

On Management of Knowledge Services

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Abstract: - At the end of the previous century we were introduced to the notion of mass customization - an approach to manufacturing that synchronizes the benefits of mass production to the benefits of tailoring each product to an individual's requirements. The underlying "technologies" that support mass customization are a combination of modular design approaches and information technology. Modular design allows us to create a very large number of varieties of a particular product with varying characteristics. Tailoring products to individual requirements means having detailed information about individual customer requirements and the knowledge. This allows us to identify how to satisfy them.

Key-Words: - Services; Knowledge Management; Knowledge Intensive Services; Czech Republic; Service Management; Accounting Profession

1 Introduction

We are in the knowledge era and knowledge has emerged and accepted as the key resource. Knowledge is the key resource because it is most costly, provides highest returns and it is the most important source of a firm's sustainable competitive advantage [20].

Services take bigger and bigger space in human activities. In essence they accompany mankind since the year dot. When people started to exchange products among themselves and the middleman - merchant - appeared, we can speak about intermediation service providing. In human communities, there always existed individuals that started to take care of the others in the time of disease, during injuries, but they also paid attention to various ceremonials that developed in the community. In subsequent years people extended their sphere of activity and mainly seaside countries carried on explorations and on the basis of the explorations they conducted transport among countries and continents. They started to say experience and knowledge and progressively it came to intentional, education (monasteries, etc.)

Nowadays a huge area opens to services. Various activities from the earlier times belong there and new occasions for services appear every day. The new

occasions are given thanks to new information and knowledge and the possibilities to transform them into services on the one side, and on the other side there are continually developing needs of people that look for satisfaction.

In order to provide more and more value through the provision of services and products we need to have both rich information concerning the consumer and rich information about the product or service domain and rich information about design. Putting these different types of information/knowledge together allows us to provide increasing value to the consumer. Basically the combination of such information/knowledge fundamentally involves the provision of a service. Manufacturing of itself will not be the province of the high-value adding economies. Value will come from service provision where information and knowledge will facilitate the identification of consumer needs and the designing of services and products to satisfy these needs [23].

An important question in connection with the nature of services, already mentioned at the beginning of this chapter, is whether services create wealth. It depends on what is meant by "wealth". To Adam Smith and Karl Marx, wealth was human labor accumulated in products that can be owned. Today, wealth is understood as a high

degree of satisfaction of human needs. [2] stress that the value of services is in their effects, which are often long term, but which are difficult to measure and even to evaluate, and which in special cases consist of impeding undesirable events (for example, police services) or of reducing some costs. [7] on the other hand maintains that pure public services do not create economic wealth and are always financed by governments or voluntary contributions rather than sold on a market.

The Smith-Marxian opinion corresponds to the deep-rooted popular notion that such people as wholesalers, bureaucrats and speculators are parasites. One often hears even highly educated people say: "We cannot live by taking in each other's laundry" - or as the saying goes in Denmark: "We cannot live by shaving one another" - which is not wrong, but the same is true of all economic activities: we cannot live by making, for instance, chairs for one another, either. The division of labor starts by me shaving you, and you making chairs for me. Today, the Smith-Marxian notion is not very useful: we would not have our contemporary wealthy society if we did not have services. The notion that services are not productive must be abandoned.

On the other hand, the neoclassical point of view that wealth equals the price that can be obtained is not satisfactory either. This may be illustrated by an example from town planning: it is sensibly attempted to plan cities in such a way that - given that people must be able to reach a certain number of places (work, shopping, leisure activities, social contacts and so on) - the volume of traffic is minimized. In other words, we do not accept that even if transport can be sold on a market, and is taken into account as a contribution to GDP, it creates wealth.

There is still a need for theoretically well-based criteria which make it possible to distinguish between economic activities that create wealth and those which do not create wealth. It seems that the question primarily, but not exclusively, concerns services.

This paper has been structured firstly to introduce the knowledge management sector when dividing the tertiary production stage. After that we will focus on the requirements on knowledge (intensive) services and finally we'll pay a special emphasis to very important sector of accounting services.

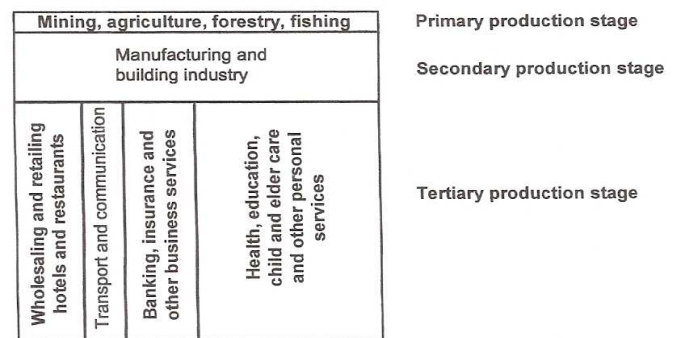
2 Literature Review

The sum of the service industries is usually called the "service sector". It coincides with the so-called tertiary stage in descriptions of the economy focusing on the production and distribution process. The primary stage consists of raw material extraction, agriculture, forestry and fishing, the secondary stage includes the manufacturing and building industries, and the tertiary

stage includes trade and all the different proper services industries.

The division of the economy into three stages is illustrated in Figure 1, where the rectangle areas are proportional to the employment of today. The tertiary stage is dominating. It corresponds to the "service sector" as conventionally defined, that is, including wholesaling and retailing of goods, and measured by the value-added of all constituent service industries including goods distribution.

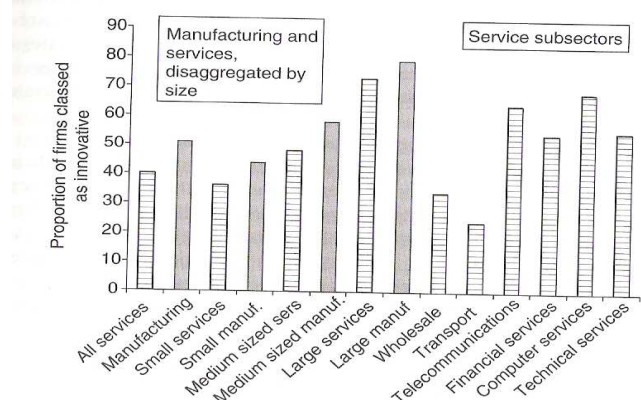
Fig. 1. The service sector as the tertiary stage



source: [14]

Defined in this way it is shown in Figure 2 that in a cross-section of 15 European countries the service sector as a share of gross national product (GNP) ranges from 60 per cent (Ireland) to 80 per cent (Luxembourg), where Sweden is close to the European Union (EU) average. According to OECD and national statistics quoted by Economist (2005), manufacturing jobs have fallen by more than half from 1970 to 2005 in European countries as well as the USA. With reference to Figure 1.3 it means that in the five first years of this century the share of the service sector in GNP has gone up by as many percentage points to 75 per cent, on average, and in the USA the service sector share in total employment seems to be as large as 88 per cent.

Fig. 2. The share of the service sector in GDP in 2000 in a cross section of EU members states



source: [16]

2.1 Basic Classification of Services

The basic classification of the services carried out by the economists Foot and Hatt divides services as the following:

Tertiary: The typical representatives of this kind of services are restaurants and hotels, barber's and hairdresser's, cosmetic services, laundries and cleaners, repairs and maintenance of appliances and households, handmade and artisanal works previously executed at home and other home-made services.

Quaternary: We can classify here the following services: transport, trade, communication, finance, and administration. Characteristic features of these services are facilitating, distribution of the activities and making work more effective.

Quintenary: As the example we can mention health and social services, education and recreation. The main feature of this sector is that the provided services change their receivers and somehow improve them.

Turning to occupational classifications, it should be recalled that the possible 'quaternary' and 'information' categories are primarily based on occupations. The VN has produced an International Standard Classification of Occupations (ISCO), but only a few countries publish data according to it.

The main service classes are:

- 0/1 Professional, technical and related workers;
- 2 Administrative and managerial workers;
- 3 Clerical and related workers;
- 4 Sales workers; and
- 5 Service workers.

Hill's definition [11] distinguished between things and persons as the object of the services, while [21] separated out information services. This line of thought has been followed by several authors [1, 9, 13], who more or less independently of one another classified services on the basis of their object.

More often than not, the object-based classes have been cross-classified with a distinction between individualized and standardized activities. In this way, one arrives at the following classes, which have been used to study skill and productivity as well as geographical issues.

A Object: Goods

A1- Individual: cleaning, hotels, restaurants, repair, renting;

A2- Standardized: Goods transport, retailing, wholesale;

B Object: Information

B1- Individual: Management, consulting, research, culture;

B2- Standardized: Back offices, routine administration, and telecomm;

C Object: Persons

C1- Individual: Education, health, care, sports, body care;

C2- Standardized: Transport of persons;

D Pure public services:

general government, police, defense, justice.

Education - especially of children and adolescents - is here viewed as a person-related activity, in which social and psychological aspects are important, not as a sheer transfer of information.

Generally, goods- and person-related services as well as individual information services require proximity between the service producer and the service user or serviced thing. Hence, there is little internationalization in these activities. However, standardized information services are increasingly liable to be transmitted via telecommunications and are exposed to international competition; as an example, one may mention the adult learning programmes now being developed by universities. However, technological progress allows more and more individualized and complicated electronic information transmission. Many activities have changed over time, for instance retailing from a rather individualized to a more standardized activity.

In genuinely individualized service production, it is only to a limited degree possible to increase productivity, and employment tends to increase, while the opposite is the case in standardized service activities [4].

Classification according to object may of course be cross-classified with the producer/household dimension, as has been done by [18].

3 Knowledge Services

Regarding the ontological dimension of knowledge (the subject who knows) it repeatedly appears in literature at two levels: the individual one and the collective one, despite the terms used to refer to them. Ontologically we can consider the organization to be a cognitive entity [5]. When addressing knowledge management, several authors distinguish these two forms of knowledge [6, 8, 10, 12, 17, 19], so we have to assume that knowledge is really able to present itself in two different forms: an individual one and a collective one. As a result, we recognize knowledge management models should identify the phases each knowledge form is most accounted for.

Following [6] we could accept small young and simple firms to focus individual knowledge and intuitively explore to the most out of it. On the other hand, huge established corporation tend to explicit or implicitly exploit and benefit from collective knowledge. Either option is acceptable and has proved to work. Each one of them traduces a strategic choice that top

management exercises on a daily basis through routines and decision making processes.

The notion professional services is understood as a type of service better than classification of providing services according to [16]. She characterizes the professional services as following:

- They are highly knowledge services provided by people with university education and usually closely focused on the scientific knowledge development in the relevant field of expert opinion.
- They include high level of customization.
- They contain high level of individual work and personal judgment of experts providing services.
- Usually they require close interaction with the company client.
- They are provided with restrictions given by professional norms of behavior that place position of client needs higher than their profits and respect limits of professional examination.

The list of professional business services covers firms as e.g.: law firms - lawyers, audit firms – auditors, consultancy firms in the field of management, technology, investment banking, marketing firms, advertising firms, personal agencies.

What is unique on professional firms?

- high quality of individuals
- service strongly concentrated on client
- subjective quality evaluation

In the Czech Republic the knowledge services are almost unknown notion although the developed countries are changing radically the structure of economic sectors. They transfer many of the processing activities heavy on capital and labor to other countries and they create thus area for “nobler” activities such as services. Strictly speaking - they try to decrease the share of nonqualified or not enough qualified labor and increase the share of the highly qualified labor.

Therefore they develop sectors of services that intensively take advantage of knowledge and offer original solution in various areas. The development of these services is very heavy on “intellectual capital” otherwise they are not so capital-intensive and they create high added value and also bring high profit.

The Europe, the Central Europe and mainly Czech Republic are relatively poor in natural resources. Czech Republic has to import raw materials for industry development so it should weigh the development that is not so capital demanding but it benefits from “intellectual capital” and natural creativity of people. Otherwise there is a danger of just “slavery” toward the future and it will be, as can be seen in the world, less and less paid.

On the whole in the Czech Republic 60% of economically active population work in services in general, from the OECD report follows that in knowledge services it is 24%.

4 Services of Professional Accountants

One of the professional services is services of professional accountants. In the Czech Republic more than 250 000 people (2.5 % of whole Czech population) state that they are professional accountants.

The accounting profession desires a wider range of capabilities (over and above technical ability) that accounting graduates should possess, e.g. the ability to manage stress, an awareness of personal values, a basic knowledge of psychology, communication skills, motivation, persistence, empathy and a sensitivity to social responsibility [22]. The profession has a responsibility towards members to encourage the cultivation of some of these skills and not focus so severely on only technical ability. The current accounting education is often focused on the acquisition of knowledge and an over-emphasis on technical knowledge in order to pass the professional examinations, rather than focusing more on the utilization of knowledge and more holistic attributes [3, 15].

Czech accounting profession is organized in three bodies: (i) Chamber of Auditors CR (given by law), (ii) Chamber of Certified Accountants CR (for all certified professional accountants), and (iii) Chamber of Certified Accountants by Union of Accountants (for accountants certified by the Union of Accountants CR).

The primary goals of all Chambers are to contribute to the development and improvement of the accounting profession in the Czech Republic by implementing an accounting professional certification system, providing the continued professional development of accountants, issuing a Code of Ethics and other standards regulating the activities of professional accountants, supervising professional accountants’ adherence to standards, collaborating in the development of accounting professions and in the field of accounting methodology and the assertion of legislative regulations of the accounting profession with other professional organizations and schools both bilaterally and within the scope of the National Accounting Board.

The CPD is obligatory for all certified accountants; newly certified accountants are obliged to join the education system from the year following the year of their certification. The main goal of the CPD system definitely lies in the improvement and refinement of the professional knowledge and skills of certified accountants, as well as the development of their professional and ethical values.

All professional accountants who are part of one of mentioned Chambers are obliged to complete 40 hours of the CPD per year. It is deemed that the CPD may be terminated only in the event of the given member's terminating the discharge of his/her profession. Only accountants maintaining their knowledge are able to provide relevant services to their customers.

5 Limitations and Future Research

The general description of solution of the topic implies a basic objective of the resource resolved, which is definition of types of services within which the project will be elaborated and the second one characteristics of corporations operating in the selected areas of the service sector.

The first partial objective defined within execution of the resource is to define individual types of services that will be the subject of research of the respective project. It is generally known that services exist in many types, forms and variants and therefore it appears to be absolutely unavoidable to narrow the defined object of solution. Too broad spectrum of the services examined could have an adverse impact on results of the solution and lead to an excessive generalization of the results achieved. The emphasis will be placed on the services of quarter sector, i.e. "Knowledge intensive services" (KIS) and services with a long-term relationship between provider and customer.

Partial objective of the second aim is to generally characterize corporations operating in the service sector, in particular from the perspective of executed activities, provided outputs, customers structure, costs structure, personnel structure, assets and capital structure as well as other characteristics that are relevant to the main objective of the project resolved and may affect the project results.

Within the future research we expect to provide a definition of the fundamental rules for definition the knowledge in the service sector and creation of a complex methodology. Thus created theoretical apparatus will also include solution of certain problems with which the persons involved may be confronted at application of the knowledge intensive services. Practical use of the results will be mainly a practical applicability of the elaborated methodology in real environments of corporations operating in the selected service sectors.

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