *watching.* Also, it deals with *analyze, spread* y and *propiciate* the correct decision-taking in response to whatever the object of vigilance.

Vigilance

Intelligence

Observation

Analysis

Precise Diffusion

Use
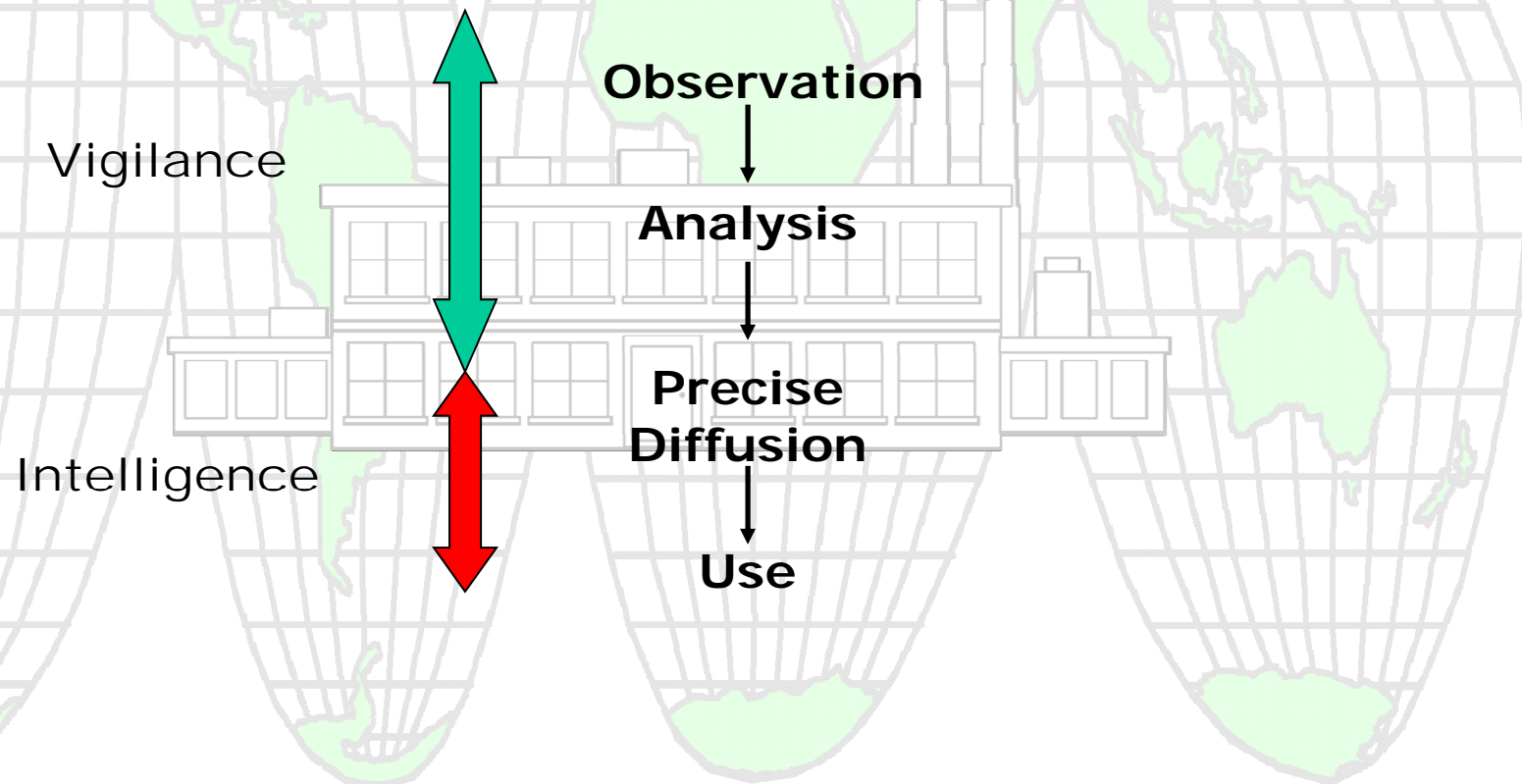
3. The Marketing Intelligence System
3.1. Definition and Relevance of the MItS

Main Reasons for establishing a MItS:

To Anticipate: Detect changes: New technologies, machines, products, makets, competitors...

To Reduce risks: Detect threats, such as attempts of illegal imitation, new products, legislation, alliances, inverstments...

To Progress: Detect the firm's own lags comparing to its competitor's, its produce's requirements or the needs from its customers...

To Innovate: Detect ideas and new solutions; economies of scale and scope, opoortunities for savings in R&D...

To Cooperate: To know new partners and intermediaries; to put in contact with prescriptors (experts), suppliers and providers ...

3. The Marketing Intelligence System
3.1. Definition and Relevance of the MItS

Some questions on MItS and intelligence in general:

*What's the material object of the MItS?...i.e. What do we have to watch?...*or What information do we have to look for?

Which are the sources of data? Where do we have to look for them?

How do we have to analyze and order that information?

Whom within the firm do we have to pass the information?

How to promote the implication from the personnel?

What resources are we going to put for the activity of intelligence?

3. The Marketing Intelligence System
3.2. Organization and running of the MItS

In a MItS it will be necessary to concrete:

- The contents of the activity of surveilance
- The sources of information
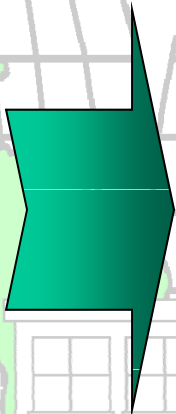- The tools and resources

3. The Marketing Intelligence System
3.2. Organization and running of the MItS

The contets of surveilance:

Which contents?

In general, all the factors from:

Macro-environment

Micro-environment

...in what concerns to Marketing management.

3. The Marketing Intelligence System
3.2. Organization and running of the MItS

The contets of surveilance in a MItS:

Very specially in terms of:

- ✓ *The main objectives;*

- ✓ *The strategy selected for them;*

- ✓ *The resources and capabilities available to fulfill them;*

- ✓ *Their strategy for the future.*

3. The Marketing Intelligence System
3.2. Organization and running of the MItS

The information sources for a MItS:

- General and specialized publications;
- Research institutes;
- Competitors' activities, such as their shareholders' meetings;
- Annual reports, balance sheets, company's results, etc;
- Former employees from competitors;
- Supply chain members (providers, wholesalers);
- The marketing channels (distributors, retailers or other);
- Official Registries (Merchant, Real estate, Patent office…);
- Sectorial or government information agencies;
- Competitors' advertising, products bought to them for their analysis;
- Sectorial studies;
- etc.

3. The Marketing Intelligence System
3.2. Organization and running of the MItS

Tools and resources for a MItS:

Technical resources, procedures and people that is dedicated to doing the activities of which the intelligence consists.

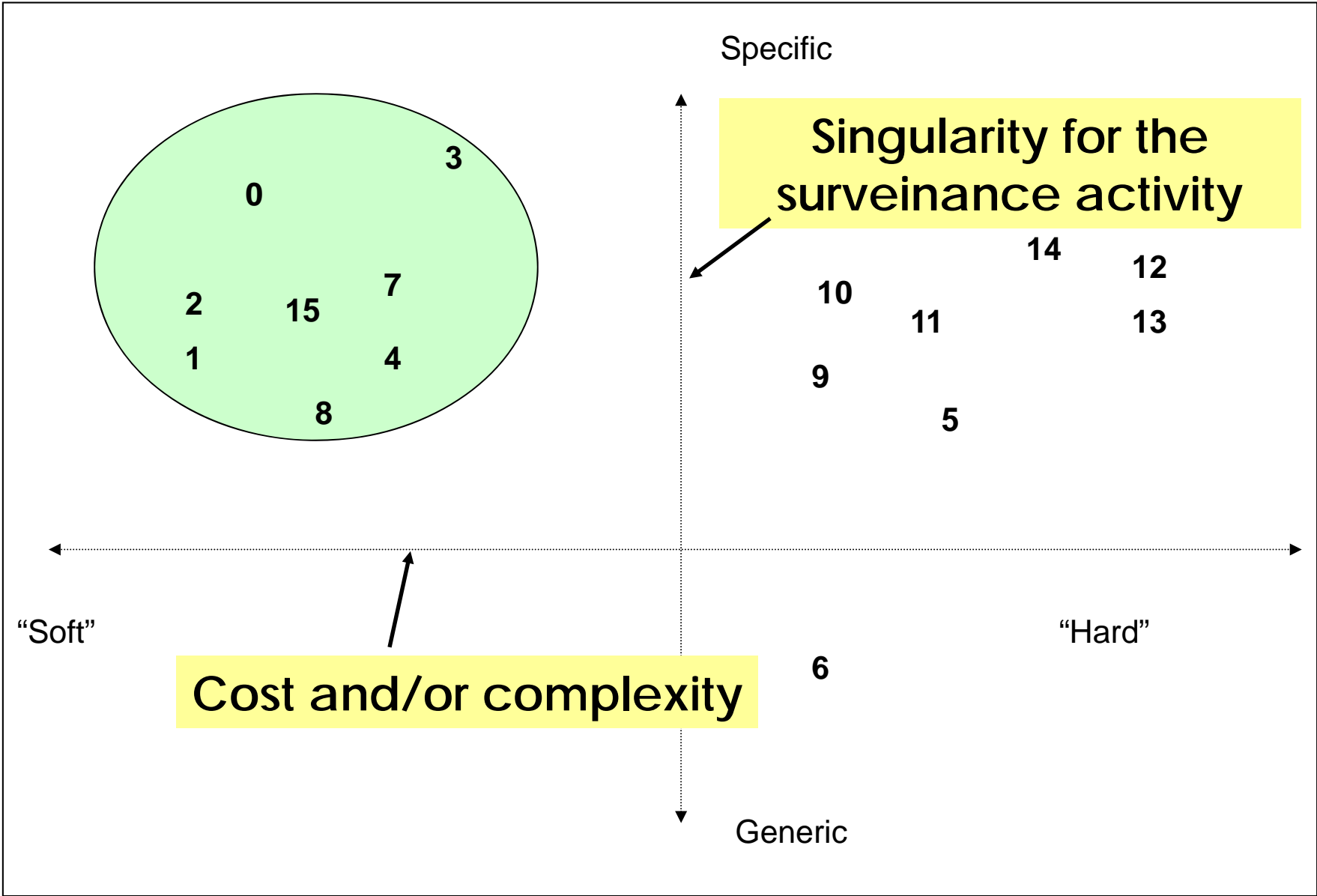# 3. The Marketing Intelligence System
3.2. Organization and running of the MItS

In fact, the MItS, as a differentiated activity, deals more with a conceptual issue. In practice, the MItS tasks are put together with the rest of the intelligence activities.
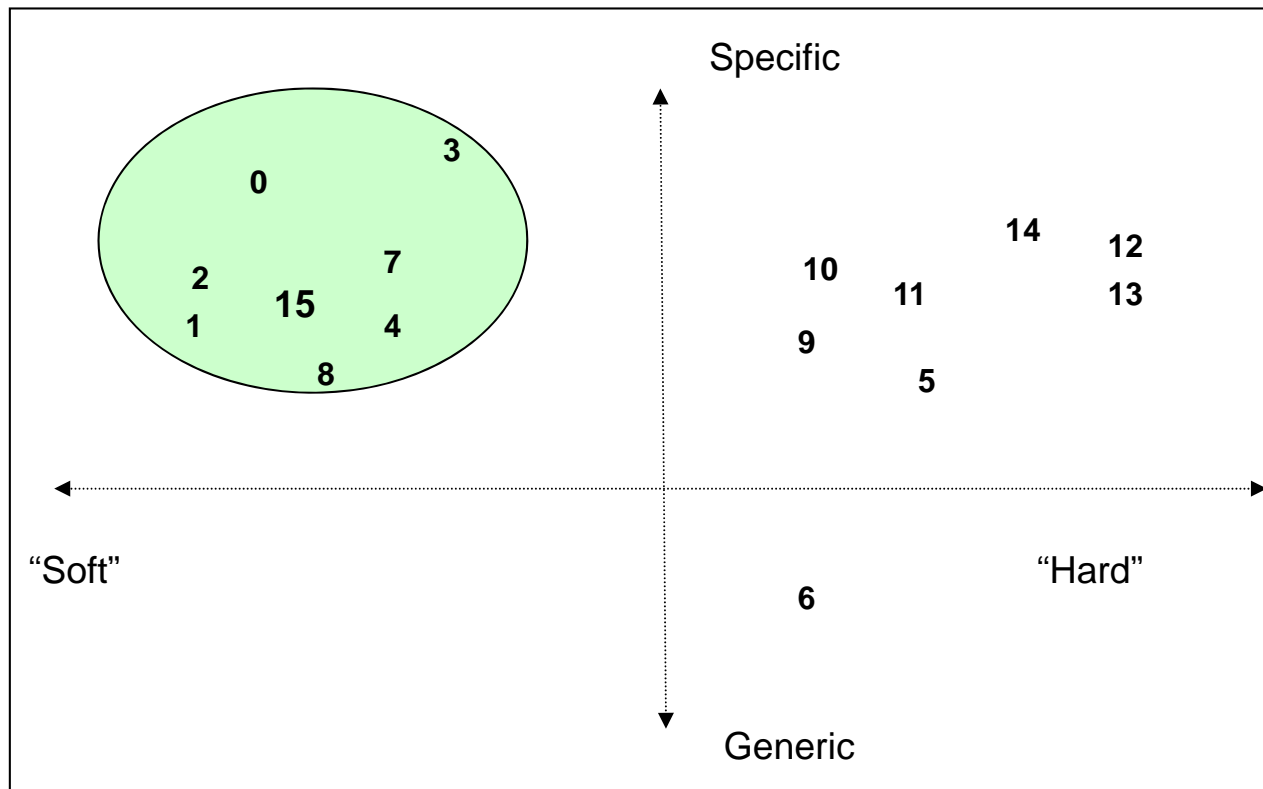
As a consequence, it is advisable to count with a multidisciplinary team lead by a manager who is experienced in the industry in which the company operates.

Resources and tools for the MItS:

Specific

Singularity for the surveinance activity

3

0

14

12

10

7

11

13

2

15

1

4

9

8

5

"Soft"

"Hard"

Cost and/or complexity

6

Generic

Resources and tools for the MItS:

Specific

3

0

14   12

10   7

11   13

2

15   9

1   4

8   5

"Soft"   "Hard"

6

Generic

(0) **Basic implication in the national scientific community**
(1) **Shared File of experts** *(intranet)*
(2) **Common file on alert signs to be gathered**
(3) **Experts' opinion management techniques (mini Delphi,interviews...)**
(4) **Recognision and surveilance of critical factors**
(5) Web of Watchers
(6) Surveilance and Intelligence coordinator
(7) **Subcontract patent surveilance and analysis**
(8) **Access to electronic information (the internet: *News,* lists...)**

(9) Internal patent analysis
(10) Subscription to Internet databases
(11) Implication in the activities of the international science and technology communities
(12) Multi-option analysis: scenarios, simulations, Delphi...
(13) Trend analysis: Regression, qualitative extrapolation ...
(14) Technological 'Scoutism'.
(15) REPORTS FROM THE SELLING STAFF

FUENTE: Adapt. de PALOP y VICENTE (1999), p.51

4. The Marketing Research System
4.1. Definition

Definition:
It is the set of people, resources, and processes aimed at <u>defining, gathering analyzing and interpreting data on specific events</u>, that can only be tackled on an *ad hoc* basis, with the objective <u>to give Marketing managers guidance on their decisions</u>.

4. The Marketing Research System
4.2. General objectives and conditions

General objetives:

➢ To diagnose the information needs that are specific for the Marketing management staff

➢ To give support to the task of identifying the marketing opportunities and threats

➢ To give support to the task of evaluation of alternative decisions

4. The Marketing Research System
4.2. General objectives and conditions

General conditions for every MR project:

➢ **Relevance:** It must be aimed at the solution of management problems or at least provide gidelines to action

➢ **Opportunity:** Results available by the moment of taking decisions

➢ **Efficiency:** Benefits greater than cost/effort

➢ **Accuracy:** Provide precise results and guidelines

In some cases these aims could be incompatible

4. The Marketing Research System
4.3. General types and applications

There are several classification criteria, this being a sign of the enormous amount of concepts and tools contained by the Marketing Research System.
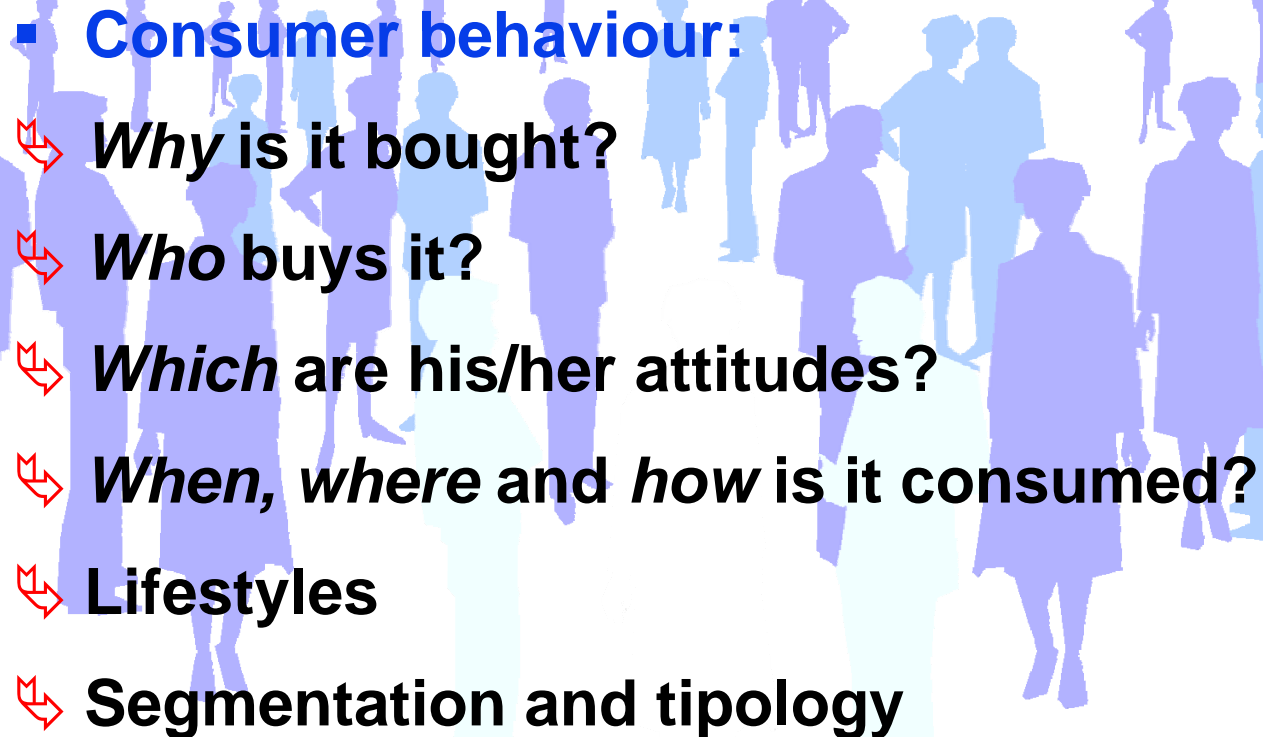
4. The Marketing Research System
4.3. General types and applications

CRITERIA	TYPES OF MARKETING RESEARCH
ACCORDING TO THE GATHERING AND ANALYSIS TECHNIQUE USED:	- Qualitative - Quantitative

ACCORDING TO THE DESIGN OF THE RESEARCH:	- Exploratory - Conclusive:
	  - Descriptive
	    - Cross-sectional
	    - Long-Sectional
	  - Causal
	    - Cross-sectional
	    - Long-Sectional

ACCORDING TO THE SOURCE OF THE INFORMATION USED:	- Desk research - Field research - Mixed
ACCORDING TO THE APPLICATION FOR WHICH IT IS DONE:	- Consumer behaviour - Demand and sales - Products and services - Communication activities - Distribution - Other

4. The Marketing Research System
4.3. General types and applications

■ **Consumer behaviour:**

⇨ *Why* is it bought?

⇨ *Who* buys it?

⇨ *Which* are his/her attitudes?

⇨ *When, where* and *how* is it consumed?

⇨ Lifestyles

⇨ Segmentation and tipology

4. The Marketing Research System
4.3. General types and applications

■ **Research on demand and sales:**

↳ **Potential demand**

　Total demand of a product for a company
　Total demand of a product for a sector for market
　Average potential consumption by a customer
　Demand by geographic area...

↳ **Market shares**

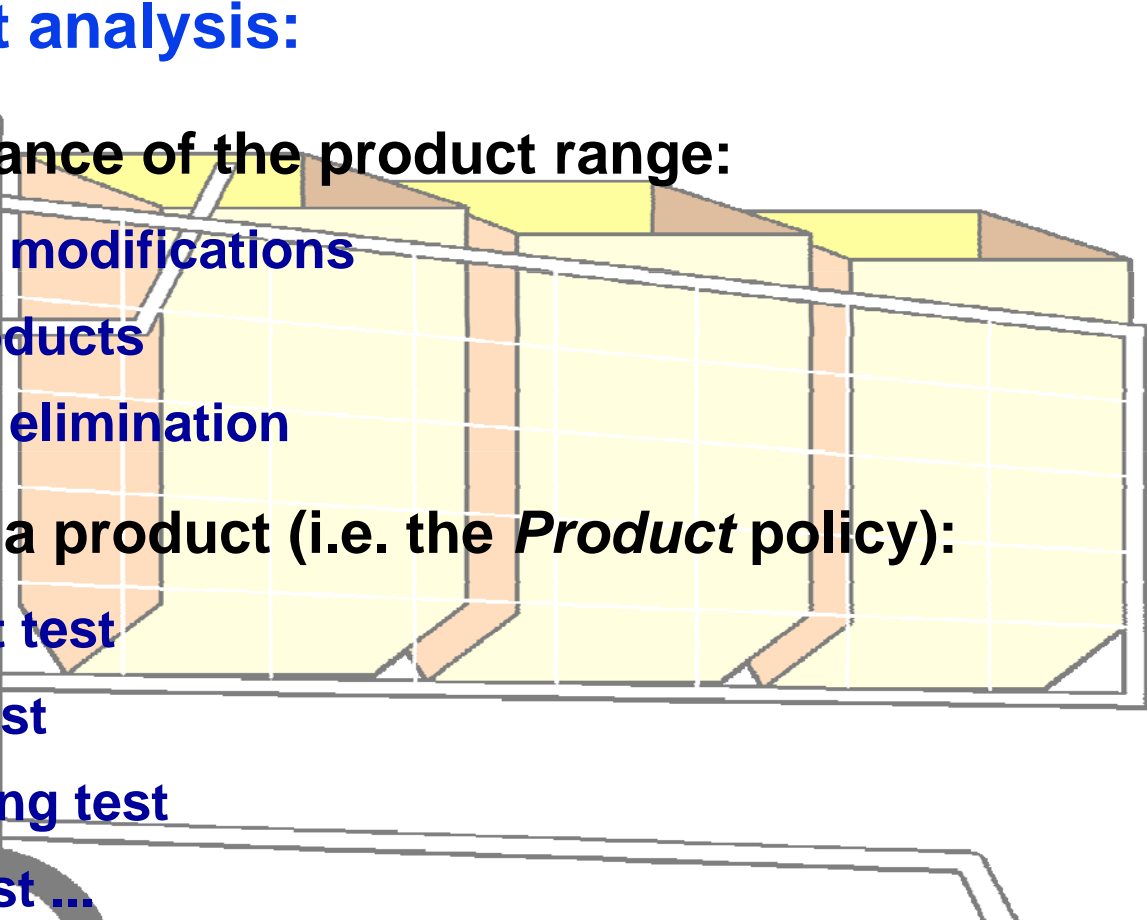　**Each brand's sheare in the market**

↳ **Sales forecasts**

　Future sales
　Evolution and trends

4. The Marketing Research System
4.3. General types and applications

▪ **Product analysis:**

↬ **Maintenance of the product range:**

Product modifications

New products

Product elimination

↬ **Parts of a product (i.e. the *Product* policy):**

Concept test

Name test

Packaging test

Blind test ...

↬ **Image, positioning and identity of a product or brand**

4. The Marketing Research System
4.3. General types and applications

■Research on Communication:

✍**Influence on behaviour. Attitudes and opinions towards advertising messages**

✍**Measure of advertising effectiveness:**

  Advertising pretests and postests

  Relations between investement in advertising and sales

✍**Budget allocation**

✍**Selection of message, the media...**

✍**Media audience**

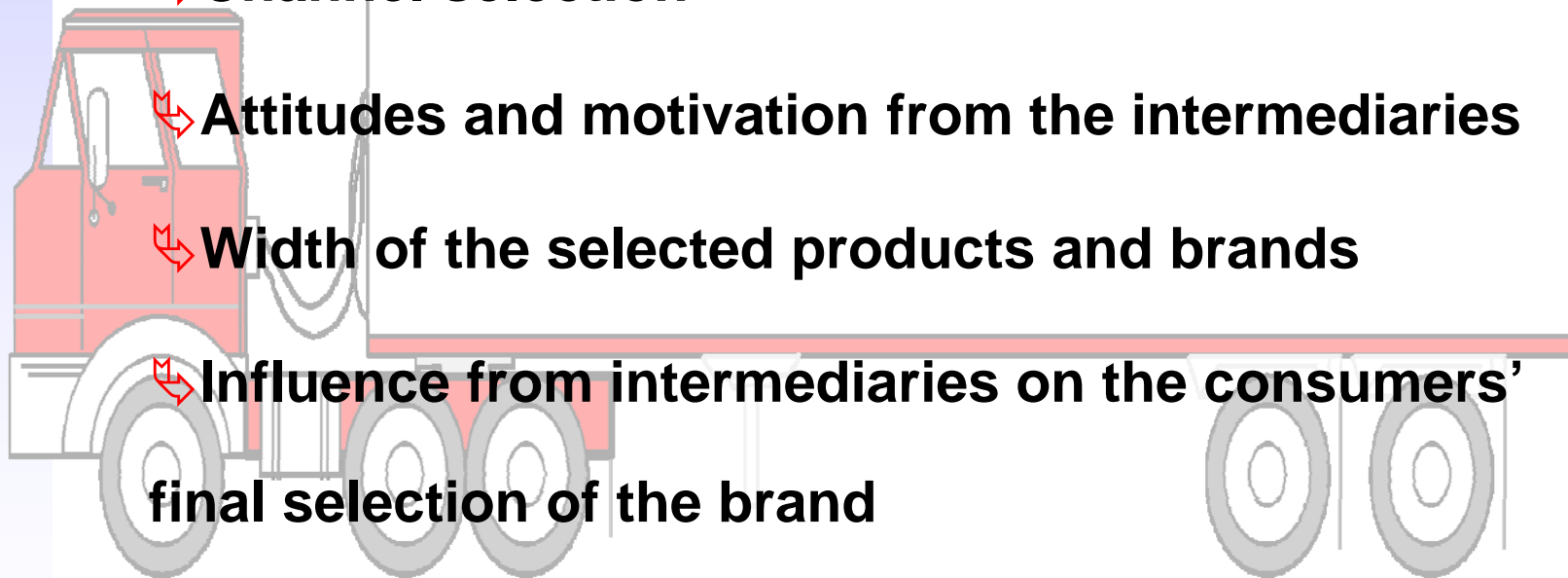# 4. The Marketing Research System
4.3. General types and applications

Analysis of distribution:

▷ **Channel selection**

▷ **Attitudes and motivation from the intermediaries**

▷ **Width of the selected products and brands**

▷ **Influence from intermediaries on the consumers'**

final selection of the brand

4. The Marketing Research System
4.3. General types and applications

- **Analysis of competitors:**

  ⇨ **Image and positioning of their brands**

  ⇨ **Segments covered by them**

  ⇨ **Set of direct and indirect competitors**

  ⇨ **Set of present and potential competitors**

  ⇨ **Competitors in new markets, products...**

4. The Marketing Research System
4.3. General types and applications

■ **Research on the legal, economic and technological environment:**

↬ **Long range forecasts for the industry**

↬ **Influence of technology on the market**

↬ **Changes in the legal and institutional environment**

↬ **Socio-demographical, cultural changes, etc**

4. The Marketing Research System
4.4. Organization and running

Two options:

1ª. Assume the MR activity

2ª. Outsource it: The most common option, especially for SMEs

In fact, today all the firms subcontract some of the tasks of the MR process, and even the whole research

4. The Marketing Research System
4.4. Organization and running

Two options:

   1ª. Assume the MR activity

   2ª. Outsource it

...and two conditions, in case of having an own MR department or section in the organigram:

   1ª. Independencce from the Marketing management

   2ª. An *staff* sort of relationship dependent only from the General management
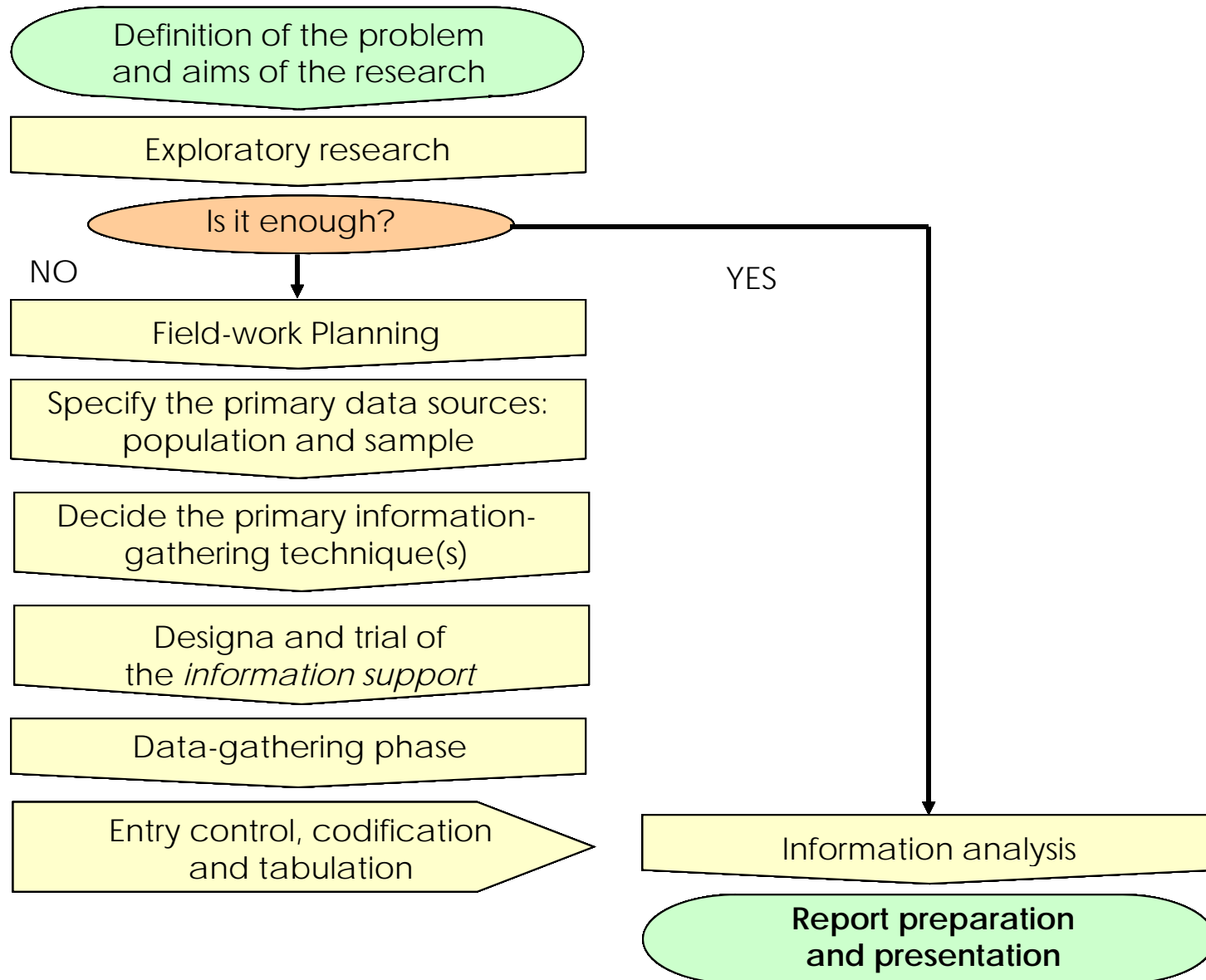
4. The Marketing Research System
4.5. The Marketing Research process

Considerations regarding the cost and time:

1. It is always necessary to evaluate costs in a relative manner

2. It is vital to adjust the research to the available time

3. A research cannot be programmed in a rigid manner. It is necessary some flexibility

4. The Marketing Research System
4.5. The Marketing Research process

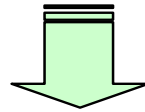# 4. The Marketing Research System
4.5. The Marketing Research process

ORIGIN	PREEXISTENCE	
	PRIMARY	SECUNDARY
INTERNAL	- Opinions from the workforce - Messages from salespeople	Company accounts Marketing Databases
EXTERNAL	- Surveys to customers - Interviews to providers and other members of the channel - Views from 'experts' - Studies contracted by groups to which the firm belongs - Information taken in trade-shows, sectorial meetings, simposiums...	- Magazines, specialized or common press. - Studies contracted by public bodies. - Information from providers: on their own products and their competitors', on our own comptetitors' produce... - Information from distributors, etc.

4. The Marketing Research System
4.5. The Marketing Research process

Sampling techniques

PROBABILISTIC	NON-PROBABILISTIC
Characteristics: ▪ Sampling units are randomly selected. ▪ Probability to become a sample member is known and equal for every member of the population. ▪ It is possible to limit the sampling error, because it is built on the statistical procedures (probability).	**Characteristics:** ▪ Sample selection is not randomly made ▪ Impossible to determine with precision or limit the final sampling error because it is not based on probability theory.

- Simple Random Sampling
- Stratified Sampling
- Area or Conglomerate Sampling
- Bietapic Sampling
- Polietapic sampling, etc

- Convenience sampling
- 'Snowball' design
- Quota sampling, etc.

4. The Marketing Research System
4.5. The Marketing Research process

Time aspect	Other criteria	Techniques

Cross-sectional	With the collaboration from the sampling individuals to be studied	Mail survey
		Auto-administered surveys:
		    Ordinary (point of selling)
		    Email surveys
		    Internet surveys
		Telephone surveys
		    CATI
		Personal interview:
		    In-home, in-office
		    Street interview
		    CAPI

	Without their help	Observation
		    Quantitative, qualitative, structured…
		    Mistery shopper
		Experiments

Long-sectional	From the demand of the market	Omnibus survey Mail diary panels Scanner diary panels Tracking studies
	From the offer of the market	Retailer audits Presence in the selling point

4. The Marketing Research System
4.5. The Marketing Research process

CLASSIFICATION OF DATA-ANALYSIS TECHNIQUES:
1. **Univariate analysis:** Frequencies, central tendency measures, measures of dispersion and form, etc.
2. **Bivariate analysis:** Linear correlation, simple regression, mean equality tests, contingency tables, etc.
3. **Multivariate analysis:** Multiple regression, Factor analysis, Conglomerate analysis, Conjoint analysis, etc.

4. The Marketing Research System
4.5. The Marketing Research process

CLUES FOR THE RIGHT PREPATATON AND PRESENTATION OF REPORTS:

1. Adapt it to the public it is aimed to.

2. Give clues to make results understandable and conclusions evident.

3. Be comprehensive but concise at the same time .

4. Plan carefully the oral presentación . Use very visual (easy-to-see) illustrations and tables.

5. The Marketing Decision Support System

DEFINITION:
It is the set of statistical models and tools that, with the help of the IT resources, makes possible analyzing the data and helps to improve the marketing decision process.

5. The Marketing Decision Support System

Main parts of the MDSS:

1. Statistical (decision) models and techniques

2. Set of IT user-interfaces

5. The Marketing Decision Support System

What is a decision model?

It is a simplified representation of reality containing explicit instructions on:

➢ The aims for which it has been created,

➢ A set of axioms (suppositions),

➢ A set of variables, and

➢ The relations among these variables.

5. The Marketing Decision Support System

What is an statistical technique?

It's a procedure aimed to analyze large amounts of data, making it possible to extract coherent information, in order to give them a meaning.

These are the aforementioned statistical analysis techniques

5. The Marketing Decision Support System

Main parts of the MDSS:

1. Statistical (decision) models and techniques

2. Set of IT user-interfaces

➢ Software facitilies (interfaces) to visualize data and report results

➢ Databases

➢ Spreadsheets, tables, graphs, etc.

5. The Marketing Decision Support System

What is a software interface?

It is any software program useful to make it easyer the use of information that had been previously processed by means of decision models and statistical techniques

SUMMARY AND CONCLUSIONS:

1. Information is a vital resource that well deserves to be administered in an efficient and effective manner.

2. The MIS is a set of processes and resources with the end to cover the information required by marketing managers.

3. In a MIS there are four sub-systems: Internal Data, Intelligence, Marketing Research and Marketing Decision Support.

4. MR is a very valuable tool for Marketing management.