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Definition and Classification of Services

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Definition and classification of services M.Martini University of Milan July 1993

The international classification of productive activities, products, and consumption constitute an "conventional language" established in view of economic statistics. As with any language, classifications come about through rigorous comparisons, diplomatic mediation, and prudent compromises.

As with any language, a classification can be studied from different perspectives: you can consider its evolution over time, compare it with others, and analyze its logical structure.

This last point of view is taken into consideration by asking which are the explicit or inplicit criteria adopted in the definition and classification of the services.

The first section proposes a definition of services considered as "activities". The second explains the definitive and classification criteria for "productive activity" conceived as the transformation of physical objects, and for products represented as transformed physical objects. In section three, after demonstrating how such criteria do not apply to services, new criteria are proposed, derived from the theory of action. In the fourth, the criteria are applied to business services. In the fifth section presents research into Business Services using a "bottom-up" classification system. In the sixth section some research results are presented.

1 Definition of Services

1.1 The relationship between definition and classification is well expressed by Plato, who differentiates two procedures: "One way is to embrace something with a glance and reduce it to a unique form which is assorted and disseminated, so that by defining each aspect you obtain clarity about what you intend to teach (...); the other way lies in the ability to break-down the subject into species types, following natural lines of division, being careful not to chop the subject as would a bad butcher." (Plato, Phaedrus, 266d-e).

A definition itself, to the extent that it describes diverse aspects of an object, already contains the classification criteria for the object.

- **1.2** The production of goods and the production of services are undoubtedly two phenomena of the same genre: **productive economic activity**:
- An activity, namely a process, implying know-how and ability on the part of the agent, that is specialized (in theory, ability, and means) and is therefore repeatable and habitual.
- Economic because the Smith division of labor concept predicts the continual exercise of rational choice to allocate limited means toward many possible ends.
- Productive, because it adds value to the means.
- 1.3 But the **specific difference** between the productive economic activity of goods and that of services, which distinguishes two internally different phenomena of the same genre, must be well defined along the "natural lines of division" before proceeding with further subdivisions.

This avoids the lacerations of the bad butcher of which Plato speaks.

- 1.4 So just as in order to define and classify cats it is not enough to say they are not flowers, even if both can be purchased; to define and classify services it is insufficient to merely state that they are not goods (i.e. things that are tangible, transportable, durable, accumulable, extractable from the ground, or artificially producible), even if they also are supplied and demanded in the marketplace.
- 1.5 Unlike goods, services are not the result of an activity of transformation, but essentially consist of one person's activity on behalf of someone else.
- **1.6** The one that serves, the agent, whether a person, enterprise, or institution, intervene on behalf of another makes available his system of means (theory, experience, ability, and instruments).

1.7 The one that is served, the client, whether a person, enterprise, institution, collectivity, is a living organism that bears the functional needs and operates to satisfy them.

The service consists of intervenction, whether occasional or continual, to support the client by satisfying needs of maintenance, enhancement, development, and relation with other subjects.

1.8 The client is "real" and not potential or virtual with the production of an physical item. He is actively involved in the process, acting and interacting with the agent, putting into play something of himself, the system, or his own means.

2 Classification of Productive Economic Activities of Goods.

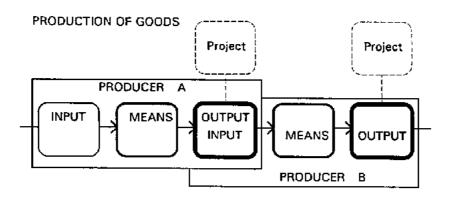
2.1 The productive activity of goods is seen from a technical standpoint as a process of transformation of things (mass and/or energy) by things (manpower or machines), and from an economic perspective as the "transformation of merchandise by merchandise" (Sraffa).

Both points of view are drawn from the theory of systems (Von Wright) that defines a process as a linear succession and cause of states in a "partially closed system".

An isolated system permits the definition of an initial state, of the intermediary stages, and of a final state. It is possible to predict the succeeding stages to any initial operation that puts the system in motion. The initial state and the operations are viewed as "causes" (as described by Hume) of the succeeding stage.

2.2 The activity of a goods producer can therefore be described as a concatenation of causes and foreseeable (and pre-dictable in a project) objective states, of means and ends; of input and output of the closed system.

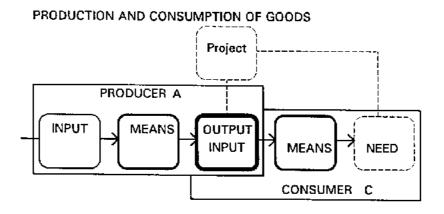
FIG. 1



2.3 Even the use is an activity, describable as a linear and causal process of objective states. It begins with an input and, through the use over time of means (human or instrumental), finishes with the satisfaction of a need (productive or final).

The output of one producer can be used as input (intermediate consumption) or as mean (productive investment) by another producer (fig. 1) that uses it to in turn make another product or as input by a "non producer" to that uses it to satisfy a need (final consumption) (fig. 2).

FIG. 2



2.4 But in this case, of the two aspects of desire - that can be seen as forces that drive and move, or as reasons to act (Anscombe) - that of physical cause is preferred over the motivation of will.

In the logic of a closed system, the need of the user is considered, objectively as a scarcity, the inverse mold, the must be filled (satis-factum) by the good produced.

For example, the need for bread is seen like the scarcity of bread, that moves to the demand and to the purchase.

Human need is seen like **determinated** with the name and form of the goods and not in its plastic indeterminate characters, shown by the antropology (Gordon Childe).

2.5 The activity of production precede that of consumption of an object, not just chronologically but also logically: the production of the good produced/sypplied/sold from the producer, in fact pre-scribes, pre-determines and de-fines the need (of the object) desired/demanded/purchased/consumed from the consumer.

The only contact necessary between the producer and consumer is that for the exchange of goods.

- **2.6** The cycle of goods produced/consumed (offered/demanded sold/purchased), that begins from "raw materials" and finishes by "consumption" (final), makes-up the principle theme of economic thought. The **involved parties** match only as holders or non-holders of the goods produced and, as such, protagonists of the exchange.
- **2.7** The international classifications of productive activities, of products and of the functions of consumption, a "conventional language" established in view of the measures of the economic statistics, are totally subordinate to such a conceptual objectivistic and physicalistic model:
- the productive activities are considered as a transformation of input into output;
- the products as transformed physical objects;
- the functions of consumption as the final destination of the vertically integrated process.

Consistent with such a view, the four Aristotelian causes of transformation of objects become classifying criteria:

- the "material" cause, that consists of "primary matter" and "secondary matter" (input): that of which objects are made;
- the "efficiency" cause, that coincides with the technologies that produce transformation (means): that with which objects are made;
- the "final" cause, that is need which is to be satisfied, or the destination of use: that for which the object is made.
- the "formal" cause, or the expected and prescribed structure (from the project plan) and is imparted through the process to the initial materials.
- **2.7.1** The classifications of the productive activities of goods (ISIC Rev.3 and NACE Rev.1) are established, according to what prevails in each case by one of the following four criteria:
- material cause (e.g. processing of minerals, wood, leather, fabrication of products in metal, plastic, ...);
- efficiency cause technology (e.g. agriculture, fishing, mining, printing, chemicals, rubber, construction ...);
- final cause (e.g. food or clothing industries, the manufacture of means of transportation, ...);
- **formal cause** (e.g. editorial, manufacture of mechanical and electric machinery, texstiles, furniture, jewelry, musical instruments, toys, ...).

One observes that when a criterion serves to define the more general heading, the others are committed, according to various measures, to the successive subheadings.

Example 1 Headings Causes 17 Manufacture of textiles formal formal 17.1 Preparation and spinning of textile fibres efficiency 17.2 Textile weaving efficiency 17.3 Finishing of textiles efficiency 17.4 Manufacture of made-up textile articles, except apparel final 17.5 Manufacture of other textiles final 17.6 Manufacture of knitted and crocheted fabrics final 17.7 Manufacture of knitted and crocheted articles final 17.11 Preparation and spinning of cotton-type fibres material 17.12 Preparation and spinning of wollen-type fibres material 17.13 Preparation and spinning of worsted-type fibres material 17.14 Preparation and spinning of flx-type fibres material 17.15 Throwing and preparation of silk including from noils and throwing and texturing of synthetic or artificial filament yarns material 17.16 Manufacture of sewing threads material 17.17 Preparation and spinning of other textile fibres material 17.21 Cotton-type weaving material 17.22 Wollen-type weaving material 17.23 Worsted-type weaving material 17.24 Silk-type weaving material 17.25 Other textile weaving material 17.51 Manufacture of carpets and rugs formal 17.52 Manufacture of cordage, rope and netting formal 17.53 Manufacture of nonwovens and articles made from nonwovens, except apparel formal 17.54 Manufacture of others texiles n.e.c.

formal

Example 2

Headings	Causes
25 Manufacture of rubber and plastic products	material
25.1 Manufacture of rubber products 25.2 Manufacture of plastic products	material material
25.11 Manufacture of rubber tyres and tubes 25.12 Retreading and rebuilding of rubber tyres 25.13 Manufacture of other rubber products	formal efficiency formal
25.21 Manufacture of plastic plates, sheets, tubes and profiles 25.22 Manufacture of plastic packing goods 25.23 Manufacture of builders' ware of plastic 25.24 Manufacture of other plastic products	sfinal final final final

2.7.2 The classifications of material products are done under the same criteria. This is not only because, formally, some of them are derived from those of the activities (the CPC from the ISIC and the CPA from the NACE), but primarily due to the conceptual setting outlined above.

Proof of this is that such derived classifications often introduce at the last number among the four recorded criteria, that which was overlooked from the classifications of economic activities; and that other classifications, as those established for foreign commerce, restate in different combinations the same four criteria.

2.7.3 The classifications of the functions of consumption (COIP, PROCOME, COFOG, CHGS and WECC) are prevalently established from a subjective point of view of the "final cause" of the user that, as a living organism, puts needs of maintenance, enhancement, and personal development (e.g. eating, clothing, health, training entertainment, ...) and of his home (heating, furnishing, hygiene, ...) or of movement (transportation,

hotel, catering, ...) and of interaction with others (e.g. communication, financing, information, insurance, justice, ...).

This does not eliminate that in the most analytical partitions of the functions of consumption, the other three Aristotelian causes return to be considered, in a variable order even in this case.

3. Classification of the productive economic activities of services

3.1 The explicative scheme physically adopted for the activity of production of goods, and its classificatory consequences, are not adapted to the "productive" activity of services.

This in fact cannot be conceived as a predictable process in the ambience of the closed systems of the "producer". In a service activity the "producer", or better yet the agent, and the "consumer", or better yet the client, enter into contact not only for that which regards the exchange, but above all to execute the service itself.

- 3.2 The productive activity of services, in contrast to that for the production of goods, must be described with a circular (non linear) scheme, of the intersubjective (non-objective) relations at the center of which rests the need of the client (and not the good produced).
- 3.3 The productive process of the service cannot be described as a causal and linear chain of means and ends, of input and output, essentially for not having any real output. It presents itself as an **open intervention**.
- 3.4 There is not object (planned, produced, demanded, or used) at the core of a service, but a desire that is yet without form.

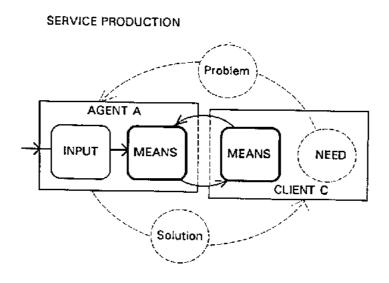
Hence, this cannot be **defined** in terms of a scarcity of a non-existent object, but must be considered in its **indeterminate** form of **reason to act**. This is defined and specified through the interaction and dialogue of the client and agent.

The first expresses a need, still formless (the need for care, instruction,

dining, purchasing a pair of shoes, from a person, or even to computerize some areas, or to study the market from an enterprise, ...).

The second (the doctor, school, restaurant, store, the business of information services or marketing, ...) reformulates the client's expressed need in terms of a **problem**, in light of the heritage of theory, experience, and ability at the agent's disposition, and seeks strategies for **solution** through his own means, but also through the involvement of the client. In light of the solution presented or achieved the client's need (plastic) can take on new specifications, in an open circular process potentially endless (fig.3).

FIG.3



3.5 The intervention of the agent is therefore carried out on the person or assets of the client that, therefore, finds himself interacting with the agent and with his means.

For this reason the service is only partially realized in foreseen or predictable operations in the projected chain of "cause and effect" (input and means) of the agent. Providing answers to the queries of the client and the unpredictable situations that the interaction is bound to create, in many cases, is done through unconventional procedures.

3.6 The definition and classification of services, one person's activity on behalf of someone else, must be founded on different criteria than those employed for the production of goods.

The "propositional" structure of the action was clearly and persuasively presented by Anthony Kenny in Action, Emotion and Will (1963).

Whenever an object results from an action, one can ask of what, with what, with what form, and for what is the object made. The motives for a transitive action, like as service, are assorted and can be lead to two groups of questions.

The first three refer to the client:

- 1) For whom? (Is the client of the service a person, family, enterprise, institution or collectivity?);
- 2) On what? (Does the service intervene on the subject system of the person o organization - or on the assets of the client?);
- 3) For what? (To what functional needs of the person, enterprise, institution, or collectivity does it respond?).

The next three refer to the agent:

- 4) From whom? (Is the agent a single, an enterprise, an institution, or a family?);
- 5) With what? (What are the specific means ability, technical understanding and instruments that the agent utilizes in the service?);
- 6) **How?** (With which way standard or non-standard are produced the agent's intervention in the client's sphere?).

Some examples:

- The service of a clothing establishment: 1) addresses itself to persons and families, 2) operates on goods, 3) to satisfy the functional need to buying clothing, 4) is offered by an enterprise, 5) through the large-scale display of merchandise, 6) by the process of assisted self-service shopping.
- The service of a public subway: 1) addresses itself to people, enterprises, and institutions, 2) operates on people's bodies, 3) to satisfy the functional need of mobility, 4) is offered by a public company or private contractor, 5)

- through the utilization of a railway network and cable-cars, 6) in the contracted manner of time and kilometers.
- Marketing service: 1) addresses itself solely to enterprises, 2) operates on the asset (organization) or intervenes to support decisions, 3) to satisfy the functional need of the sales enterprise, 4) is offered by an enterprise or a specialist, 5) through the use of professional expertise, or a survey network, 6) through a process of study, consulting, etc..
- 3.7 Referring to the above criteria, they can assemble six distinct hierarchical classificatory columns, according to genre and type:
- a) of the subjects, clients (criterion 1) and agents (criterion 4);
- b) of the objects (criterion 2);
- c) of the functions of each subject (criterion 3);
- d) of the operations that can be performed on each object (criteria 2 and 3);
- e) of the way of intervenction on the subjects (criteria 2 and 6);
- f) of the means to assist that are available to the agents (criterion 5).
- 3.8 The systematic application of the six above-mentioned criteria can help clarify the "lines of division" principles of the classification of services. In particular, the criterion 2) allows one to distinguish the services dealing with the purchase, lease, rental, maintenance, conservation, or repair of goods, from the services performed responding to the functional needs of subjects.

The criterion 1) allows one to distinguish four large groupings:

- Services to people designed exclusively for the functional needs of people, (e.g. eating, clothing, development, health, recreation, etc.);
- Services to enterprises designed exclusively for the functional needs of enterprises, (marketing and sales, administration, information systems, human resources, etc.);
- Network services designed for the functional needs of interaction, common to the people of enterprises and of institutions, (e.g.

transportation, communication, finances, insurance, etc.);

Collective services designed for the whole community (e.g. justice, defense, security, etc.).

Criterion 4) allows one to distinguish the services designed for sales (products of enterprises and specialists) from services not designed for sale (products from public, private and family institutions).

Combining criteria 3) "function" and 6) "way" allows service typologies to be specified using various combinations. Section 4 presents an application of this to Business Services (Martini, 1991).

3.9 The six criteria and the six proposed classificatory headings also permit a linkage to be made between the actual international classification of product activities, and the functions of consumption that employ them, not always explicitly, and that get mixed among themselves according to the degree of importance.

Finally, application of the six criteria and the six distinct "classificatory headings" provide a **bottom-up** classifying tool (an aristotelian classification for Aristotle's "categories"). One that is better able to interpret the changing and fickle demeanor of the service industries listed in the actual classifications, which were constructed in a **top-down** manner (a platonic classification based on "diairetic" subdivisions of a more general idea).

Such an instrument used in statistical research on the enterprise, rather than being restricted to a unique classification method established "ex-ante", gives the ability to partition service activities "ex-post" according to multiple criteria.

4 Application: the case of Business Services

The definition and the classification of business Services (BS) may be made at two levels :

- the first level involves criteria 1, 2 and 4;
- the second level involves criteria 3 and 6.

4.1 The first level classification

BS are services intended for sale provided by enterprises (criterion 4) and exclusively geared to enterprises and institutions (criterion 1) which are considered subjects (criterion 2), (cell I₁₁ of the table).

SERVICES	INTEN	INTENDED FOR:						
PROVIDED	enterpr and ins only	ises titutions	families individu only		enterpr institution	ons,	public	, ,
	<u>(I)</u>	·	(F)		network	(N)	(C)	
BY:	1.	2.	1.	2.	1.	2.	1.	2.
	Subj.	Obj.	Subj.	Obj.	Subj.	Obj.	Subj.	Obj.
1. enterprises	111	112	F ₁₁	F ₁₂	N ₁₁	N ₁₂		
2. institutions	121	122	F ₂₁	F ₂₂	N ₂₁	N ₂₂	C ₂₁	C ₂₂
3. families			F ₃₁	F ₃₂	N ₃₁	N ₃₂		

4.2 The BS do not include:

- the services I₁₂ that involve physical objects (immobile or mobile) of the enterprise (e.g. repairs, maintenance, upkeep, packing, cleaning, transportation, etc.);
- non-marketable services I₂₁ and I₂₂, offered to enterprises by public or private institutions (e.g. economic and research services, or services of business associations, etc.) or to their property (e.g. waste disposal);
- the services under F, intended exclusively for people and families (e.g. sanitary, scholastic, recreative, touristic, etc.) or their property (e.g. home appliance repair), whether provided by enterprises, institutions, or the families themselves;

- network services N, not only intended for enterprises and institutions, but also people and families, (such as services in communication, finance or insurance, etc.) or to their property (such as transportation or services involving sales, leasing, or renting furnishings or automobiles), whether provided by enterprises, institutions, or the families themselves;
- the collective services under C, offered exclusively by institutions to the public (such as defense, justice, etc.).

4.3 The second level classification

The **function needs** (criterion 3) of the enterprises and institutions pertain to activities that are performed internally, while connected to external events by markets and the interconnecting networks:

FUNCTIONS	NETWORK\$	MARKETS
F1 Sales and marketing	Distribution	Sales outlets
F2 Administration	Administrative-fiscal offices	-
F3 Financial resources	Credit-insurance	Financial products market
F4 Human resources	Labor services	Labor market
F5 Information resources	Communication	Information market
F6 Technical resources	Distribution	Supply market

Such functions, critical to the "life" of the enterprise-institution, are performed by the internal organization but can need support services from the BS.

4.4 Each function can be broken-down into sub-functions (by code):

- F1. Sales and marketing
 - F1.1 Advertising
 - F1.2 Marketing
 - F1.3 Public relation
 - F1.4 Sales
 - F1.5 Sale promotion
- F2. Administration
 - F2.1 Managment control
 - F2.2 Accountancy
 - F2.3 Tax
 - F2.4 Legal
- F3. Financial resources
 - F3.1 Finance
 - F3.2 Insurance
- F4. Human resources
 - F4.1 Managerial staff
 - F4.2 Executive staff
- F5. Information resources
 - F5.1 Hardware
 - F5.2 Software
 - F5.3 Data processing
 - F5.4 Database
- F6. Technical resources
 - F6.1 Architectural, civil, urban systems
 - F6.2 Environmental systems
 - F6.3 Engeneering processes and systems
 - F6.4 Materials
 - F6.5 Agri food
 - F6.6 Design styling and fashion

- 4.5 The interaction between the agent (BS) and the client (enterprise or institution) can involve different methods (criterion 6), and the intervenction of the agent can consist of:
- W1 Standard operations, expected on the part of the client and entrusted to the agent;
- W2 Control and certification on the part of the agent of procedures or results of the client;
- W3 Decision support for the client;
- W4 Organizational intervenction for the client.
- 4.6 The ways can be classified by various sub-ways (by code):

W1. Standard operations

W1.1 Internal

W1.2 External

W2. Monitoring

W2.1 Inspections, tests, analysis

W2.2 Certifications

W3. Decision supports

W3.1 Consultancy

W3.2 Research, studies, analysis

W3.3 Projects

W3.4 Assistence

W4. Organisation intervenction

W4.1 System and procedures

W4.2 Training

4.7 Crossing sub-functions of the client with sub-ways of the agent allows various types of services to be described. For example: software analysis (F5.2 and W3.2) and financial consultancy (F3.1 and W3.1).

- 4.8 The BS enterprises can specialize in services:
- uni-function-uni-way (e.g. balance sheet auditings);
- pluri-function uni-way (e.g. consulting);
- uni-function pluri-way (e.g. computer services);
- pluri-function pluri-way (e.g. organizational research and assistance).

The domains of the activities depend on their history, market conditions, and economies of training, and can change often and rapidly.

Among the BS enterprises are also various agreements, permanent or temporary, that allow them to continually adapt their product offerings to the erratic market requirements.

Therefore a unique top-down "diairetic" classification method that favors one of the two criteria, function or way, it is not able to grasp the subtle organizational aspects of the BS enterprises and can yield distorted results in measuring the effective size of its market.

4.9 A **bottom-up** classification strategy, founded on the combinatorial application of the two criteria, was utilized with positive results in the investigation of "Innovative Service Offerings to Metropolitan Milan Enterprises" (M. Martini, 1992).

5 An investigation on BS enterprises

- **5.1** The investigation, sponsored by the Assolombarda industrial association sought to estimate the services market for enterprises in the Milan area in 1990. From prior research, Milan appeared to have most concentrated and developed BS of any city in Italy.
- 5.2 The data concerning the dynamics and structure of the local businesses and employees of the BS enterprises, as well as the sample list, were taken from the ASPO data bank. At the time, it provided information for 1981 to 1989 and adopted the NACE 70 economic activity classifications detailed, to four-digits.

Attention is focused on the units whose activity centered on corporate functions of the client enterprises:

- 1. Financial and administrative services (classes 835, "Legal consultants", and 836, "Accounting, financial consultancy and auditing");
- 2. Marketing and advertising (class 838, "Advertising and public relations", and category 839.1, "Market studies");
- 3. Consultancy and management (category 839.2, "Management consultancy");
- Information services (category 839.3, "Information services, data processing and acquisition");
- 5. Engineering and technical services (class 837, "Technical services"); which taken together were called "Business Services" to distinguish from the broader group:

83 "Financial and insurance assistance and services to the enterprise" that also encompasses, in addition to those cited, the services of financial and commercial brokers, as well as services like cleaning, clerical, security, etc.

5.3 The dynamics of whole private economy, excluding agriculture and independent contractors, of the services sector, of group 83 and, within, the BS, and is summarized in Table 5.1.

Thanks to explosive growth rates, higher than those of every other activity, during the Eighties the employees in Business Services units located in the Milan area increased from 2,8% to 5,2% on total: this share being by now comparable to those of important compartments as building, chemical and machine-tools industry.

We observe that from the 15,280 local units of Business Services estimated by ASPO for 1989, independent contractors were excluded, many of whom operate in related fields such as legal and financial consulting, etc. that experienced strong growth during these years.

Tab. 5.1

Province of Milan, local units and employees number.

	1981	1989	var. %
	local units		
Total industry services of which:	232,814	273,997	17.7
Services sector of which:	153,061	180,976	18.2
Services to enterprises of which:	8,258	16,620	101.3
Business Services	7,279	15,280	109.9
	employees		
Total industry services of which:	1,533,731	1,599,868	4.3
Services sector of which:	665,232	786,994	18.3
Services to enterprises of which:	51,101	94,643	85.2
Business Services	42,962	83,382	94.1

Source: Research by Ail-Gruppo Clas on ASPO data

Also excluded from the investigation were the smaller local units, with only one or two employees. These have the form of an individual company and, apart from a different legal structure, are organizationally closer to an independent contractor than to larger enterprises.

Having excluded from the field of observation the local units with one or two employees, the resulting sample space is composed of 8,514 local units. They were made up of small (3-9 employees), medium (10-49 employees), and large (over 50 employees) sized units that collectively employed 73,839 people in 1989.

5.4 The questionnaire (enclosure 1), that covered four topics:

- the form and relationships of the Business Services enterprises;
- the territorial and sectorial structure of their market;
- the type of services offered;
- the structure and quality of human resources employed.

and was assembled in conjunction with enterprises in the target industries of the research. The surveys were mailed in March 1991 to 2,588 enterprises, of which 1,106 were local units with 10 employees or more and 1,482 with 3-9 employees (20% of the total).

The number of valid and complete responses was especially high for a mail survey: after and accurate check and some solicitation, 260 completed questionnaires were returned, which more than represents a satisfactory sample (Table 5.2).

The ex-post sample coverage increased passing from the small (3-9 employees), to the medium (10-49 employees), then to the large (over 50 employees) units. As the size increased, so did the variability of the sample, but this did not diminish the validity of the estimates.

Tab. 5.2 Local units and employees of enterprises responding to the survey

	3-9	10-49	over 50	Total
I	cal units	-·		
Financial and administrative service	27	19	5	51
Marketing and advertising	17	17	7	41
Consultancy and management	20	5	3	28
Information services	28	20	20	68
Engineering and technical services	37	23	12	72
Total	129	84	47	260
e	mployees			
Financial and administrative service	146	374	684	1,204
Marketing and advertising	84	318	1,024	1,426
Consultancy and management	76	106	338	520
Information services	137	543	2,270	2,950
Engineering and technical services	155	532	1,643	2,330
Total	598_	1,873	5,959	8,430

Source: Research by Ail-Gruppo Clas on ASPO data

Thanks to knowing the number of employees and local units for each cell obtained by crossing the three size classes with the five industries, estimates can be made of each industry, size class, or for the enterprises as a group, using weighted averages with the number of local units or employees in each cell.

5.5 In particular, to build a **typology of services offered**, first the portfolio of products must be gathered, the brochures used by the enterprises in an industry with their clients and the reference manuals of services published by their trade associations.

By examining the materials that the enterprises present to the market, the numerous expressions used to define the services offered are grouped into 54 type services, of which the original texts could be considered lexical variants.

Other grouping of type services into more general categories could eliminate specific differences that are deemed relevant by the enterprises themselves.

5.6 Observations:

- every enterprise offers many type services, in highly variable combinations.
- the type services do not correspond to the NACE 70 classification, adopted by the ASPO data bank, nor to its revision (NACE Rev.1 in fourdigit codes and in five digit codes derived from ISTAT), that has since been released, nor to the CPC product classification.
- the type services are precisely characterized by the function and subfunction, way and sub-way combinations described above.
- **5.7** The following Chart 1 associated each type service with its corresponding code (NACE Rev.1 in four-digits and ISTAT 91) and two codes in two-digits, representing the sub-function and sub-way respectively.

The correspondence between the two codes and the type services is biunivocal, while the between the ATECO codes and type services is ambiguous, as is illustrated in Chart 2.

Chart 1

TYPE SERVICES	Functions	Ways	NACE Rev.1
TIPE SERVICES	Lincacina	114,5	Code
1 Sales of advertising space	1.1	1.2	74.40.2
2 Advertising campaigns	1.1	4.1	74,40.1
3 Marketing consultancy	1.2	3.1	74.14
4 Market research	1.2	3.2	74.13.0
5 New product feasibility studies	1.2	3.3	74.13.0
6 Public opinion politing	1.3	3.2	74.13.0
7 Public relation	1.3	4.1	74.14.5
B Direct marketing	1.4	1.0	74
9 Commercial consultancy	1.4	3,1	74.14.6
10 Sales planning	1.4	4.0	74.14
11 Promotional campaign management	1.4	4.1	74.40.1
12 Business training	1.4	4.2	74.14
13 Exhibitions and trade fairs	1.5	1.2	74.83.1
14 Administrative consultancy	2.0	3.1	74.14.4
15 Administrative personnel training	2.0	4.2	74.14
16 Strategic consultancy	2.1	3.1	74.14.4
17 Planning and control	2.1	4.1	74.14.4
18 Accounting services	2.2	1.0	74.12.1
19 Financial auditing and certification	2.2	2.2	74.12.2
20 Fiscal consultancy	2.3	3.1	74.12,1
21 Legal consultancy	2.4	4.1	74.11
22 Financial consultancy	3.1	3.1	74.14.1
23 Financial resources management	3.1	4.1	74.14.1
24 Insurance brokerage	3.2	1.2	67.20
25 Insurance consultancy	3.2	3.1	67.20
26 Human rescuce evaluation	4.0	2.1	74.14
27 Organizational consultancy	4.0	3.1	74.14.4
28 Human resource management consultan	4.0	3.4	74.14.4
29 Human resouce planning and developme	4.0	4.1	74.14
30 Search and selection of executives	4,1	3.2	74,50.0
31 Management training	4.1	4.2	74.14
32 Search and selection of other personnel	4.2	3.2	74.50.0
33 Training of other personnel	4.2	4.2	74.14
34 Analysis and consultancy	5.0	3.1	72.20.0
35 System design	5.0	3.3	72.20.0
36 System programming and development	5.0	4.0	72.20.0
37 System integration	5.0	4.1	72.20.0
38 Personnel training	5.0	4.2	74
39 Hardware maintenance	5.1	1.1	72.50.0
40 Software maintenance	5.2	1.1	72.50.0
41 Data processing services	5.3	1.1	72,30.0
42 Other technical consultancy	6.0	3,1	74.20
43 Buying, tendering and preparation of bids	s 6.1	1.2	74.20
44 Urban construction consultancy	6.1	3.1	74.20.1
45 Development planning	6.1	3.2	74.20.1
46 Feasibility studies	6.1	3.3	74.20.1
47 Project completion assistance	6.1	3.4	74.20.3
48 Turnkey projects	6.1	4.0	74.20.1
49 Environmental and ecological consultant	¢ 6.2	3.1	74.20
50 Technical planning	6.3	3.3	74.20.2
51 Production system organization	6.3	4.1	74.20.3
52 Technical personnel training	6.3	4.2	74.14
53 Product and materials analysis	6.4	2.1	74.30.1
54 Quality control and certification	6.4	2.2	74.30.2

Chart 2

NACE Rev.	.1			
ISTAT Code	Description	TYPE SERVICES	F	W
67.20	Activities auxiliary to insurance and pension	24 Insurance brokerage	3.2	1.2
	funding	25 Insurance consultancy	3.2	3,1
72.20	Software consultancy and supply	34 Analysis and consultancy	5.D	3.1
	` i	35 System design	5.0	
		36 System programming and development	5.0	4.0
		37 System Integration	5.0	4.1
72.30	Data processing	41 Data processing services	5.3	1.1
72.50	Maintenance and repair of office, accounting	39 Hardware maintenance	5.1	1.1
	and computing machinery	40 Software maintenence	5.2	1.1
74	Other busibess activities	8 Direct marketing	1.4	1.0
		38 Personnet training	5.0	4.2
74.11	Legal activities	21 Legal consultancy	2.4	4.1
74.12	Accounting, book-keeping and auditing activities; tax consultancy			
74.12.1	Accounting, book-keeping, corporate consul-	18 Accounting services	2,2	1,0
	tancy, tax consultancy	20 Fiscal consultancy	2.3	3.1
74,12.2	Corporate auditing	19 Financial auditing and certification	2.2	
74.13	Market research and public opinion polling	4 Market research	1.2	
		5 New product feasibility studies	1.2	
		6 Public opinion polling		3.2
74.14	Business and management consultancy	3 Marketing consultancy	1.2	3.1
	activities	10 Sales planning	1.4	4.0
	a variation of	12 Business training	1.4	4.2
		15 Administrative training	2.0	4.2
		26 Human resource evaluation	4.0	
		29 Human resource planning and developme		
		31 Management training	4.1	
		33 Training of other personnel	4.2	
			6.3	
74.14.1	Financial consultancy	52 Technical personnel training 22 Financial consultancy	3.1	3.1
(4,14,1	Tantancial consultancy		3.1	4.1
74.14.4	Corporate administrative services, administrative	23 Financial resource management 14 Administrative consultancy	2.0	3.1
, 4.14.4	management and corporate planning	16 Strategic consultancy	2.1	3.1
	management and corporate planning	17 Planning and control	2.1	4.1
		27 Organizational consultancy	4.0	3,1
		28 Human resource management consultan	4.0	
74.14.5	Public relations	7 Public relations	1.3	
74.14.6	Credit information services	9 Commercial consultancy		3.
74.20	Architectural and engineering activities and	42 Other technical consultancy	1.4 6.0	3.4
1 4.40	related technical consultancy			
	retated technical consultancy	43 Buying, tendering and preparation of bids	6.1	1.3
74.20.1	Architectural studies	49 Environmental and ecological consultance		
74.20.1	Architectural studies	44 Urban construction consultancy	6.1	3.1
		45 Development planning	6.1	3.3
		46 Feasibility studies	6.1	3.
74.20.2	E- al along along the	48 Turnkey projects	6.1	4.0
	Engineering studies	50 Technical planning	6.3	
74.20.3	Integrated engineering services	47 Project completion assistance 51 Production system organization	6.1 6.3	
74.30	Technical testing and analysis		J. J	•
74,30.1	Technical product testing and analysis	53 Product and material analysis	6.4	2.
74.30.2	Quality control and product certification	54 Certification and quality control	6.4	
74.40	Advertising			
74.40.1	Advertising promotion studies	2 Advertising campaigns	1.1	4,
74.40.2	Aganalas managing a directivity	11 Promotional campaign management	1.4	
74.40,2	Agencies managing advertising space	1 Sales of advertising space	1.1	1.
74.50	Labor recruitment and provision of personnel	30 Search and selection of executives	4.1	
74.00		32 Search and selection of other personnel	4.2	Э.
74.83	Secretarial and translation activities	<u> </u>		
74.83.1	Convention organization	13 Exhibitions and trade fairs	1.5	1.

- 5.8 The questionnaire on economic activity (section 2) consisted of two questions:
- an open question on the principle and secondary economic activities
- a structured question asking for a percentage distribution of 1990 revenues, which was asked for in section 4.1 in millions of lire, according to the corporate function to which the revenues apply. The corporate functions corresponded to the 54 type services derived by combining the functions (or sub-functions) and ways (or sub-ways).
- 5.9 The revenue distributions given for the type services were very pleasing, with only one missing response of the 260 questionnaires returned. The expected methods are well shown and the residual responses ("other" indications) refer to services not included among the Business Services of the investigation.

6 Some research results

6.1 Revenues

From the sample estimates of revenues per employee and the complete employee data, up to 1990, its possible to determine the total revenues of all Business Services enterprises working in the province of Milan, for the five industries and the three size classes under consideration (Table 6.1), as well as the percentage distribution according to the sector of their client enterprises (table 6.2).

Tab. 6.1
Revenues of Business Services units operating in the province of Milan, 1990
In millions of lire

	Size class			
	3-9	10-49	over 50	Total
Financial and administrative services	248	705	556	1,509
Marketing and advertising	1,226	256	587	2,069
Consultancy and management	401	211	89	701
information services	1,135	560	983	2,678
Engineering and technical services	939	1,063	665	2,667
Total	3,949	2,795	2,880	9,624

Tab. 6.2 Percentage of 1990 revenues coming from:

	Size class			
	3-9	10-49	over 50	Total
Industrial enterprises	61.4	53.0	59.0	57.7
Private service enterprise	24.8	35.0	24.1	27.4
Public administration	7.4	6.7	14.1	9.2
Other	6.5	5.3	2.8	5.8

6.2 Revenue distribution of the type services

The following table presents the revenue distribution by functional source and type service.

Tab. 6.3
Revenues by functional source and type services
F1 Sales and marketing

In millions of lire

TYPE SERVICES	Revenues
4 Market research	756,4
9 Commercial consultancy	232,9
2 Advertising campaigns	180,9
3 Marketing consultancy	157,8
13 Exhibitions and trade fairs	154,0
1 Sales of advertising space	120,3
12 Business training	119,4
11 Promotional campaign management	113,6
7 Public relations	55,8
5 New product feasibility studies	50,0
10 Sales planning	49,1
6 Public opinion polling	38,5
8 Direct marketing	32,7
Other	7,7
Total	2069,1

Tab. 6.4
Revenues by functional source and type services
F2 Administration

In millions of lire

TYPE SERVICES	Revenues
18 Accounting services	271,4
14 Administrative consultancy	205,0
19 Financial auditing and certification	111,6
17 Planning and control	90,5
16 Strategic consultancy	84,7
20 Fiscal consultancy	34,6
15 Administrative personnel training	32,7
21 Legal consultancy	24,1
Other	15,0
Total	869,6

Tab. 6.5
Revenues by functional source and type services
F3 Financial resources

In millions of lire

TYPE SERVICES	Revenues
22 Financial consultancy	292,6
25 Insurance consultancy	154,0
24 Insurance brokerage	138,6
23 Financial resource management	42,3
Other	12,0
Total	639,5

Tab. 6.6
Revenues by functional source and type services
F4 Human resources

In millions of lire

TYPE SERVICES	Revenues
27 Organizational consultancy	210,8
30 Search and selection of executives	131,8
31 Management training	73,1
28 Human resource management consultancy	63,5
32 Search and selection of other personnel	48,1
29 Numan resource planning and developmen	¥ 41,4
33 Training of other personnel	37,5
26 Human resource evaluation	16,4
Other	78,0
Total	700,6

Tab. 6.7
Revenues by functional source and type services
F5 Information resources

In millions of lire

TYPE SERVICES	Revenues
41 Data processing services	809,4
36 System programming and development	659,2
34 Analysis and consultancy	391,7
35 System design	254,1
37 System integration	181,9
40 Software maintenance	156,9
38 Personnel training	88,5
39 Hardware maintenance	78,0
Other	58,7
Total	2678,4

Tab. 6.8
Revenues by functional source and type services
F6 Technical resources

In millions of lire

TYPE SERVICES	Revenues
48 Turnkey projects	785,9
50 Technical planning	663,1
42 Other technical consultancy	486,0
47 Project completion assistance	146,3
46 Feasibility studies	116,5
51 Production system organization	109,7
54 Quality control and certification	104,9
44 Urban construction consultancy	70,3
43 Buying, tendering and preparation of bids	60,6
49 Environmental and ecological consultancy	44,3
53 Product and material analysis	21,2
52 Technical personnel training	15,4
45 Development planning	13,5
Other	29,0
Total	2666,7

6.3 Revenues by functional source and way of intervenction

Tab. 6.9

Revenues by functional source and intervenction way
% on overall total

			Ways			
Functions	Standard operations	Monitoring	Decison supports	Organi- zation	Other	Total
Sales and marketing	3.2	0,0	12.8	5.4	0.1	21.5
Administration	2.8	1.2	3.4	1.5	0.2	9.0
Financial resources	1.4	0.0	4.6	0.4	0.1	6.6
Human resources	0.0	0.2	4.7	1.6	8.0	7.3
Information resource,	10.9	0.0	6.7	9.7	0.6	27.8
Technical resources	0.6	1.3	16.0	9.5	0.3	27.7
Total	18.9	2.6	48.3	28.1	2.1	100.0

Tab. 6.10

Revenues by functional source and intervenction way

% of column total

			Ways			
	Standard	Monitoring	Decison	Organi-	Other	Total
Functions	operations		supports	zation		
Sales and marketing	16.9	0.0	26.6	19.2	3.8	21.5
Administration	14.9	43,9	7.0	5.5	7.5	9.0
Financial resources	7.6	0.0	9.6	1.6	6.0	6.6
Human resources	0.0	6.5	9.8	5.6	38.9	7.3
Information resource;	57.3	0.0	13.9	34.4	29,3	27.8
Technical resources	3.3	49.6	33.1	33.7	14.5	27.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

The three corporate functions from which most revenues are derived are information resources, technology, and marketing.

For smaller enterprises the predominant revenue source was commercial functions; for medium enterprises, technology; and for large enterprises, the information system.

6.4 Revenues by way of intervenction

Tab. 6.11
Revenues by functional source and intervenction way
% of row total

			Modalità			
Functions	Standard Noperations	Monitorin g	Decison supports	Organi- zation	Other	Total
Marketing, sales	14.8	0.0	59.7	25.1	0.4	100.0
Administration	31.2	12.8	37.3	16.9	1.7	100.0
Financial resources	21.7	0.0	69.8	6.6	1.9	100.0
Human resources	0.0	2,3	64.8	21.7	11.1	100.0
Information resources	39.0	0,0	24.1	34.7	2.2	100.0
Technical resources	2.3	4.7	57.7	34.2	1.1	100.0
Total	18.9_	2.6	48.3	28.1	2.1	100.0

The standardized tasks of an enterprise on behalf of its clientele and that do not involve high level personnel comprise about 20% of total revenues.

Of the other 80%, "decision support" accounts for the largest part. The ways under this heading, by their very nature, involve highly qualified personnel that are able to interact with both clients and agents to identify problems (problem setting) and find solutions (problem solving).

The various sub-ways of intervenction do not carry the same importance among corporate functions.

"Consulting and analysis" was the most significant sub-way among "administrative", "financial", and "human resource" functions. The "studies, research and projects" was the most significant sub-way for "commercial" functions, mainly in the form of "market research"; it was also represented under "technology" functions in the form of "technical planning".

The sub-way of assisting the organizational structure was most prevalent for "technology" functions, mainly in "turnkey projects", and for "information systems" in the form of "systems programming and development.

And finally, operational intervenction was significantly present under "information systems", principally in the form of "processing services" but also well represented under "administrative", "financial" and "marketing" functions.

6.5 Functional revenues and activities prevalent for agents

It is interesting to observe how the revenues of corporate functions do not fully correspond to activities mainly attributed to enterprises in ATECO 81 classification from the ASPO data bank.

In Table 6.12, 34% of services performed by enterprises identifying themselves as principally "consulting and management" are geared toward functions other than human resources.

Also 12-13% of revenues from enterprises under "administrative and financial services", "sales and marketing", and "information services" pertain to functions different from the principle function.

"Engineering and technical services" recorded only 7% of revenues from functions other than technology.

Tab. 6.12 Corporate functions

			Activity typ	е		
	Financial administr.	Marketing and	Consult. and	Inform. services	Engineer. technical	Total
Functions	services	advertis.	managem,		services	
Administr. and financial	87.1	1.1	9.8	3.2	3.2	16.4
Sales and marketing	0.9	87.6	5.7	1.1	0.5	19.8
Human resources	2.1	3.4	66.0	3.3	0.9	7.0
Information resources	7.0	2.5	12.3	88.7	2.4	27.9
Technical resources	2.9	5.4	6.2	3.7	93.0	28.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

This confirms that the services offered by Business Service enterprises are diversely composed, frequently integrating different specializations. Moreover, the "boarders" of Business Service companies depend more on the corporate mission, in relation to the market penetration capability, than on corporate "know-how" or installed technology.

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Enclosure 1

Research questionnaire on innovative services offered to enterprises in the Milan metropolitan area

The original version of the enclosed questionnaire is Italian The English version will be presented as a room document

SEZIONE PRIMA: INFORMAZIONI GENERALI

1.	FORMA GIURIDICA:	
	1 Ditta individuale	3 Società di capitali
	2 Società di persone	4 Altro (specificare)
2.	DATA DI INIZIO DELL'ATTIVITÀ	x: 19
3	L'IMPRESA APPARTIENE AD UN	GRUPPO [1] SI [2] NO
ψ.		
	Se si	•
	1 Gruppo Estero 2 Gruppo 1	Italiano
4.		ORTI DI COLLABORAZIONE STABI-
		POSSIBILE DARE ANCHE PIÙ RI-
	SPOSTE)	
	1. IN ITALIA	2. ALL'ESTERO
	1 NO	1 NO
	2 SI con imprese dello stesso gruppo	o 2 SI con imprese dello stesso gruppo
	3 SI con imprese dello stesso settore	3 SI con imprese dello stesso settore
		4 SI con imprese acquirenti
	5 SI con altre imprese	5 SI con altre imprese
5.	L'IMPRESA INTENDE STABILIRE I	NEL PROSSIMO FUTURO ALTRI AC-
	CORDI FORMALIZZATI CON ALT	TRE IMPRESE?
	1. IN ITALIA	2. ALL'ESTERO
	I no	1 NO
	2 SI per potenziare l'offerta	2 SI per potenziare l'offerta
	dei servizi già prodotti	dei servizi già prodotti
	3 SI per allargare la gamma	3 SI per allargare la gamma
	dei servizi offerti	dei servizi offerti
	[4] Sl per altri motivi	. 4 SI per altri motivi

6. L'IMPRESA È: 1 monolocalizzata	2 plurilocaliz	zata	
Se è plurilocalizzata indicare:			
be e pidinocalization is a second	U.L.	ADD.	
1 unità locali e addetti in prov. di Milano	U.D.		
unità locali e addetti in Lombardia (esclusa	la		
prov. di Milano)			
3 unità locali e addetti in Italia (esclusa la Lo	om-		
bardia)			
4 unità locali e addetti nella Cee (esclusa l'Ita	lia)		
5 unità locali e addetti nei paesi europei			
extra Cee			
6 unità locali e addetti negli Usa			
[7] unità locali e addetti in Giappone			
8 unità locali e addetti negli altri paesi			
	RESA		ار این ایک جمعه در این این هم این این جمعه در
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI	RESA		
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI	RESA		
	RESA		
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI	• • • • • • • • • • • • • • • • • • • •		
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI			
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI			
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI			
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI 2. SERVIZI SECONDARI			
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI 2. SERVIZI SECONDARI			
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI 2. SERVIZI SECONDARI			
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI 2. SERVIZI SECONDARI			
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI 2. SERVIZI SECONDARI			
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI 2. SERVIZI SECONDARI			
SEZIONE SECONDA: ATTIVITÀ DELL'IMPI 1. SERVIZI PRINCIPALI 2. SERVIZI SECONDARI			

.

NEI SEGUENTI GRUF [1] SERVIZI FINAN. ZIARI E PER	2 SERVIZI ALLE VENDITE E	3 RISORSE UMANE ED ORGANIZZA	4 SERVIZI DI INFORMATICA	6 ENGINEERING E SERVIZI TECNICI
L'AMMINISTRA- ZIONE	MARKETING	ZIONE		
		<u> </u>	_ _	
di cui²:	di cui²:	di cui ²:	di cui²:	di cui 2:
Consulenza strate-	1 Consulenza com- merciale	1 Consulenza orga- nizzativa	1 Analisi e consulenze	Progetto chiavi in
2 Consul. ammini- strativa	2 Consulenza marketing	2 Consulenza nella gestione delle ri- sorse umane	2 Progettazione di sistemi soft-hard- ware	2 Consulenza urba- nistica, edilizia
3 Consul finanziaria	3 Pubbliche relazioni	3 Piani di sviluppo delle risorse uma- ne	3 Programmazione e sviluppo sistemi	3 Consulenza am- bientale ecologica
4 Consul. assicurativa	4 Studi di fattibilità per nuovi predotti	4 Valutazione delle risorse umane	4 Integrazione di si- stemi (soft-hard- ware)	4 Altre consulenze
5 Consulenza fiscale	5 Ricerche di mer- cato _ _	5 Selezione ricerca dipendenti quadri	5 Servizi di elaborazione (data entry, data base, ecc.)	5 Prove, verifiche co- mandi
6 Consulenza legale	6 Sondaggi di opinione	6 Selezione ricerca pltro personale	6 Manutenzione hardware	6 Analisi prodotti, materiali
7 Organizzazione ri- sorse finanziarie	7 Programmazione delle vendite	7 Formazione dirigenti e quadri	7 Manutenzione software _ _ _	7 Piani di sviluppo ,

8 Pianificazione controllo	e 8 Organizzazione di campagne promo- zionali _ _	8 Formazione altro personale	8 Formazione del personale addetto	B Organizzazione si stemi produzione
Servizi di contate lità, paghe e co tributi		9 Altri	9 Altri	9 Acquisti ed appal- ti (preparazioni di documenti di gara)
10 Brocheraggio as curativo	si- [13] Vendita di spazi pubblicitari 			10 Studi di fattibilità
Revisione e cer ficazione bilan				11 Progettazione tec- nica
12 Formazione del p sonale amminist	_		•	12 Assistenza in fase di renlizzazione del progetto
tivo _ _ [13] Altri _ _	13 Formazione, selezione, reti di vendita			13 Realizzazione mon- taggio di sistemi
	l_l_l_l Formazione del per- sonale commerciale			14 Formazione del per- sonale tecnico
	_ _ _ 			15 Altri

La somma delle percentuali espresse senza decimali relative a ciascuna dei 5 gruppi di attività deve risultare pari a 100.

La somma delle percentuali dei sottogruppi di ogni colonna deve essere uguale alla quota indicata per il corrispondente gruppo.

SI	EZIONE TERZA: IL MERCATO	1	,	
1.	QUALE È STATO IL FATTURA (in milioni di lire)	TO NEL 1990?		
2.	QUALE È STATA NEL 1990 LA : TURATO PROVENIENTE:	PERCENTUALE	DI FAT-	
	1 Dal mercato locale (prov. Mi)	•		
	2 Dal mercato nazionale (compr	resa prov. MI)		.
	3 Dal mercato internazionale			
3.	NEL PROSSIMO FUTURO SI E SARANNO:	PREVEDE CHE	TALI PER	CENTUALI
	[I] Mercato locale (prov. MI)	1 maggiori	2 uguali	3 minori
	2 Mercato nazionale (compresa prov. MI)	1 maggiori	2 uguali	3 minori
	3 Mercato internazionale	1 maggiori	2 uguali	3 minori
4.	QUALE È STATA NEL 1990 LA P VENIENTE DA:			RATO PRO-
	 Imprese industriali (manifatti acqua, energia ecc.) Imprese agricole 	uriere, costruzion	ui, gas,	
	3 Imprese di servizi privati (ad commercio, comunicazioni, tra		icurazione,	
	4 Pubblica Amministrazione (S	egione, ecc.)	
	5 Associazioni ed Enti vari			
5.	NEL PROSSIMO FUTURO SI I SARANNO:	PREVEDE CHE	TALI PER	CENTUALI
	1 Imprese industriali	1 maggiori	2 uguali	3 minori

2 Imprese agricole

1 maggiori 2 uguali 3 minori

^(*) Si ricordi che secondo la classificazione ufficiale ad esempio le Ferrovie dello Stato e la Sip sono imprese di servizi mentre l'Enel è un'impresa industriale.

3 Imprese di servizi 4 Pubblica Amministrazione	1 maggior	ri 2 uguali 3 minori ri 2 uguali 3 minori									
5 Associazione ed Enti vari		ri 🙎 uguali 🕄 minori									
6. INDICARE IL NUMERO DI CLIENTI DEL 1990:											
7. INDICARE QUALE PERCENTUALE DI FATTURATO È STATA REALIZZATA:											
1 Con i primi 5 clienti 2 Con i primi 2 clienti											
SEZIONE QUARTA: ORGANIZ	ZAZIONE E R	ISORSE UMANE									
1. CON RIFERIMENTO AGLI ADDETTI DELLE UNITÀ LOCALI IN PROVINCIA DI MILANO INDICARE IL NUMERO AL 31.12.1989 E AL 31.12.1990:											
		VIERO AL 31.12.1300									
	31-12-1989	31-12-1990									
E AL 31.12.1990:		31-12-1990									
E AL 31.12.1990:		· · · · · · · · · · · · · · · · · · ·									
E AL 31.12.1990:		31-12-1990 Di cui									
E AL 31.12.1990: [1] Imprenditori, soci partners, familiari [2] Dirigenti e quadri	31-12-1989	31-12-1990 Di cui									
E AL 31.12.1990: [1] Imprenditori, soci partners, familiari	31-12-1989	31-12-1990 Di cui									
 E AL 31.12.1990: Imprenditori, soci partners, familiari Dirigenti e quadri dipendenti 	31-12-1989	31-12-1990 Di cui									

1 maggiori 2 uguali 3 minori

2.	. QUANTI DEGLI ADDETTI AL 1990 INDICATI AL PUNTO PRECE TE SONO DESTINATI PREVALENTEMENTE AI SERVIZI GENE (AMMINISTRAZIONE, PERSONALE, ECC.)?								
	1 Imprend	litori, soci s, familiari		ímpi	genti, qu egati e a onale dip				
3.		IL NUMERO NCIA DI MI		IDENTI 1	VELLE U	nità loc	JALI J	DEL-	
	บร	CITE NEL	NEL			ENTRATE NEL			
	CORSO DELL'ANNO			CORSO DELL'ANNO					
	1989	1990	1991²	1989	. 1	990	19	9 1 ²	
					•			• •	
		•							
4.	GENERALI MILANO S	EMDO DA E LA O LE I SONO AV FESSIONIST	UNITÀ LO VALSE COI	CALI CO N SISTEM	N SEDE	IN PROV	TNCL	A DI	
				•.	I si	2	МО		
	Se sì specif	ncarne il nu	mero:				•		
	1 per la commercializzazione del servizio								
	2 per consulenze integrative specifiche 3 per la realizzazione del servizio							, .	
								•	
	<u> </u>	ecuzione dei							
	5 altri								

Esclusi i trasferimenti.
 Previsioni.