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# CURRENT COMMUNICATION DIFFICULTIES



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(COORDINATORS)

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Editura *SITECH*

Zip Publishing

Craiova, 2014

Acknowledgment: This work was partially supported by the grant number 33C/2014, awarded in the internal grant competition of the University of Craiova.

Corectura aparține autorului.

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Editura SITECH Craiova, România  
Aleea Teatrului, nr. 2, Bloc T1, parter  
Tel/fax: 0251/414003  
E-mail: editurasitech@yahoo.com;  
sitech@rdsmail.ro

Zip Publishing  
1313 Chesapeake Ave  
Columbus, Ohio 43212  
USA  
Tel: 614.485.0721  
Toll Free: 1.866.880.5373  
info@zippublishing.com

**Descrierea CIP a Bibliotecii Naționale a României**

SMARANDACHE, FLORENTIN

**CURRENT COMMUNICATION DIFFICULTIES/ Florentin**

Smarandache, Ștefan Vlăduțescu, Alina Țenescu. - Craiova : Sitech, 2014  
Bibliogr.

ISBN: 978-606-11-4226-2

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316.77

ISBN 978-606-11-4226-2

ISBN 9781599739847

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## **Current communication difficulties**

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As young academic discipline, communication has gained a relative autonomy in the last sixty years. The social phenomenon of communication has become the unique and unitary object of a clearly structured discipline in the 1950s. Even if it cannot be asserted that communication phenomena have not been studied till the middle of the twentieth century, these phenomena have been observed, examined, experienced and analyzed only incidentally, in an isolated manner, sporadically and complementarily. Communication phenomena have been subsequently approached within research on rhetorical, sociological, psychological, anthropological, semiotic phenomena and so on (Coman & Rothenbuhler, 2005). The segregation of specific communicational phenomena has led to the foundation of a new object of study relatively homogenous and rigorously delimited: communication. The greatest issue of communication that partially remains valid nowadays is that it that not have its own research method. Communication has borrowed from its constitutive sources not only research methods, but also procedures, means and instrument of validation and acknowledgment. Delia Cristina Balaban and Mirela Codruța Abrudan conclude that in „the domain of communication sciences we have to deal with a theoretic pluralism” (Balaban & Abrudan, 2011, p. 7).

Nevertheless, difficulties and uncertainties which communication is faced with nowadays are part of its natural destiny: it has separated itself as object of study and it has borrowed methodological instruments. Its object was relatively amorphous, frail, volatile and partially contradictory. The borrowed methods were permeated by the interests that have generated them. Communication has taken them for granted by lack of something else. It has even borrowed some sectorial theories. It has become accustomed to making use of those theories and to employ those methods, for investigation and justification. The respective theories and methods have turned the discipline of communication into an interdisciplinary, and afterwards, into a transdisciplinary science.

Robert T. Craig understands communication as being unitary from its beginning and as being situated along seven traditions. In the standard-matrix, R. T. Craig claims that there are seven traditions within the unique field of (the theory) of communication: rhetorical, semiotic, phenomenological, cybernetic, socio-psychological, socio-cultural and critical (Craig, 1999).

Our thesis is that communication has several sources. Some may be considered as main sources or constitutive sources from which communication springs, and others may be considered as secondary or complementary sources of communication. We can thus acknowledge eight main sources of communication: rhetoric, persuasion, psychology, sociology, anthropology, semiotics, linguistics and political science. Rhetoric is the first and oldest discipline which studied certain communication phenomena; rhetoric has outlined a proto-object of communication. Sociology is the most powerful source of communication methodology: sociology has supplied most of the theories and methods that have led to the discipline of communication growing autonomously. We assert that secondary sources of communication are: philosophy, ethics, pragmatics, mathematics, cybernetics and ecology. The current major effort of the discipline of communication is to consolidate its object and to build its own specific theories, methods and instruments of study. In this approach, communication confronts itself with insurmountable difficulties for the moment. In order to become a robust system of knowledge, it has to live amidst uncertainties and to remain for the moment on difficulty. Consequently, communication has first to unveil the veil: that is to see uncertainties as uncertainties and live difficulties as difficulties.

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# Chapter 1

## Disinformation as an intentional and legal failure of communication

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### Abstract

The study aims to prove that the action of disinformation includes the operations of setting the target and formulating some misleading purposes, selecting and knowing the target, preparing the misleading message, activating a feed device (feedback and feed-forward), of selecting the channel for transmitting the message, lying and seducing in relation not only to the message, but to all operations of the misleading project. If we were forced to say it in “one word”, any action could resume to just a single operation: to a message that consists of an intentional failure of communication.

**Keywords:** disinformation, communication, intentional failure of communication

### 1. Introduction

According to Guy Durandin, the basis of disinformation is the lie; moreover, the lie also presides in propaganda and publicity (Durandin, 1982). In our opinion, the lie is an elementary persuasive operation entering into complex actions, such as disinformation, publicity, manipulation, propaganda. Durandin bases his theory of disinformation (1993) on three features, which he calls categories of the truthless speech: signs, operations and channels. Regarding the language signs (language level of the speech), the amphibolies and ambivalence of the daily language register are capitalised within disinformation. The basic signs of the lie are: false images, words, fictional characters, objects, documents and false objects. Thus, one

takes advantage of polysemy, of the ambiguity of the natural language, as well as of the rigidity of some specialised registers, such as the so-called “wooden language”. Automatism rendering significance, usages are particularly exploited, which have become prototypical, which could be called the force of language inertia (Watzlawick, 1977; Ferro, 1991; Bénesteanu, 2002).

## **2. Context and frame of disinformation**

The speech admits the alteration of naturalness of the situations of communication, tricking the contexts and events. Even when it comes to images, the correctitude loses its innocence by tricking. Communication on the spot falsely provides pre-created situations matched with indicators, indications and signs of neutrality, with the purpose to mislead. The operations of misleading rhetoric based on lie consist in the procedures by means of which the implementation of facts into speech is misleadingly distorted. The alteration deliberated from disinformation is aroused by a source of power. The intrusion of alternative techniques of disinformation proves to be easily recognisable to that who knows the raw event. In fact, a number of misleading procedures is exercised on a raw event, through the implementation into speech. Such an operation is the intentional reduction, which consists of minimisation, contestations, deletions of traces or denials. Another type of procedure is the axiological amplification (beautification, improvements, corrections, rectifications, over-sizing). Therefore, we have to deal with minimisation techniques, or with an amplification technique, or with mixed techniques. The forgeries in relation to the source of the message and actors’ identity, addition of facts, properties, testimonials, dangers or inexistent advantages may also be included in this operational opposition. Specific techniques are: diversion (understood as distraction and diversion of attention), release of contradictory news, allusions, attribution of false intentions and establishment of an unjust presumption of guilt.

For example, through procedures, one can reach from raw, incoherent events to news with a diamond cohesion. If the raw event does not keep the attention, it does not have sufficient elements to set the intrigue, they shall be invented in relation to the misleading

objectives. When the enemy accepts their crimes, they shall be minimised by intellectual faults or by moral deficiencies. The diminishing or amplifying infra-operations lead even to the disappearance of some elements of the raw event: when two elements of the same importance are a minimised one, and another an amplified one, the effects of combining the lying-misleading infra-operations can lead to eluding the debilitated one, which has become minor. Surely, misleading infra-operations are not performed on a material that is well known by the public which the disinformation moves to. The misleading message shall be addressed to an audience that is confused, which could not make connections of “recuperating” the raw event, which would not be able to perform operations that are inverse to the misleading procedures.

The channels propagating the misleading messages can be of three types. The channels with national coverage include: formal media (television, radio, newspapers, magazines, etc.), informal media (conversations, rumours) and symbolic media (sport competitions, cultural events, monuments). The channels with selective coverage include: specialised media (TV shows and magazines with specialised audiences: political, financial, etc.) and meetings, congresses, symposiums. Of the channels with individualised targets there are: allegedly confidential documents and news on figures of media impact on those aimed to be misled.

Guy Durandin says that the purpose of signs, operations and channels engaged in misleading is the creation and reinforcement of verisimilitude.

As action of persuasion, disinformation consists of a set of informational-persuasion operations to deliberately promote erroneous “information”. Disinformation operates according to the principles of information. The DEX (DEX, 1996, p. 296) (Romanian Explanatory Dictionary) defines "a dezinforma" (to mislead) as being "to inform (deliberately) wrong". Misleading is not (deliberately) informing wrong, but a deliberate “error” of information. Misleading is also seen as a technique of psychological aggression.

In essence, disinformation is a type of information: it is a persuasive information. According to Guy Durandin’s observations (Durandin, 1987, pp. 3-5), the term "disinformation" was released in the former U.S.S.R. in the second decade of the 20<sup>th</sup> Century. It

denoted "the actions of intoxication of the capitalist countries against the U.S.S.R." Later, the Russian Dictionary was to note the term as covering the "action of misleading through truthless information", and the Great Soviet Encyclopaedia was to understand the term as denoting "broadcasting via press, radio and television the truthless information in order to confuse the public opinion (...), to deceive the people and to overwhelm them with lies". It is also worth taking into account that the Dictionary of the French Academy (1984) stops on the same proximate genre, specifying that disinformation is the "intermittent or continuous action – by using any means – which consists in misleading (n.s.) an opponent or promotes or favours the subversion among it, to weaken it" (Apud Cathala, 1991, p. 24).

There are three specialists in disinformation in the 20<sup>th</sup> Century: Guy Durandin, P.-H. Cathala and Vladimir Volkoff.

Guy Durandin believes that disinformation would be "a chain of lies" organised in an era when the means of broadcasting the information are very developed" (Durandin G., 1987, p. 20), there not existing any essential difference between disinformation and intoxication (Durandin, 1987, p. 41).

P.-H. Cathala shows that disinformation is the "assembly of procedures intentionally used in order to succeed with the perfidious manipulation of people, groups or an entire society, in order to deviate their political behaviours, to dominate their thinking or even to subjugate them. It involves the dissimulation the sources and real purposes, as well as the intention to harm, by a distorted representation or by a tendentious interpretation of reality. It is a form of aggression which seeks to pass unnoticed. It is classified among the subversive psychological actions" (Cathala, 1991, p. 24).

Vladimir Volkoff believes that disinformation is technique allowing the erroneous general information to be provided to third parties, determining them to commit collective acts or distribute judgements desired by the disinformers. (What if all information would be misleading!).

In "Dicționarul de jurnalism" (Dictionary of Journalism), C. F. Popescu considers that "in one way or another, the key-notion of disinformation is the lie" (Popescu, 2002, p. 112).

It may be understood that disinformation:

- a) means misleading, deceiving (the Americans speak of “military deception”), chain of lies, dissimulation;
- b) is a deliberate action;
- c) is a set of processes, a technique;
- d) is intoxication, manipulation;
- e) is a psychological aggression;
- f) aims at people, groups, even the entire society.

By closely examining these characteristics, it appears that, in a simplifying manner, disinformation is identified with the lie, intoxication and manipulation (Ahmed, 2005; Verdon, 2010; Géré, 2011).

First of all: the lie is an elementary operation of persuasive influence. Disinformation is not an innocent lie. There is no disinformation at the age of the lie. There is no lie as big as disinformation. Disinformation is never just one lie. As persuasive operation, the lie infallibly intervenes in the technology of disinformation. The operation of influence though myth also intervenes through seduction and fiction. However, the basic operations in the action of disinformation are two: the lie and seduction. The dilution of disinformation as intoxication or as manipulation is explained by the fact there are no pure actions of persuasive influence and by the fact that the closest actions seem to be intoxication and manipulation (Bittman, 1985; Cummins, 1994; Rothkopf, 1999; Stahl, 2006). Actually, by the amplitude of the public-recipient and by the respect for it, the action which disinformation is neighbouring, is shown to be the action of propaganda. The action of disinformation includes the operations of setting the target and formulating some misleading purposes, selecting and knowing the target, preparing the misleading message, activating a feed device (feedback and feed-forward), of selecting the channel for transmitting the message, lying and seducing in relation not only to the message, but to all operations of the misleading project. If we were forced to say it in “one word”, any action could resume to just a single operation: to a message. Disinformation is essentially not a technique, not a procedure, not an aggression: these are tools and effects. Disinformation is essentially the misleading message. It is

especially prepared and by an institution of communication, it is deliberately directed to a target, with the purpose to influence it into the direction of the objectives which led to the message development itself.

The purpose of disinformation is even the disinformation itself. Of course, it is a matter of partial, bias and interested information. "The purpose is, shows P.-H. Cathala (Cathala, 1991, p. 133), the completion of the action aiming the accomplishment of a project". The leaders of the action establish the "objectives", respectively opinions, attitudes or behaviours which it is intended to determine them at the carefully chosen targets" (Cathala, 1991, p. 133). These "quality purposes" (derived objectives in meeting a major interest) are accompanied by misleading in relation to the capacities, capabilities, equipment, layout and the disinformers' disposal, also with misleading in relation to their intentions, programs and projects, as well as with their way of operating in the theatre of operations of the capital interests.

Small interests are achieved through lies, for major interests being required disinformation.

Disinformation targets are individuals or social groups on which persuasive influence is exercised either directly, or through intermediaries. Those concerned are considered opponents. When the opponents are within the informal genre of the public opinion, then the target shall be the very public, perhaps just or particularly the decision-makers. The following are considered "enemies" and tools: peoples, governments, intelligence services, military general staffs, social groups (youth, pensioners), religious organisations, human communities, influencing and socially representative figures, able to be the first step in two step flow projects (policymakers, advisors, journalists, opinion makers). The performers of the action of disinformation cannot also be the beneficiaries of its effects. In such a situation, the silent partners or customers of the actions of disinformation can be: military general staff, governments, information services, social, political or economical entities. The employer, the operator of disinformation or agency of disinformation shall examine all the details of the communicational situation and shall establish the exact coordinates of the situation of disinformation, meaning they shall perform the following:

- they shall establish the topic of disinformation and scope of action;

- they shall prepare the misleading message that needs to be disseminated (first of all the raw, altered, false, distorted information, and after that the “disinformation”);

- they shall indicate the small, true or pretended to be true, false, misled facts that shall form the support for advancing the misleading message;

- they shall determine the moment when to launch the action and how the effects are expected to occur over time;

- they shall set up the transmitters, relays and sounding boards for disseminating and amplifying the message: influential personalities, journalists, social organisations, open letters, confidential letters, mass information media, aiming to create a circuit where the transmission would occur through several means in the idea of followership (phenomenon of taking information from one means to another), of descending (from an important means to a less important one) or climbing (from the less important means to a spread one). The topic of disinformation ensures the coherence of operations and cohesion of approaches. The texture of disinformation is based on major topics, such as dictatorship, tyranny, nationalism, lack of rights and fundamental freedoms, fight for peace, protection of minorities and helpless people, solidarity with the malnourished ones and in dirt, environmental protection, etc.. The thematic paradigms revolve around the fundamental human values: freedom, dignity, responsibility, solidarity, preservation of rights, etc. “Choosing the messages, shows H.-P. Cathala (Cathala, 1991, p. 167), is fundamental”. The misleading message shall catch on the topic in the field of misleading speech. The implementation of the topic into the speech shall occur by relating to the social reality where the message must go and where it must cause the misleading effect.

As achievement of the purpose and fulfilment of objectives, disinformation retains the production of effects such as:

- eroding critical sense of individuals whom form in the wholeness the target of disinformation;

- inducing dysfunctions in major decision networks;

- creating the impression that besides the capitalisation of "misleading" information, the vital objectives of the organisation concerned are unreachable or can only be achieved in delay;
- putting the opponent in the position of losing some credibility and prestige positions;
- stagnations or involutions in various areas of economic and social life;
- generating, managing and preserving the social suspicion, of conflict states and destabilising processes;
- anaesthetising the mechanisms that guarantee the security of social decisions;
- loosening the force to defend and promote the fundamental interests;
- quartering in an unsafe conduct, exclusively defensive, in relating with states and international organisations;
- settling in a fragile and incoherent response for those aggressions targeting major interests;
- inducing a lack of respect for the decisional bodies and a lack of understanding for the rules of social life, as first step in triggering the dissolution of the authority;
- developing behavioural alternatives which have no legal legitimacy, but are based on legally unadmitted religious rules or otherwise.

The action of disinformation presents two phases: anaesthetising the critical sense and promoting certain information capitalising the absence of the informational critical sense. Concerning the stagger or ruination of the informational balance, Alvin and Heidi Töffler in "War and Anti-War" (1995), find that in this respect there are six ways:

- a) launching the accusation of atrocities;
- b) hyperbolic dilation of stakes;
- c) satanising (demonising) and/or dehumanising the opponent;
- d) absolutely intransigent polarisation like "you are either with or against us";
- e) invoking a divine sanction, such as "God protects...";
- f) metapropaganda, as art to make the adverse propaganda inefficient and discredit it, to throw suspicion on everything that

comes from such an opponent, to induce the idea that everything is emanated from the opponent is propaganda.

The misleading message shall always start from true facts. The support of the message must be real, authentic, verifiable. On this basis, through elementary operations (lie, seduction, myth, fiction), the true fact shall be misleadingly distorted. Striking within the misleading framework is the contrast between the major topic and the harmless starting fact. A broad set of opportunities for the performance of a misleading speech is created from the persuasion exercised in terms of a topic on small matter. The explanation which a minor fact as releasing platform should be selected for is the necessity underlying any persuasive production: Vagueness of reality (Wolton, 1997; Fetzer, 2004; Gackowski, 2006). Vagueness, ambiguity and confusion allow both the persuasive distortion and, in case of verification, a withdrawal behind the motivation of confusion, vagueness and ambiguous. Upon the real fact (small, harmless, insignificant) as material to be processed, a distortion technology is applied, this being the decisive moment of the creating the misleading speech. The principle of development is the distortion, meaning that operations, mechanisms and strategies based on lies are put into service.

Therefore, the fundamental operation of disinformation is the lie. Falsely processing is always processing a truth. Therefore, we find in disinformation the "lie", both at cogitative level and at the language level.

Infra-operations are not missing from the misleading technology:

- scholarly dosage between truth and lie;
- counter-truth (unverifiable due to lacking witnesses);
- barefaced, absolute, exaggerated lies;
- lying by omission;
- capitalising the accessory, the random fact to the detriment of the professionally dimmed essentiality;
- mixing the non-equivalent facts, opinions or individuals;
- inserting the reminiscences or unjustified comparisons;
- truncated or approximate quotes;
- affirmations on an angelic, free or indignant tone;
- disconcerting lie in a multitude of information;

- exaggerating an insignificant fact, in the name of high moral principles;
- debilitating the truth by a sarcastic and ridiculing presentation;
- labelling people by assigning an alleged appurtenance to a system of ideas that can be rejected more easily than discussing in detail the genuine arguments brought;
- telling the truth as absolute form of lying, provided that the context makes the differentiation between the truth and the lie vague and unrealisable;
- denying the facts, when their reality cannot be confirmed;
- denying an affirmation, so to believe that, it is actually approved by the one who issued it;
- changing the internal reasons and circumstances of the basic fact;
- reversing the facts under the cover of merging the truth and the lie;
- dimming or camouflaging within the speech the events related to the basic fact, which would make it unusable as a platform for disinformation;
- drowning the events contrary to the basic fact by over-information, in an amorphous mass of facts without any connection with it whatsoever;
- keeping the basic fact within the real dimensions and supplying in relation to it an abundance of information which would confuse it;
- under-information in relation to the essential elements of the fact pragmatically illustrating the topic: debilitating or censoring some of these;
- deliberately reducing or amplifying the signification of some elements of the basic fact or a fact itself in relation to the situation of disinformation by presenting certain unreal consequences;
- approving some facts related to the basic fact which tend to negate it and disapproving those that would tend to confirm it as veracity;
- using a vocabulary with a combative content and some stereotypes relying on words and phrases which themselves tend to

induce a message: "war criminal", "terrorist", "mass grave", "retrograde", "communist", "securist" (Security Officer), etc.

- encouraging the Logomachia;

- using a jargon of placing in inferiority or specialised professional languages which prevent the exact understanding of the basic fact;

- using shocking-images to create "a stronger emotion than a whole message" (Cathala, 1991, p. 162);

- establishing of tendentious cogitations, especially a tendentious argumentation, by emotional and partisan impregnation of the basic fact with information incompliant with the data of reality;

- reasoning simplification of the problem which the basic fact arises;

- reducing the problem in debate to contraries and supporting that perspective which allows the coverage of misleading operations;

- satanising the people whom are actors of the misleading scenario, consisting in providing information which make these beings be unconditionally rejected;

- customising the essential aspects of the basic fact, provided that the topic always forces to seeing the things at an extended level: the question is asked in terms of individuals, and not of groups, so as to give the impression that the individual's defects would irrepressibly react on the group;

- inducing the rumours in relation to the topic, allowing the creation of a psychosis in which the misled would be unable to accept anything other than what the disinformation promotes to enrich, thus becoming themselves a relay of disinformation;

- excessive delimitation in the basic fact of two sides (good and bad) and using the differentiation to establish a misleading perspective. Some of these infra-operations are mentioned, as such, by P.-H. Cathala (1991) and V. Volkoff (Volkoff, 1997, pp. 129-133). In carrying out these infra-operations, it is to start from the idea that the basic fact as any fact can be presented, as concluded by Volkoff (Volkoff, 1997, p 128), in seven different ways: affirmed, denied, silenced, amplified, diminished, approved, disapproved. In the project of an action of disinformation, the broadcasting channel has an important role (Roustang, 1990; Laurens, 2005; Duruz, 2013). The ideal of any disinformers is that their message would be propagated

by the media. Disinformation may begin and may arrive through newspapers, magazines, television, radio or Internet. It can reach us via a media communication or via multiple channels concurrently or successively. Each media has capabilities of information, to the same extent everyone is able to promote disinformation. As strength and permeability to disinformation, each has strengths and weaknesses, and vulnerabilities and is marked by prejudices. Even when defending from disinformation, the media propagates disinformation: no one is immune to persuasion. When disinformation occurs via the media, persuasion is received as expected.

### **3. Conclusions**

Only if communication defends itself from persuasion, then it must directly cope with persuasion. It emerges that the media is totally vulnerable to persuasion and, in addition, even admits and stimulates it. Any communication also survives due to persuasion. The press does not need to defend itself from persuasion, because by doing so, it would only increase the sizes of persuasion which it promotes anyway. The press also survives due to persuasion. The securing need of the press to disinformation is a need of those which meet in the press on the ground of disinformation, and not of the press itself. The press is a place of disinformation promoting both the press and disinformation.

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## Chapter 2

# Communicating Football in the context of Spanish society

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This chapter examines football in the context of Spanish society, before considering its role in the transition to democracy between 1975 and 1982. The section finishes with an appraisal of the representation and mediatisation of the Spanish game in the evolution from state control to the global marketplace.

### 1. Football in the context of Spanish society

'It can be argued that Spanish football has its own identity. This is a safe identity, one which can be seen to exist without risking national and regional sensitivities.' (Crolley and Hand, *Football and European Identity*, Ch 6)

From the end of the civil war to the transition to democracy, football in Spain was subject to direct political control and manipulation, particularly in respect of the ways in which the game was mediated with the gradual development of television from the 1950s onwards: This created a degree of cultural coherence so that the burgeoning mass spectacle of football was exploited by the state to reflect and contain embedded rivalries based on regionalism, locality and ethnicity. In these contexts *la seleccion* drew on folkloric antecedents to fashion a sense of Spanishness and national identity around *la furia espanola*, (1) whilst the club rivalry most clearly manifested by the Real Madrid - Barcelona axis embellished historic centre- region tensions in addition to deflecting more dangerous opposition to the Franco regime. Consequently, from 1939 until 1975 state involvement in the governance of the game was tightly circumscribed at every level, with the result that the ways in which football was communicated suggested its potent use as a political weapon capable of shaping cultural outcomes. Prior to and subsequent to the death of *el caudillo* in 1975, this bedrock of orthodoxy began to

unravel, so that the rapid social, political and cultural changes which engulfed Spain in its transition to democracy impacted on and challenged the ways in which football was communicated and mediated. From the perspective of 2014, Spanish football can be seen as a critical barometer of political and cultural developments within the fabric of democratic Spain; Tradition and autocracy have left significant legacies in the game's lexicon, and have fused with decentralised political power, globalisation and seminal changes in football itself to foster multiple channels and outlets in which the Spanish game is represented and articulated. The diverse implications of the ways in which football has been communicated in post Franco Spain is at the core of this chapter.

In describing Spain's historic record of failure in international tournaments, Ball pinpointed one of the classic paradoxes which, until the recent achievements of *la roja* in winning the World Cup of 2010 and the European Championships of 2008 and 2012, had been at the root of the game's cultural identity since *la seleccion* first participated in the Antwerp Olympics of 1920 ( Ball, Morbo, Ch 8) In spite of the success of Spain in winning the European Nations Cup in 1964, within a very specific and highly politicised context, the efforts of the national side rarely came close to emulating the success of Spanish club football. The dual images of *la furia* and *el fatalismo* (2), continually reconstructed, represented and mediated across generations of the game's folklore defined deeply embedded foundations around seminal traditions of culture, language locality, region and politics. The juxtaposition of these focal points of unity and divergence around football characterised the sport's development since its formative period in the 1870s and 1880s, and gave it a centrality in repeated debates, conflicts and tensions concerning regional and national ethnicities in Spain The supremacy of club football suggested a set of complex historical and political divisions within the complex vortex of nationalism, regionalism and localism in the Spanish state. Within this vortex, the failures of *la seleccion* mirrored wider tensions on the fragile cultural, historical and political unity of Spain itself as a contested nation.

The golden period of *la roja* (3) in winning three successive international tournaments challenged some of these old orthodoxies in a number of ways, presaging a reappraisal of the traditional role of football as a reflector of political, historical and mediated traditions and contemporary political cultures. In football terms, *la roja* were largely able to shake off the twin burdens of *la furia* and *el fatalismo* which had shackled their predecessors, enabling their adoption of the tiki - taka style of Guardiola's FC Barcelona to embrace panache, technique and fluidity, rejecting the dourness and physicality which had been the hallmark of their predecessors. Moreover, as the victory in Euro 2008 came thirty years after the formal establishment of a democratic Spain, it highlighted a cohesion, maturity and stability in which the old debates and tensions stemming from the francoist past and beyond had seemingly been marginalised to the folklore of football's lexicon, replaced by a new synergy indicative of a comfortable acceptance of a dual or plurinational Spain. The rebranding and success of *la roja* stood out, from 2008 onwards, as an arena of unity and cohesion whilst the fragile Spanish state once again threatened to implode in the wake of economic meltdown to fashion separatism and demands for autonomy in the historically troublesome regions, particularly Catalonia and The Basque Country. Football enabled fans to cheer and support *la roja* in Barcelona and Bilbao, though perhaps with less fervour, as well as in Madrid and Valencia.

The key purpose of this chapter is to analyse the critical role played by football within the development of democratic Spain. In doing so, it draws upon the historical antecedents of the pivotal role of the game in defining and shaping political and mediated identities. Although this is more muted and subtle in contemporary contexts, the axiomatic link between football, politics and the media is still a crucial one. The chapter has four central themes; Firstly, it seeks to examine the key role played by football in the difficult and complex transition to democracy between 1975 - 1982, articulating its critical role in fusing opposition and consent; region and nation. The study then considers the critical changes in media coverage of football from the early 1980s, assessing the shifting cultural and political mosaic of the game within its developing mediated representations in the context of a democratic and rapidly evolving Spanish society, within the

framework of competitive party politics ( Part One).Thirdly, the chapter investigates the role of football as a barometer of cultural continuity and change, examining the implications of commodification and globalisation for the traditional mores of the game's political and cultural traditions. The study concludes with a consideration of political, cultural and media developments in Zapatero's and Rajoy's Spain, with particular consideration of the Second Transition and how the rejection of the consensual 'Pact of Forgetting' (4), which had been a cohesive force in Spanish politics in the post Franco era, provoked an intense debate to impact on the relationship between football, politics and culture, whilst demonstrating that the game's complex patterns of representation in regional, national and global contexts in which political rivalries and competing identities are seldom far from the surface (Part Two). The central focus of the chapter confirms football's distinctive and multifaceted role in the Spanish political and media landscape.

## **2. Football and the Politics of Transition; Spain 1975 - 1982**

'The creation of a democratic political regime had a direct impact on Spanish football. In the period from 1975-1982, francoist sporting structures were dismantled and new decentralised, more democratic structures were created.' (Quiroga, Goals and Flags; Football and National Identities in Spain, Ch 3)

The Franco regime mercilessly exploited and manipulated football as a symbol of the legitimacy of a centralised, unified Spain, whilst also using the burgeoning power of the game as a mass spectacle to act as a safety valve to contain alternative nationalisms (Crolley, Chapter 8). Consequently both the success of Real Madrid during the 1950s in winning the first five European Cups, and the victory by Spain over the Soviet Union in the European Cup of Nations in 1964 were crucial in anchoring the autocracy within the axis of Madrid, unity and centralism, with Franco and Bernabeu as the seminal protagonists.( 5) The rigid administrative and political control of football enabled the regime to utilise it as a social drug and mass distraction, particularly when its boom period of the 1950s was accompanied by the expansion in radio, television and press coverage of the game, so that it began to serve the dual purposes of normalcy

and cultural escapism. The highly politicised press rivalries around football were most clearly expressed in the tacit support and bias of *Marca* (6) for Real Madrid, and by implication for the regime itself. The development of television confirmed and reinforced this hegemony. By the 1960s, the symmetry of prime time Saturday night viewing had been perfected, with the mass national audience being fed a mixture of Real Madrid matches and bullfighting in the iconic figure of *el cordobes*, himself a Real Madrid fan. Thus order, cohesion and national identity were constructed and embellished through media exposure, with sport and particularly football being a central feature of the regime's nonemclature. Television was used to deflect the mass audience away from politically sensitive moments to engender a sense of cultural homogeneity (Vincent, Ch 10).

In a contrasting sense, football was also a central site of oppositional politics in francoist Spain, no more so than in the rivalry between FC Barcelona and Real Madrid. This rivalry was rooted in earlier tensions surrounding political, linguistic, cultural and historical differences stemming from the origins of both clubs in the late nineteenth/ early twentieth centuries, and was complimented by other centre - region differences within the vortex of Spanish football folklore so that by the dictatorship the clubs were framed as enemies which were interdependent (Montalban, Ch 2). Football became the site of entrenched alliances and rivalries, within the interplay of cultural and political forces, with FC Barcelona representing the clandestine aspirations and ideals of suppressed Catalan nationalism, whilst their cross -city rivals Espanol drew on earlier working class roots and a distinctive cultural identity to support the Franco regime, reinforced by a core nucleus of support from the police and army. In a similar vein, the rivalry between Athletic Bilbao and Real Sociedad, though united in opposition to the centralising forces of Madrid, came to contextualise a wider debate about the nature of 'Basqueness' itself (Rivas, Ch12) in contrast to Catalonia, where the link between FC Barcelona was rooted in pre civil war Spain (Crolley and Hand, Ch 8). Nonetheless, the genesis and development of Athletic Bilbao was closely interwoven with the rise of Basque nationalism and the PNV (7), reflecting the close synthesis between political identity and football. (Goldblatt, Ch 5). In Franco's Spain, football was utilised as a carefully constructed set of traditional rivalries to maintain a

balanced cohesion between conformity and dissent, with the result that the folklore of FC Barcelona was imbued with an iconography of heroes and martyrs together with incidents of suppression, injustice and corruption at the hands of the *madridistas*.( 8) During the late 1960s and early 1970s, in the dying embers of the Franco era, football's function as a safely valve of escapist mass spectacle started to implode, as the game became more openly critical of the regime itself, with latent tensions rising to the surface. Central amongst these was the 'Battle of the Bottles' Cup Final in 1968, which brought the antipathy between Madrid and Catalonia into the public domain with Bernabeu's implicit attack on the nature of Catalanism, and the subsequent Gureceta Affair of 1970. In the former, the traditional sense of injustice underscoring the enmity between Madrid and Barcelona was catapulted into a burgeoning media glare, exploiting the relative opening up of the Press Law of 1966 ( 9) to bring into the public domain a high profile and passionate debate about the nature of Catalanism. Similarly , the fallout from the Gureceta affair not only tapped into a history of alleged injustices against FC Barcelona from corrupt officials in the pocket of francoism, it was significant as being one of first public arenas of discontent with the Franco regime ( Ball 2003 ,Ch 8). The pitch invasion at the end of a bitterly disputed contest between the arch rivals suggested a wider political protest in which FC Barcelona began to reassert its function in representing an oppressed Catalonia (Burns 2009, Ch 8). By the time of Franco's death in November 1975, football had already started to move away from the permitted ritualism of flag waving and singing to become a focal point of dissent embracing both demands for regime change and the renaissance of regionalism, particularly in the historic communities of the Basque Country and Catalonia. It signposted a deeper malaise within francoism itself and increasing political and regional tensions ,with the growth in ETA activities, climaxing in the assassination of Prime Minister Carrero Blanco in 1973, which shook the image of invulnerability the regime had enjoyed (Ball 2011, Ch1) adding to more confident and growing demands for Basque and Catalan autonomy (10).

During the transition period, the game occupied a pivotal and highly politicalised role, particularly in the period between 1975 - 1978, before the framing of the 1978 Constitution, when it symbolised

both a dissenting break from the suppression of the past and the unity of a continued adherence to traditional landscapes of football rivalry. The Spanish league provided the single most cohesive element of stable national identity whilst the complex social and political enmities and divisions, for so long frozen out by a one party centralised autocracy, rose to the surface of competitive politics to shape the future direction of Spain, with the result that the elections of June 1977 were contested across the political spectrum ( Lawlor and Rigby, Part 1 ).The period 1978 - 1982 witnessed the central role of football in the realisation of the constitutional settlement and in the consensus surrounding the genesis and renaissance of the ' Two Spains'. It was instrumental in the process of collective amnesia and developed as a key component in opening up the regionally focussed, democratic media to represent the languages, culture and football ethnicities and identities in an overt rejection of manufactured centralism. The 'Pact of Forgetting' permitted the dualism of the legitimisation of the Spanish state alongside the Spain of seventeen autonomous communities, especially in the historic communities of the late nineteenth century (The Basque Country, Catalonia and Galicia). This decentralisation of political and cultural power utilised the traditional mores and values of football to construct a modern, democratic Spain out of its authoritarian past, so that a fusion of the national identity of the structures and organisation of the game was interwoven with its local and regional identities to facilitate and hasten the complexities of the transition itself. In Catalonia and The Basque Country football and its folkloric ritual symbolism was in the vanguard of change in the promotion of the Spain of the Regions. This process was not without challenges and contradictions. It also raised crucial questions as to the developing linkages between football, politics and cultural representation after the highly structured dynamics of the francoist state. The transition pressaged the gradual renaissance of the notion of alternative national teams, which had remained dormant for so long, challenging the traditional iconography of *la furia* as one of the stable components of constructions of 'Spanishness' ( Quiroga Ch 5, 2013).

The months following Franco's death created a vacuum of considerable uncertainty. Football witnessed one of the first public cultural and political displays of a tentative and gradual break with the

past to signpost the new regionalism. The growing renaissance of Catalan identity had found increasing confidence and expression in the last years of Franco. FC Barcelona was the most potent agent and symbol of this evolving process, from the gradual reintroduction of the Catalan language in the club's publications, to the signing of Johan Cruyff in 1973 following a protracted transfer saga in which the club came into direct conflict with the central governance of the game over the vexed issue of the signing of foreign players. The subsequent success of the team emerging from the shadows and winning the league, gave growing status and confidence to the shrewd Presidency of Montal, the most glittering of victories coming in February 1974 with the 5-0 eclipse of Real in the Bernabeu. The 1970s success of FC Barcelona was synonymous with the emergent nationalist project, dovetailing with the process and progress of the statute of autonomy (Payne, Ch 8). By the time FC Barcelona played Real Madrid at the Camp Nou in late December 1975, football was a crucial barometer to test the fragile nation's nerves, with strident echoes of the past interwoven with fledgling aspirations for the future. The match witnessed the first major public display and celebration of the Senyera since the end of the civil war (Santacana Torres, Ch 7). Barcelona's victory communicated a potent symbol of the transition as politics, football and democratic consolidation were juxtaposed within sensitive societal changes (Burns 2009, Ch 11). Football, which had so long been at the core of Franco's notion of an indivisible Spain was crucial to the transition as it represented suppressed notions of regional, political and linguistic diversity and constituted a cohesive continuity based on the interplay of sporting rivalry within a national structure. In this sense, it became instrumental in the creation of the consensus building of the new Spain. In Catalonia, the display of regional identity so soon after Franco's death was followed by other developments; the radio broadcasts of FC Barcelona's matches in Catalan from September 1976 assisted both the club and the station in respect of profile, audience and representation of the game's regional heartbeat (ibid, Ch 7) whilst the return of the Catalan President Taradellas from exile in October 1977 bore witness to the public reassertion of Catalanism in the post Franco period.

The role of football, and more specifically of FC Barcelona at the centre of the democratisation process embracing regional

autonomy was mirrored by developments elsewhere. Under Franco, football was the only legal manifestation of Basque political and cultural sentiments, a seminal contrast with ETA's violent expressions of demands for Basque separatism which came to mark Franco's later years and beyond. In football terms, the quest for ethnic purity underpinned the Basque only policy at the core of *la cantera* in both Athletic Bilbao and Real Sociedad (Crolley and Hand, Ch 8 ) In the melting pot of these complex dynamics, Real Sociedad played Athletic Bilbao in San Sebastian in December 1976. Before the match Korkabarria and Iribar, the opposing captains, carried the Basque flag onto the field, their entrance accompanied by the playing of the Basque anthem, in a key act of unity which became defined as a seminal cultural and political watershed in articulating a shared Basque identity (Ball 2011, Ch 1). The combined pressures for change, communicated through the rituals and folklores of football, challenged the traditional hegemony of Madrid, and helped pave the way for the mobilisation of political and public opinion in support of the June 1978 Constitution.

Other developments within the organisation and structure of the game itself highlighted the break with a past of rigid centralised control. Football had been highly politicised in Spain from its formative days, with clubs maintaining strong traditions of economic and political democracy dating back to the 1890s (Wagg, Ch 5). Within this landscape, the power of club hierarchies held considerable sway in the local and regional arena. Although largely subsumed and manipulated during the Franco era, football represented a catalyst for political, cultural and economic change through developments within its own structures, both in the last years of Franco and in the early period of the transition. The demands for universal suffrage in the election of club officials, which had been so carefully controlled under Franco, coupled with the vibrancy of football in expressing cultural separatism became potent metaphors for wider political and cultural nuances. The growth of free trade unions also found expression in challenges to the oligarchic orthodoxy which had tied players to their employers since the late 1920s. A power struggle emerged during the transition, manifesting itself in the formation of a union to represent the players' interests in 1978 , followed by a series of players' strikes between 1978 and 1981. These tensions were evidence of wider social

and political upheavals during the transition ; for football itself, they demonstrated the tentative beginning of a new order, in which players, the regions and the media played a seminal role in the shift to democracy at multiple levels of Spanish society.

By 1978, the Constitutional Settlement under the Suarez government laid the foundations for the seventeen autonomous communities under a federal unitary Spain. Sport, and in particular football had been central to the Franco regime and its ultimate decline; it was pivotal to the formation of the constitution itself, being integrated into the processes of cultural and political decentralisation (Riordan and Kruger, Ch 7). The collective amnesia which allowed the rapid transition to democracy was aided by the cultural power and political heritage of football in assimilating continuity and change. Consequently, football drew upon the old allegiances and rivalries of the historical communities and fused them with the modernity of the sporting rivalry of Spain's national competitive leagues. This political decentralisation and the return to locality fractured the oppression and largely manufactured unity of francoism (Payne, Ch 9). Football helped paper over the cracks of contradictory and competing forces so that by 1982, Spain was not only hosting the World Cup but also rapidly moved towards membership of the European Community. In these contexts of the end of international isolation Tejero's assault on the Cortes in 1981 was a macabre last dance of the Franco hegemony; indeed it appears that the seeds of rebellion were sown when the colonel and his associates witnessed the spectacle of the Basque flag being unfurled live on national television in the celebrated encounter between Real Sociedad and Athletic Bilbao some five years before. Football, politics and identity cut deeply in the Spanish psyche. Just as it secured a central role in legitimising the politics of transition, the interplay between football and its mediated representations has been a central facet of Spanish society since the early 1980s. The manner in which the game came to be communicated reveals much about audience, cultural identity and shifting patterns of global sport within contemporary geopolitics.

### **3. The Representation and Mediatisation of Spanish Football; From State Control to the Global Marketplace.**

"Spain is not a nation. National Unity was a reality historically imposed by the Absolute Monarchy and has been maintained all along by the political regimes of contemporary Spain" (Solis, *Negotiating Spain and Catalonia*, Ch 1)

The hosting of the World Cup in 1982 allowed the Spain of the autonomies to show an increasingly global television audience that it had emerged from decades of isolation as part of a process which dovetailed democracy, socialism, modernism and Europeanism under the Gonzales government, culminating in EC membership in 1986. Once again football came to represent the paradoxes, traditions and changes in which the evolving democracy was framed. As an enthusiastic follower of Betis Seville, Gonzales exploited the political populism around the game in order to maximise its cultural kudos (Ball 2003, Ch 1) much as his successor Aznar did with his high profile support of Real Madrid. In the early phase of the Gonzales administration football's role was ambivalent. Just as Spain itself entered a new era, the representation of the game underwent important changes, underscored by political, economic, technological and cultural developments, which impacted on football itself as a definer and reflector of cultural and political identities. These changes were most marked in television representations of football, although significant developments also took place in both radio and the press from the early 1980s onwards, which allied to the contemporary growth of the internet, have radically altered the mediated forms in which the representations of football have been constructed, so that Spanish football was gradually transformed from a narrow enclave of tightly proscribed processes of communication to the diversity of multi-layered global media platforms

In the Franco Regime, all aspects of media output were centrally controlled under the watchful eye of No - Do propaganda, (11) aimed at inculcating and promoting the values of the francoist state (Riordan and Kruger, Ch 7). Television was a central feature of the state apparatus, legitimising through TVE and subsequently TVE2 a unitary, monolingual state and society with Madrid at its heart. Football, after the 1950s spectator boom, was ideally suited to serve

as a vehicle giving publicity to the regime's status and success, so that the dual images of Franco's Spain were Real Madrid and *la seleccion*, creating an iconography in which state intervention was carefully manufactured to foster notions of cohesion, unity and nationhood (Crolley, Ch 28). The 1978 Constitution established media freedom; shortly afterwards the first break with francoism emerged with the development of regional television in the early 1980s, most potently in the Basque Country, Catalonia and Galicia, providing football with a more regional focus and voice (Santacana, personal communication, Barcelona, March 2010). Their rationale was shaped by regionalism, language and culture within a public service ethos, thereby manifesting a nexus of devolved public spheres in which the issues around the game were debated and communicated to divergent audiences. Football was central to this renaissance, tapping into traditional mores of locality and rivalry, engendering a sense of separateness and fuelling demands for further autonomy, particularly in The Basque Country and Catalonia, where the game was significant as a symbol of the democratic process itself, because of their distinctive histories and politics (Ibid, March 2010) This gave traditional centre - region hostilities a revived passion, with football securing an emblematic and ritualistic role as it was anchored in a secure consensual framework which could contain regional sensitivities (Crolley and Hand 2006, Ch 6).

By the late 1980s, technological change opened up the deregulation of football. The rise of pay per view television meant that market forces driven by consumerism and the commercial impulse witnessed high octane battles between competing organisations seeking to exploit the increasing dominance of football as the dominant televised sport. These processes set the template for the sporadic conflicts over broadcasting rights which have beset the Spanish game as clubs, media outlets and governing bodies have sought to exploit la liga's burgeoning potential in the global media space (Boyle and Haynes, Ch 4) These developments held crucial implications for the game itself - the vast sums of revenue pouring into football led to spiralling costs, rising debts, the growth of player power and the new influx of stars and galacticos into the Spanish game. The synergy between media representation and its political exploitation became firmly attached to political ideology in the late 1990s and early

2000s, so that under the Aznar administration, in its adherence to the market and private enterprise in the form of satellite transmission, football constituted an ideological break with some aspects of the public sphere (Wagg, Ch 3), in which the mass spectacle of the game moved inexorably towards the entertainment domain of fragmented national audiences as part of a wider commercial competition between competing service providers, contrasting with the role of football as a unifying force under a public service ethos. The election of Zapatero in 2004 partially reasserted the principles, if not the economics of public service broadcasting via terrestrial output in the contracting of *la liga* to *la sexta* from 2006 onwards, in sharp ideological contrast to the Aznar regime, demonstrating the continuing volatility of the relationship between football, media and the state and its enduring role in redefining and reshaping national and regional cultures.. The deal with *la sexta* between 2006-2010 was a hybrid mix of public service, political populism, state interventionism and commercial enterprise (12), so that whilst contemporary televised football in Spain has increased exposure, diversity and consumer choice, politics and cultural tradition still play a significant role. Mediated constructions of the game constitute a post-modern vortex in which the traditional roots of locality and national identity framed and fostered by football have been subsumed by globalisation, consumerism and commodification of the sport, which in turn makes multiple mediated identities ever more complex. By 2010, the success of *la roja* in winning Spain's first World Cup, allied to the global mega spectacle of *el clasico* had catapulted the high profile aspects of the Spanish game to a vast public of global consumers

This fusion of tradition and post modernity can also be perceived if the contemporary press and its representation of football is considered. The tradition of a specialised sporting press, giving increasing coverage to football as the game itself developed, has been embedded in the Spanish media landscape since the late nineteenth century. Moreover, a pronounced sense of local and regional identity has been a central element in the representation of football. Consequently, the rivalry between *Marca* and *El Mundo Deportivo* maintains and promotes the football, cultural and political rivalry between Real Madrid and FC Barcelona, serving as a benchmark for their respective identities. Even under Franco this rivalry in the

football press was implicitly, if not openly expressed. Since the 1980s, as television and online coverage has surpassed saturation levels of exposure the football press has changed in response to both these and wider political and societal developments. The fact that Spain still has four national newspapers devoted to sport (with *Marca* being the best seller amongst them) alongside a range of choices within the autonomous communities, gives Spain a distinctive character in its consumption of mediated sport at the core of its media centred sporting identities and ethnicities. Within this context football has become increasingly dominant, particularly around the polarised coverage of the Real Madrid and FC Barcelona duopoly, with the consequence that other sports, once at the centre of mediated representation, are now marginalised at the periphery, or grouped together in minimal coverage of *polideportivo* (other sports). Furthermore, this excess of coverage has meant that editorialising and speculation have become the key channels of communicating the Spanish game to national and global newspaper, online and blog consumers. Allied to the tendency of the mainstream press to devote more column space to football, the contemporary press has witnessed an increase in the stories around football to accentuate the link between football, entertainment and celebrity, suggesting that *Marca* exists on daily diet of rumour, gossip and sensationalism (Santacana, personal communication, Barcelona, March 2010). In spite of these changes and the perceived dumbing down of content at the expense of more analytical commentary the football press still plays a pivotal role in its continued legitimisation of the traditional roots of the political and regional rivalry around the game, particularly in respect of the vexed question of Spanish national identity surrounding *la seleccion*. The press periodically resorts to negative stereotyping in reinforcing the disunity and lack of success (Paradinas, Ch 10) traditionally surrounding the performance of the national team in international competition. Only the unparalleled success of *la roja* allowed the reframing and rebranding of the national side to embrace a sense of cohesion and unity (Burns, 2012, Ch 29). Within the changing dynamics of television and press representations of football, grouped together around themes of commercialisation, globalisation and commodification to both expanding and fragmenting audiences, radio remains the medium of cohesion and continuity, a unique feature of

the Spanish media landscape because of its attachments, passion and intensity (Carrera, personal communication, Santiago de Compostela, March 2010) From its pioneering inception in the 1920s to the culturally loaded expansion of football coverage during the 1950s, radio has embraced political, economic and technological change to retain its role as a constant feature of the Spanish cultural lexicon, securing the link between the traditional and modernist past and the post modernity of the present, so that since 1996, for example, Radio Barcelona has continued to provide an immediacy of access for football within the Catalan tradition.( Santacana Torres, personal communication, Barcelona, March 2010.)

This juxtaposition of tradition and modernity, technology and post-modernity found potent expression in the launch of club websites, the growth of the internet and the development of club television channels for Real Madrid and FC Barcelona, which have diversified the communication and representation of the Spanish game since 2000. The fact that FC Barcelona's website operates in five languages enables it to tap into the local and the global in respect of members, audiences and consumers, manufacturing hybrid forms of Catalanism on a global basis. From the late 1990s, Spanish football embraced an increasingly high profile, so that the celebrated rivalries at the heart of the game's historical, political and cultural identity are now played out to huge global audiences, mirroring transnational and global trends in football's globalised economy and political dynamic (Crolley and Hand 2006, Ch 9). The location of Real Madrid and FC Barcelona within the higher strata of the G14 has enabled both clubs to exploit their respective heritages (Crolley, Ch 28), so that the traditional enmity between Castile and Catalonia is transformed into el derbi or el clasico through the globalised mediated representation, of which Sky Television is but one key manifestation. In the post-modern idiom transforming stars into celebrities and marketing them as commodities, the global branding and marketing of football embellishes a global coinage of shared cultures of consumption (Cashmore, Ch 12). The recurrent use of the galacticos at Real Madrid from Zidane to Ronaldo and Bale as the football equivalent of the Harlem Globetrotters fuses global branding, football success with the club's traditional sense of superiority, with Beckham as the perfect icon in developing new marketing and sponsorship deals. (Boyle and

Haynes, Ch 4) The presence of the galacticos confirms the link between social status, identity and the global commodity of elite football. (Cashmore, Ch 12). Notwithstanding the achievement of *la roja* between 2008 and 2014, the global mediatisation of the Spanish game has reaffirmed the hegemony of club football, with high octane publicity based around sensationalism, speculation and hyperbole (Ball 2003, Ch 1). In the maturing democracy of contemporary Spain, the game is often reduced to a set of competing media constructions, exploiting football's history in order to define imagined rivalries played out on a global media stage.

From the manipulated and distorted lens of public service control during the Franco period, legal, technological and economic developments have merged to catapult the game into a new media landscape in which television became the principal source of revenue. From the 1980s onwards, the role of the LNP (Professional Players League) in the negotiations with television has highlighted the growth of player power which has since shaped many aspects of the game's contemporary profile (Andreff and Szmanski, Ch 10). During the late 1980s and early 1990s a series of often protracted alliances and rivalries began to dominate increasingly fierce battles to secure the contractual rights of live television football coverage. This shift of power towards players, television and the market signposted a key development in democratic Spain in which the traditional orthodoxies of the links between politics, media and football were challenged, adding a further dimension to the debate about the relationship between football and Spanish cultural identities.

## Notes

1 *la seleccion* is used in the media to describe Spain's national side. It demonstrates the historic sensitivity around constructs and definers of nationhood. *la furia espanola* was used by the contemporary press to highlight the courage, spirit and tenacity of *la seleccion* in the Antwerp in the Olympics of 1920, when the side won the silver medal. It became the traditional image associated with the national side.

2 The curse of *el fatalismo* or bad luck, created a further set of images around *la seleccion*. It defined their perceived lack of good fortune in international tournaments, particularly against Italy in the World Cups of 1934 and 1994, when a combination of alleged corruption, biased

refereeing and lack of reward for good play conspired against the side.

3 The term *la roja* was first used by Luis Aragones in the build up to Euro 2008, It marked a departure from *la furia* and was subsequently used to market and construct a more inclusive image for the national team.

4 The Pact of Forgetting ( sometimes referred to as 'collective amnesia' describes the transition period after the death of Franco in 1975, when political groups in Spain effectively ignored the civil war and the dictatorship in order to move towards the constitutional settlement of 1978. The policy was, and is, controversial and contested.

5 Santiago Bernabeu, a former distinguished player, was President of Real Madrid from 1943 to 1978. His long term of office witnessed the opening of the Bernabeu stadium in 1947 and the rise to dominance of the club in the second half of the 1950s, when the Franco regime started to exploit the team's success for propagandist purposes.

6 Marca was founded as a weekly publication in 1938, in the nationalist stronghold of San Sebastian. In 1942 it became a daily sports newspaper based in Madrid concentrating on football, especially on the activities of Real Madrid. In the Franco era, critics saw it as a mouthpiece for francoist propaganda, exploiting the achievements of Real to buttress the regime. It currently has a daily circulation of 2,500,000, making it the best selling newspaper in Spain.

7 The PNV, *Partido Nacionalista Vasca*\_(Basque National Party) was founded by Sabino Arana in 1895.

8 The assassination of FC Barcelona President Josep Sunyol by falangists in the mountains outside Madrid in August 1936 became an enduring legacy and symbol of the enmity between Catalonia and Madrid, a potent figure of martyrdom for FC Barcelona.

9 The Press Law of 1966 demonstrated a modest relaxation of media censorship in that criticism of the officials of francoism was allowed, but not of the regime itself or its leadership.

10 ETA, *Euskadi Ta Askatasuna* ( Basque Homeland in Freedom) was founded in 1959.It used bombings and a military campaign in attempting to achieve its objective of Basque independence.In October 2011, the organisation announced a permanent cessation in the use of violence to achieve their political objectives.

11 No-Do is the colloquial term given to *noticierios y documentales* (news and documentaries) which produced the cinema newsreels of the Franco and post- Franco regime between 1943 and 1981.The material served a

pro Franco propaganda and public relations.

12 *La sexta* (Channel 6) was the last national privately owned analogue channel. It was owned by Mediapro and broadcast one *la liga* match on a free to view basis each week on terrestrial television. In this way it combined the public service ethos with political kudos for the Zapatero government.

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## **Chapter 3**

### **Communication in business leadership**

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#### **1. ENTREPRENEUR VERSUS ENTREPRENEURSHIP**

*The entrepreneurship* represents *creation of a new firm*. Although it is possible that someone might engage in an entrepreneurship activity of creating a non-profit organization (like an association or a cultural center), the majority of the entrepreneurship activities are oriented, usually, to firms that want to obtain profit. Based on the definition of entrepreneurship, *entrepreneur* is *a person that is creating a new firm*. Many well-known names of products are results of economic activities created by such entrepreneurs (Brooks Brothers confections – Henry Sand Brooks, Barbie Dolls – Barbara Handler, Calvin Klein trousers – Calvin Klein, Heintz ketchup – Henry J. Heintz).

These new firms usually belong to the category of small firms, a category that is difficult to define. So, according to some opinions it is considered that firms that have less than 500 employees are *small firms*. According to other opinions, the number of employees from this category is less than 100. No matter the adopted criterion, these *small firms* are representing an important percentage of the total number of firms from countries with market economy. Another criterion, used for the identification of small firms is the one of private individual properties. In other words, this firm does not have to be a subsidiary of a bigger firm. In consequence, we consider that a firm is small, if it represents an independent business and has less than 500 employees. Terms of firm and entrepreneur were being used in creation of a new business, and terms of small firm owner of a small firm are being used when discussion has a general nature.

In the paper, *Innovation and the entrepreneurship system* well-known specialists in management, writer Peter Drucker makes

the next explanation: *innovation represent a specific tool of entrepreneur,that helps to look at change as at an opportunity to create a different business or a different service.* In the first place, it is difficult to be an entrepreneur without engage in at least one innovation, as long as duplicating, copying and reproducing of what has been already realized won't attract a sufficient number of customers. The specific dilemma of innovation is illustrated in table no. 1.

As it can be seen, in this table, opportunity criterions are varying in accordance with innovation degree. Criterions can be evaluated in terms of risk, evaluation or potential profit. The risk, represent the possibility of business failure. Evaluation represents the facility to estimate signification and feasibility of the basic idea of a new firm. Potential profit is the probable level of earnings or rewards of entrepreneur as a result of taking the risk to apply the idea by creating this business.

As the table shows, if a certain firm is too much alike competition firms, its importance and feasibility are easy to appreciate (as long as others already did that). Unfortunately, such a firm has a very high level of risk, because it's very improbable to attract clients, so the potential profit level is very low. As much as new business ideas are more and more innovative, firm's importance and feasibility are more and more difficult to evaluate and associated risk is bigger. As much as innovative nature and level of risk are growing, the potential profit will grow too, because the possibility to offer a new and more wanted product or service, is growing too. In the table, it can be observed that entrepreneur isn't the creator any more, the inventor of this product or service, but is rather the one that knows its utility from the commercial point of view.

Anyway, the motivation represents an important part of entrepreneurship process because if it would not be for motivation, perspectives of success are very low.

Table no. 1

Opportunity criterions associated with innovation degree of new firms

Opportunity criterions	New inventions	High innovation degree	Medium innovation degree	Low innovation degree	Imitation
Risks	Very high	High	Medium	Medium to low	Very big
Evaluations	Very hard to realize	Hard to realize	Kind of difficult	Easy to realize	Easy to realize
Potential profit	Very big	Big	Big and medium	Medium to low	Low or none

The activity of understanding, has attracted more and more the attention of the press. This concentration reflects the growing recognition of substantial economic and social contributions of this activity and of the firm.

In the context of these preoccupations there will be considered major contributions of entrepreneurship activity in the area of *economic growth, innovation, opportunities of creating work places and in the area of alternatives for building professional careers of women and minorities.*

The activity of entrepreneurs leads to the creation of a new business that is contributing to economic growth. As long as it doesn't exist a central source of information regarding appearance of new firms, it is impossible to obtain an exact number of them.

As it has been anticipated in the appreciation of entrepreneurship opportunities regarding the necessity of innovation in the success of entrepreneurship activity, entrepreneurs have always created new products and services that have changed the life style. Statistical data are showing that in comparison with bigger and more stable forms of activity organization, new firms are realizing a bigger percentage of the totality of new products.

New and small firms are delivering the majority of new work places. The economic impact of the growth of work places in these firms, is probably bigger in periods of economic recession, when bigger firms are reducing their personnel. In these periods, when many

persons that have lost their work place, are finding a new work place in small firms.

Firms are offering the possibility for women and minorities to have the access in the business world. A major attraction is constituted by the possibility to avoid discriminations. In stable organizations, women and minorities are often guided to low hierarchical positions.

Another attractive element is represented by the perspective of material independence and the capacity to control results of own efforts. Finally, some governmental organizations have encouraged the appearance of firms owned by women or minorities.

They have developed programs, that are helping such firms to be favored in the problem of obtaining contracts with the state.

What exactly is determining someone to create a new successful firm? In order to find the answer, researchers have explored a few different ways. They have concentrated on characteristic features of the entrepreneur, supposing that it is possible to exist some specific particularities. They have started to examine closer some circumstances of life experiences, that could influence them to become entrepreneurs.

Besides that, researchers have considered the possibility that certain environmental factors could encourage their entrepreneurship activity. Finally, they have examined data regarding feasibility of entrepreneurship activity, that seems to affect decision to engage in such activities. All these factors, that are influencing the entrepreneurship activity, are shown in figure no. 1.

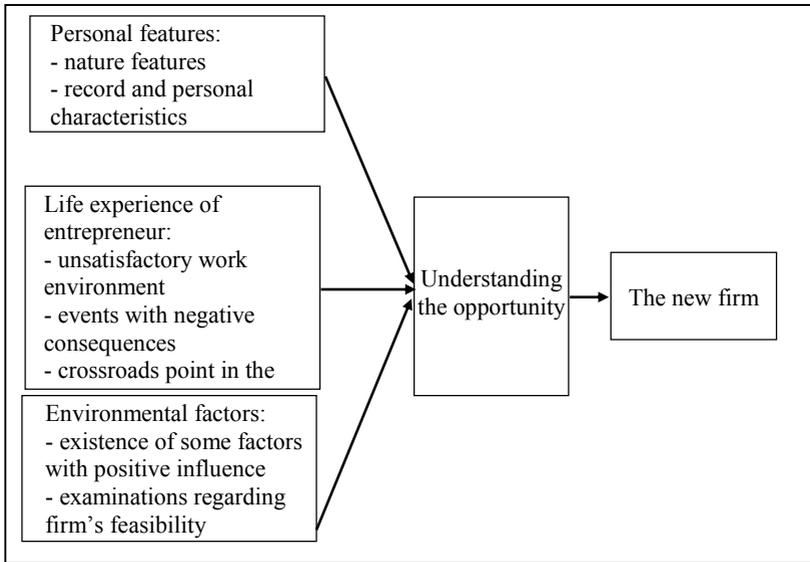


Figure no. 1. Factors that are influencing the entrepreneurship

There are three modalities to found a new firm:

➤ *creation of a new firm*, that, is usually named *startup*. Based on studies made on a representative sample of entrepreneurs, researchers have identified the following reasons for creation of a new firm. Creation of a new firm is based on: *desire to change* (in this case, this person wants to change the type of activity, that he is developing now, and it doesn't offer him wanted satisfactions); *capitalization of obtained knowledge* (in this case, the entrepreneur had a job that has offered him the possibility to develop aptitudes and technical knowledge that can be capitalized successfully in a new firm); *experience in the area* (in this case, the person that wants to create the new firm has to be a good specialist in his activity area, to associate with other persons and to create a flexible firm, that is considering changes of environmental factors and customers' necessities); *promotion of a new idea of product or service* (the firm is created based on an innovative idea of product or service, that hasn't been offered on market before, product or service that is very complex and

difficult to realize); *detailed business plan* (in this case, entrepreneur is using the existence planning for obtaining qualities, as well for the realization of work duties requested by the new firm, offered products and services being similar with ones of the competition, but firms brings a significant improvement or is addressing to a new market share);

➤ *buying an extant firm* is the second modality to start a new business. Entrepreneurs are buying, usually, when they think they can change its direction and improve its activity, so, that it would obtain profit. It is possible that these firms would go bankrupt. When someone is buying a business, some aspects must be analyzed (fig. no. 2.) For this, it is necessary to consult a specialist usually a jurist, in order to settle aspects regarding deed of conveyance and an economist, in order to analyze economic situation of the firm and to determine the adequate price;

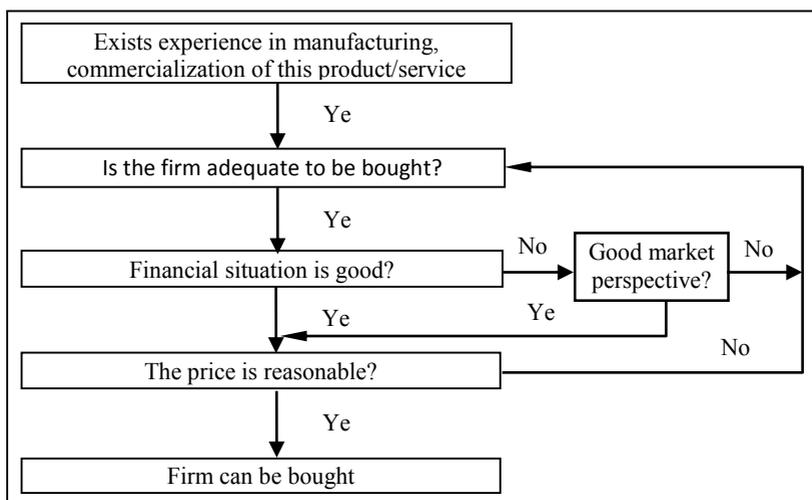


Figure no. 2. Buying an existant firm

➤ *franchising* is the third possibility to start a business. A contract of franchising represents an agreement that a firm (franchisor) is demising to a person or firm (franchiser) in exchange to a sum of money the right or privilege to do business in a certain way, on a certain period of time and in a certain place.

*Franchisor* is a producer or distributor of a brand product, that has tradition and is known in a certain activity area.

*Franchiser* is a person or firm, to whom is being given the possibility to start a business with a considerable chance to be successful.

The initiation of franchising is mostly franchisor responsibility. The most important advantage of franchiser is relatively low afferent risk and the access to acknowledged, successful business methods, and the reputation of franchisor. There are some disadvantages too regarding the difficulty to cancel a franchising contract, small independence of franchiser.

No matter the method that helps a person to enter in the business world, there are some stages of developing a business: *realization of a business plan, insurance with necessary resources and choosing the adequate location for this business.*

*The business plan* is recommended by specialists when a person wants to start a business.

*The business plan* represent a document drafted by the future chief of the firm, that is containing details about the nature of business and/or services, competition in this area, production and used methods of marketing, financing and other aspects of the future business.

A well-done business plan can be realized in a certain period of time, in accordance with the complexity of business, number of involved parts and number of determinative factors. It has a lot of goals: *in the first place* helps to ground the idea of business, this way obliging the entrepreneur to think about some aspects and problems that might appear during the development of activity; *in the second place* it might help the entrepreneur to obtain necessary financing. The majority of investors do not consider financing demands, if these don't contain a grounded business plan; *in the third place* a business plan represents the basic evaluation of realized progress in this business. Specialists think that business plan is very important for new firms because they tend to be very unstable. With the help of such a business plan can be identified potential problems and can be found solutions for them; *in the fourth place* a well grounded business plan is growing the credibility. For example, potential employees have to be convinced

that firm will have success, and suppliers are expanding their credit line when there is a well-done business plan.

The elaboration of a business plan requires the following actions: personal implication in founding a business; analyzing strong and weak points, business experience, education and desires of the entrepreneur. He has to answer the following questions: Why do I have to enter business? Choosing the adequate product or service. Here, will be answered questions like: What is offering my new product or service? What will be the attitude of customers? marketing research. The answers are: Who are the customers? Where are they located? What are consumption traditions? Who are my competitors? How powerful is the competition? Forecasting of future large market share, if this is possible; forecasting of returns: monthly in the first year; trimestrial in the second year and yearly in the third year; choosing of adequate location for the future business; creation of a production plan. Relevant questions are: How big will be my factory? What equipment do I need? How will I coordinate and control the production? Development of a marketing plan, by answering the following questions: How will I get customers? What promotional methods should I use? What kind of distribution is more appropriate for my business? Elaboration of the organizational plan of the firm. What is the organizational structure of the firm? How many hierarchical levels will be? Legal organization, what kind of firm do we choose: limited company, share company, sleeping partners company, etc; elaboration of insurance plan of the firm. What kind of insurance do I need? Elaboration of accounting organization of the firm, accounts and necessary documentation; development of information system of the firm; elaboration of financial plan; drafting of a letter of intent, that would include the goal and abstract of the business plan.

*Insurance of financial or human resources* necessary for founding a business.

New business, even the small ones, need *financial resources*. There are many financing sources for entrepreneurs and owners of small business. The most utilized are: own savings, loans from friends an family and loans banks. One of the main problems, associated with ensuring of financing, is business control, that entrepreneurs have to give up to, in order to obtain the necessary financing.

There are two main types of available financing: *first* is the loan capital, financing that is being followed by its return, plus the afferent interest. Usually, loan can be obtained by depositing some goods (house, car, equipment) in case firm won't be able to return the loan. Loan capital for new business and for small business comes mostly from other sources. *Second* type of financing is shareholder's capital. This way, the investor will participate at profit and at every sale of goods in relation with his shares.

Although many new business are initiated by entrepreneurs, some of them are initiated by more persons, that are forming a business group. A business group is a group, formed of two or more persons, united for the realization of a new business. That would be an ideal situation if members of the business group would complete each others qualities, this way, consolidating plans of the future business. For the beginning of business there are essential strong engagements and reciprocal trust. Potential members of the group have to analyze very carefully their objectives, because a premature breaking of the group might have serious repercussions on the success of the idea. So *human resources* are necessary.

Of course, new firms and small business need help from other entrepreneurs or owners. Actually, small firms owners' experience showed that the most difficult problem is finding of competent workers and their motivation in order to obtain superior performances. Because in a small firm every employer represents a big percentage of work forces, individual contribution to firm's success might be significant. Such entrepreneurs and owners of small business hate to have a good selection system in order to find valuable persons.

*Choosing of the adequate location* is an important decision. For example, the success of a fast-food depends on potential customers, so on persons that are passing by. On the other side, attraction of customers by publicity will generate the fact that business won't be affected in such a big measure, by the location. In choosing of the adequate location entrepreneurs have to consider factors like: *community, good commercial custom, local and social demands and price.*

*Community* where entrepreneur decides to develop his activity is a personal option. Some person prefer a certain geographic area, others small towns or big cities. In some geographic areas, local

authorities are offering advantages and material stimulus for firm that choose this area.

Usually, decision regarding location is determined by the *good commercial custom*, geographical area where are potential customers. To determine commercial area, means to determine who will be your customers and find out what they usually buy.

Many firms *are renting necessary equipment and headquarters*, sometimes with the option *to buy* them. This is happening because of the fact that suppliers of financial resources are reticent when firm doesn't have a history. When business are growing, entrepreneurs tend to buy their headquarters.

*Zone regulations* might encourage or sometimes discourage new business. For example, many types of firms, like light industry or car showrooms, aren't allowed to be built in residential zones. More than that, regulations of some zones are allowing certain types of business, like restaurants, car washes, gas station, shops and bars.

For this reasons, an investigation of local laws and regulations is necessary in choosing the location of business.

Dimension of *the rent* and of the level of *price* can vary and this might be important for the new business. Commercial spaces are usually rented considering the surface. These prices are determined by localization, space conditions, offered services and parking possibilities for employees and customers. Sometimes, starting a business in an isolated area might reduce cost a lot, although this kind of localization isn't always recommended.

As much as new firms are starting to grow, they are entering the competition with other activities, that they have to handle with.

When some researchers have studied development stages of firms, in generally, others have investigated development stages of a small business, in order to understand better starting period of a small firm.

According to one of these analysis, development process of a small firm is passing through the following 5 stages (fig. no. 3.)

➤ *the stage of existence*, when the small business starts to function. The main problems that is confronting a firm are attraction of consumers and distribution of products and services. Critical aspects are: attraction of a sufficient number of buyers, satisfaction of customers' necessities by offering wanted products and services and

existence of sufficient assets to cover costs of launching. In this stage, firms are fighting for their existence,. Many times, initial assets are exhausting before number of customers or production capacities would correspond to necessities. In this case, the new firm is going bankrupt or is being sold;

➤ *the stage of surviving*, when the main preoccupation of managers is not just to exist, but to obtain profits. It has to be found answer for two questions: can the firm obtain big enough to ensure reparation and replacement of assets? Can the firm generate sufficient funds for financing the development, in case it would be obtained a good rentability of assets and work?

The main preoccupation in this period is to survive, the owner still making the most important decisions regarding the firm. Some firms might stay in the stage of development for a long time, hardly realizing its objectives, till the moment when the owner is giving up and is retiring. Other firms might grow in dimensions and start to realize a reasonable profit, this way passing to the next stage;

➤ *the stage of success*, when the owner is confronting a very important decision: to stable profit on a certain level, that he would use to cover other objectives (stabilization phase) or to continue to develop (development phase)? We are talking about *success*.

In the *stabilization* phase, firm has a good economic situation and is realizing a medium or high profit. If it doesn't adapt to chase of the economic environment, it might return to the stage of surviving.

In the *development* phase, owner is using cash and liability capacity of the firm to develop it, to make it bigger. The most important duties are taking place in such way, that firm would stay profitable, and managers would handle the expansion. Strategic forecasting becomes decisive, and owner has to be involved in all phases of business. If it succeeds, firm is passing to the next stage; if not, it will return to the stabilization phase or, in the worst case, to the surviving stage or might even be sold;

➤ *the stage of taking-over* is the stage of key-problems, like: rhythm and financing of development. A decisive problems is to name responsible persons for firm's development. If the cash is sufficient, the situation is difficult. Production forecasting, as well as strategic forecasting are extremely important. Entrepreneurs end small business owners don't have the necessary education and experience to lead a

firm in this stage. Sometimes, entrepreneurs admit their limits and retiring so that experienced managers might lead the firm. So, this is the *taking-over* stage;

➤ *the stage of maturity*, when firm's necessities are to consolidate and to control results of a fast growth, but as well to find the spirit that would help it to develop, then the firms has reached *the maturity*. Yet, dimension of growth might generate *boning* (situation characterized by lack of innovation and avoiding of risk). In accordance with rapidity of changes in the economic environment, *boning* might lead to decline or even to the stage of surviving or liquidation of business .In this stage, the firm has to make important steps in encouraging the innovation. The accent is being put now not on *entrepreneurship* but on *intrapreneurship*.

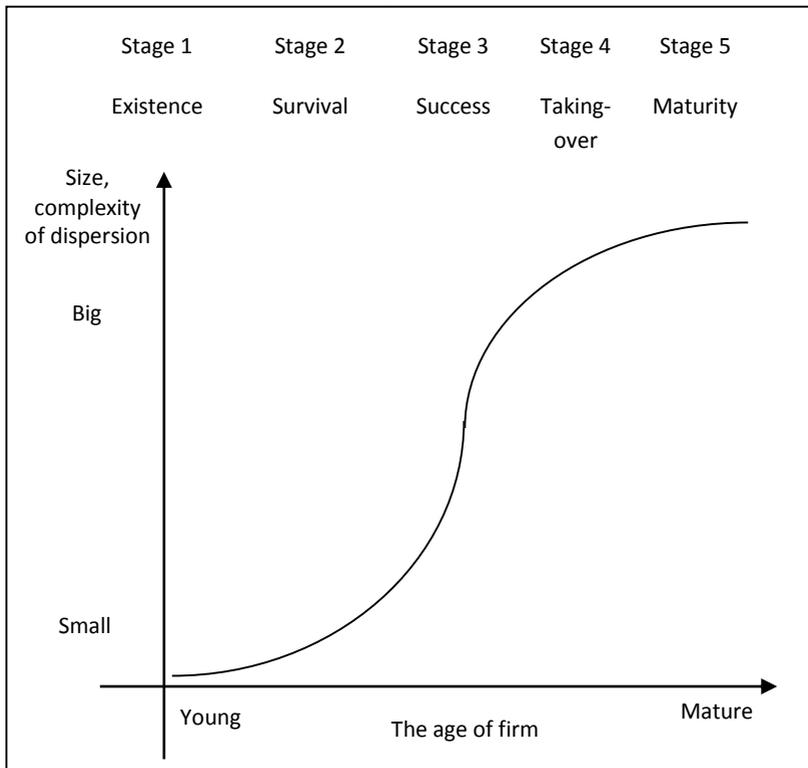


Figure no. 3. Development stages of a firm

When a firm is reaching the maturity stage, its necessities for intrapreneurship, that is a practice of innovation by manufacturing new products, process or services.

Small and new business can bring to entrepreneur a considerable satisfaction in the area of realizations and financial rewards. On the other side, such trials are generating relatively unique problems like: bankrupt and the perspective to fail, ethics problems, appearance of some family problems, development of actions out of the blue, not recognizing the necessity to consult persons from firm's exterior etc.

The most frequent causes for bankruptcy are: business crisis; inefficient administration of the firm; insufficiency of capital; contracting of inefficient loans from different banks; not recognizing the intensity of competition on market or on market share, of firms that have the same activity object; unsuitable territorial emplacement in ratio with sources of raw material and market for the end-product; high and very high interests for contracted loans, from different banks; unfavorable change of manufacturing of the firm that wouldn't correspond to this development strategies etc.

## **2. Leader and the leadership**

Some researchers sustain that the importance of leaders is supra-evaluated, most of the time, and are recommending the possibility of existence of substitutes for leaders, meaning *substitute factors of the leadership*.

An interesting aspect of the theory way-goal is the fact that situation factor might lead sometimes to useless or inefficient types of management.

The concept of *substitute factors of the management*, is trying to outline some situation factors that can make useless leader's behavior or can deny their efficiency.

According to this concept, neutralizing factors are situation factors that are making impossible the influence of leader's behavior regarding satisfaction and realizations of subordinates. In other words, they are canceling or neutralizing effects of leader's behavior.

Examples of neutralizing factors, that might cancel the influence of the two types of behavior – oriented to duties or oriented

to inter-personal relations – are: the necessity of independence for subordinates, low interests of subordinates for extant rewards and physical distance between leader and subordinates. On the other side, substitute factors are situation factors that are making the influence of management to be not just impossible, but useless.

Substitute factors for leaders with behavior oriented to inter-personal relations include work that is generating internal satisfactions and subordinates oriented to this work. Substitute factors for leaders with behavior oriented to duties, include: capable and experienced subordinates and routine work, that has specific methods and/or is ensuring a clear feedback.

Neutralizing factors might create a vacuum of leadership, that is generating disfunctionalities. So, managers have to appreciate the presence of neutralizing factors and to try to change the situation as much as possible, so, that behavior of leader would give the wanted result. (for example, a manager might elaborate new reward methods, like possibilities of education, if subordinates have a low interests for extant rewards). On the other side, situational factors, that are substituting the leadership, can allow the leader to concentrate on other areas, where his activity is necessary, because substitute factors tend to have a positive influence on satisfaction and realization of subordinates.

Sometimes, substitute factors are replacing only a part of leading behavior, the leadership still being necessary. Leader's reaction on actions realized by subordinate, are giving to the last one the possibility of orientation, but a certain guidance from a leader might still be necessary, until the subordinate will have the necessary experience or in case it appear some unusual circumstances. Besides the preoccupation for guiding certain subordinates and work groups, managers have to consider the influence of life cycle of the firm.

The concept of *leader* represent the process of influencing of other persons in order to reach goals of the firm. It is being considered the basic element of leading function of the management.

Why do people accept the influence of leaders? Mostly, because leaders have power, that comes from different source.

*Power is the capacity of a person to influence the behavior of others.* Leaders of the firm are relying on the following six major types of power:

➤ *legitimate power* comes from a certain position in the managerial hierarchy and its authority. When we accept a post in a company, we realize that we will receive duties from the direct superior manager. We consider his orders legitimate, because this person has the authority position;

➤ *the power of rewarding* is based on the capacity to control and to offer reward to other persons. In most firms, there is a big diversity of rewards that can be controlled by a manager: bonuses, salary increments, interesting projects, promotions, training, recognition of merits, appointment in important posts, positive feedback;

➤ *the power of compulsion* depends on the possibility to punish the others when they don't have an adequate behavior. Forms of compulsion that can be used by the managers are including: criticisms, reprimands, suspensions, letter of warning, demotions, renunciation to pay some bonuses and dismissing;

➤ *the professional power* is based on the possession of specialized knowledge, appreciated by other members of the collective. Often, managers have considerable knowledge, technical abilities and experience, essential for the senses of subordinates;

➤ *the power of information* results from the access to important information and from control over distribution of information regarding firm's activity and its future plans. Usually, managers have an easy access to this kind of information in comparison with their subordinates, because there is some information that aren't being known by all members of the firm;

➤ *personal power* results from the capacity to be admired by others. When we admire someone, we wish to be like that person or to be friend with her, we will listen to her more carefully and will follow her indications.

Even if all six types of power are ensuring an influence over other persons, the utilization of a certain type of power depends on the motivation level of subordinates. Subordinates might react to duties, given by the leader, with the adoption of an *attitude of trust, permission or resistance*. *In the first case* employees are enthusiastic and are answering with enthusiasm and are making big efforts in order to realize objectives. *In the second case*, they are making minimum efforts for the realization of duties and have a medium or low performance. *In the third case*, might pretend that they are getting

involved, making minimum efforts, and might even sabotage reaching of objectives.

Relation between utilization of different power sources of a leader and reactions of subordinates are shown in figure no. 4. This way, it can be observed that professional and personal power are the most indicated ones, because they are leading to the implication of employees, when legitimate power, information and reward power are determining the discontent of employees. Utilization of compulsion power is always determining a powerful resistance of subordinates.

Important sources of leading power and relations of subordinates to them.			
Leader's source of influence	Types of reaction		
	Trust	Permission	Resistance
Personal power	If the request is important for leader	If the request is understood to be unimportant for leader	If the request is something that would cause damages to leader
Professional power	If the request is persuasive and subordinates are acting in the sense of duties	If the request is persuasive and subordinates are listless to their duties	If the leader is arrogant, subordinates do not want to complete their duties
Legitimate power	If the request is adequate and polite	If the request seems to be legitimate	If the request is arrogant and inappropriate
Power of information	If the request is based on data	If the request is reasonable	If the leader is arrogant and is manipulating people
Power of rewarding	If the was used in a subtle way	If it was used in a mechanical, impersonal way	If it was used in an arrogant way

Power of compulsion	Uncalled	If its being used in an non-repressive way	If its being used in a hostile way
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Figure no. 4. Important sources of leading power and reactions of subordinates to them

In order to be efficient, managers have to apply different types of power.

Although the power is explaining the reason why managers have such an influence, are being used, as well, other concepts for studying the nature of their influence on the others.

During the First World War, psychologists from the army, looking for methods to select officers, have based scientific studies regarding specific features of a manager. First researchers have tried to identify features that were differencing leaders from the others. *Features* are internal distinct characteristics or qualities like: physical features (height, weight, energy), characteristics of personality (originality, open nature), qualities and abilities (intelligence, competence, technical knowledge) and social factors (sociability, social-economic position).

First researchers have analyzed different features of persons, and they let them to work in groups without leaders. The idea was to discover if these are some features that are differencing them from one another features that will help to identify leaders. The research has stopped in the 50-es when the majority of research were showing that there aren't specific features of the potential leader. Advanced statistical techniques are offering the possibility now to evaluate better results. Results are showing that there are some special features associated to persons that are being identified as leaders – *intelligence, dominion, aggressively and power of decision*.

It is possible that future researches would identify features, that would show potential leaders, at least in some situations. For example, a well-known research, realized by Americans has shown that features like capacity communicate, inter-human relations, tolerance to uncertainty, energy, creativity, correspond to a leader. Still, there exists the question if these features can guarantee the

performance of leaders. Many experts think that performance is related more with effective actions of leader, than with his features. As a result, the most recent researches have concentrated mostly on leaders' behavior.

### **3. Styles of management and types of managers**

Researches have been preoccupied of studying the possibility that certain specific behaviors are making some leaders more efficient than the others. Features of a person are difficult to change, but we can learn universal efficient behaviors – as we can identify them – this way, becoming successful leaders.

The most important realized researches in this area are:

➤ *researches of Universities of Iowa and Michigan* are first successful trials to identify styles of management. They have concentrated on three styles of management: *autocrat* when leaders are making unilateral decision, are dictating work methods, are limiting employees' knowledge about objective till the next stage; *democrat*, when leaders of a group are letting the group to establish their work methods, are telling them what are the general goals and are using feedback for on efficient supervision; *laissez-faire*, when leaders are giving freedom to the group, are supplying them with necessary materials are participating only by answering questions and avoid the feedback – in other words, they do nothing.

In order to determine which one of the styles is more efficient, researchers have worked with many groups, teaching adult persons how to adopt a certain style and after that, have placed leaders in boy clubs with ages from 10 to 14 years. They have observed that, according to all criterions, the group with *laissez-faire* style of management was non-performing in comparison with the *autocrat* and *democrat* ones.

On the other side, in conditions of equal quantity of work, in groups with *autocrat* and *democrat* management, the quality of work and group satisfaction were higher in the *democrat* group.

The result was that the *democrat* style can lead to good results both quantitative and qualitative. It looked like it was found the key. Unfortunately, ulterior researches are leading to other results.

The democrat style, but other times it was upside down. Results related with the satisfaction of subordinates were better when it was applied the democrat style.

These discoveries have created a dilemma for researchers. When democrat management seems to make subordinates more happy, it doesn't always lead to a bigger or equal performance as the autocrat management. More than that, a lot of managers haven't used this democratic style.

For simplifying these problems, Robert Tannenbaum and Warren H. Schmidt Have elaborated a chart of behaviors. This chart represents different levels of management styles, from the autocrat (or oriented to leader) to the democrat (or oriented to employee).

Going away the autocrat style represents an approaching to the democrat style and the reverse. In the elaboration of the chart, research has modified a little the autocrat sense, that doesn't have sanction or hiding from employees final goals.

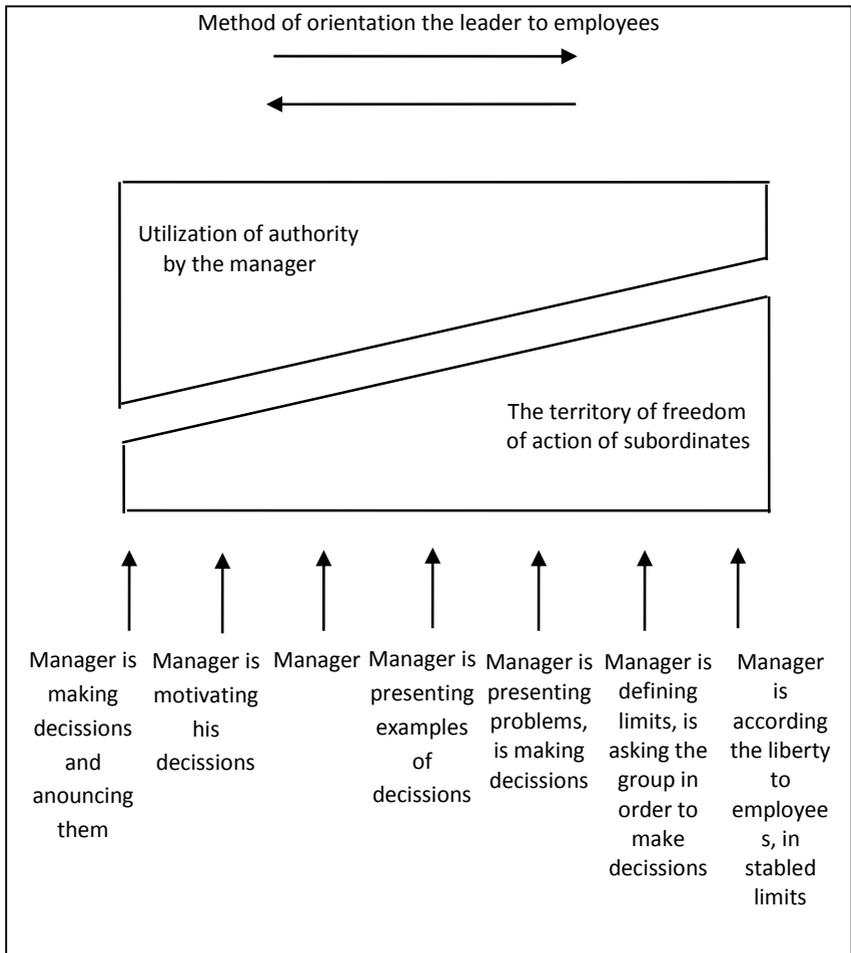


Figure no 5. An example of management styles

According to the vision of Tannenbaum and Schmidt, managers have to consider, in the adoption of management style, his own personality, employees and present situation. On short term, managers have to prove a certain flexibility of their behavior in different situations. Researchers think that, on a long term, managers have to try to orientate to subordinates, on the idea that such a behavior has a high potential for growing motivation of employees, quality of decisions, place in the team

and development of the firm. Researcher from the University of Michigan are confirming the utility of the method oriented to duties or productivity. With the help of the method oriented to employees, leaders can concentrate on sustaining the work team for the growth of results (fig. no. 5). With the help of the method oriented to leader, leaders are sharing work in routine duties and control workers in order to be sure that methods were being followed and productivity level has reached standards. Yet, results were still various, which means that activity of research of leader's behavior has to continue;

➤ *researches of Ohio University* were realized by a group of researchers that have developed the third research strategy of behavior of managers. They have started by identifying a big number of management styles. After that, they have elaborated a questionnaire, that allowed them to evaluate behavior of more leaders and to compare different factors, like group performance or satisfaction, in order to discover what kind of behavior is more efficient. Although they have identified many styles, two of them were the most important: *structure initiation* and *consideration*.

*Structure initiation* is the degree where leader is defining his own role and the one of subordinates, to reach firm's goals. This includes many managerial functions (forecasting, organization and coordination) and is concentrating especially on duties. Structure initiation is very much alike the style oriented to duties of researches done by the Michigan State, but includes a large scale of managerial functions.

*Consideration* is the degree where a leader is creating a relation based on reciprocal trust between him and subordinates respects their ideas and is preoccupied by their feelings. This kind of leader is more friendly with his subordinates, maintaining a good communication and encouraging the participation to the decision-making process. He is putting the accent on people. Unlike researchers from Iowa and Michigan, who have considered that dimensions of management are two opposite ends of the same whole, researchers from Ohio have sustained that structure initiation and consideration are two independent behaviors. The bi-dimensional approach of the Ohio state is being presented lower down. This configuration has a practical application, a lot of leaders having the characteristics of both structure initiation and consideration. The bi-dimensional approach (fig. no. 6) gives the possibility to a leader to put the accent on duties and yet to offer, as well, satisfaction to employees. As long initial researches were based on the idea that a manager with high

structure initiation and with an adequate consideration will have the best results, this case was, later, cataloged as a myth. Why this interpretation? The main reason was that, as well as researches from Iowa and Michigan, everything is simple. On the way researches are developing, it becomes more and more obvious that situation factors (nature of the duty and employees' expectations) will affect the success of a certain behavior.

*Managerial scale* has been elaborated by Robert Blake and Jane Srygley Mouton.

In the place of concentrating directly on the behavior of leader studied by researchers from Ohio, this scale is comparing leading attitudes: preoccupation for people and preoccupation for production.

A recent version of the scale is presented in figure no. 7., that was used as an instrument for the preparation of a big number of firms.

In accordance with the level of preoccupation for employees and production, a manager might be situated anywhere on the scale. Blake and Mouton have shown that the most wanted style is chooser to 9,9, having a big implication regarding employees and production. Anyway, researches made in Ohio were suggesting that an orientation of 9,9 doesn't always lead to very good results scale allows a certain flexibility in leader's behavior, in accordance with evaluation of people by the leader and realized production in a certain period.

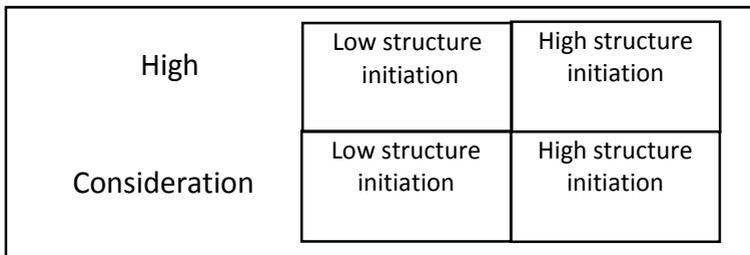


Fig no. 6. The bi-dimensional model of the Ohio management

Preoccupation for people	9	1,9 Club management. A special attention given to personnel necessities, to create a friendly work environment.	9,9 Team management. Realization of goals is done with the participation of people, common interests about objectives of the organization is leading to trust and respect relations.								
	8		5,5 Firm oriented management. Performance of the firm is possible by balancing necessity to realize a duty with the maintenance of spirit at a satisfactory level.								
	7		1,1 Inefficient management. A minimum effort for wanted work and sustaining of connections between members of the firm.			9,1 Authority. The efficiency of actions results from the arrangement of work conditions, so that human element' would interfere a little.					
	6										
		1	2	3	4	5	6	7	8	9	
		Low					High				
		Preoccupation for production									

Figure no 7. Managerial scale

In researches regarding different styles of management, a special place had the *behavior of women-leaders regarding men-*

*leaders*. It has appeared the question if women have different styles of management. Certain researches have shown that people think that women are oriented to personal problems, that's why they don't occupy leading positions. Men are seen as being oriented mostly on duties, and, because of this, they are better for managerial positions. As it was later, none of these ideas is right. Researches show that women, as much as men, can be very good leaders and are efficient in fulfillment of duties and in ensuring satisfaction to employees.

Although they have tried to identify management style that would be efficient in every situation, researchers have reached the conclusion that a style that is efficient in one situation, won't be efficient in other situation. That's why, they have started to give importance to situation factors. These approaches are known as *situation theories*. They are named, as well, *contextual theories*, because they sustain that certain features or management styles depend on specific characteristics of the situation.

The most known of them are:

➤ *Fielder's contextual model* elaborated by the researcher Fred Fielder and his associates, shows that leaders are different in accordance with the degree of orientation to duties or employees. This difference makes them more efficient in certain situations. The model is identifying the type of situation where every leader will act better. He is talking about *LPC (least preferred coworker) orientation*, that represents a personal feature that shows the level where a person is giving higher priority to fulfillment of duties than to inter-personal relations. LPC orientation can be evaluated with the help of the LPC scale, that has 18 adjectives. The leader has to describe person that he can't work with by giving him a mark between 1 and 8 points for every adjective.

Agreeable  $\frac{\quad}{8} : \frac{\quad}{7} : \frac{\quad}{6} : \frac{\quad}{5} : \frac{\quad}{4} : \frac{\quad}{3} : \frac{\quad}{2} : \frac{\quad}{1}$  Disagreeable

If a leader describes his subordinate in relatively disagreeable terms on the LPC scale, he is probably motivated by the duty and is putting *business before pleasure*. If the leader describes his least preferred subordinate in relatively positive terms, leader is a person that can motivate people and thinks that a good relations with his

subordinates is an important factor for the success of the team. As Fiedler said, the LPC orientation of a leader, as a personal feature, is relatively stable and difficult to change. The main idea of this model is that the LPC orientation of a leader has to be in concordance with situation factors that are favorizing the success of this leader. As well, the model is based on the *evaluation of situation*, by establishing 3 situation factors that are affecting the control degree of the situation for a leader: *relations leader-member* are describing the level where every leader has the support of group members, this being the most important situation variable. In order to valuate this factor, leader has to ask himself the following question: “will members of the group do what I’m asking them to, can they be trusted, do they sustain me?” *structure of the duty* represents the degree where a duty is obviously specified regarding goals, methods and performance standards. In this case, the question is: “Do I know what I have to do and how to do it?”; the *authority of position* represents the power given by the firm to the leader so, that he would fulfill his duties and is related to sanctions and rewards. Leader is asking himself the following question: “do I have the support of my superior and the necessary authority in the relation with my subordinates?”

Fiedler thinks that managers can’t change easy their LPC orientation or management style. As a result, he says that leader has to understand management style and to analyze control that they have over situation. If those two don’t match, leader has to make changes or to find a better management style;

TYPES O DECISIONS AFTER THE MODEL OF NORMATIVE LEADERSHIP	
Symbol	Definition
AI	You are solving the problem or taking the decision by yourself, using available information
AII	You obtain the necessary information from the subordinates, after that, you are making the decision by yourself. You may not tell your subordinates what are you working on, because they don’t have a very important role in decision-making.
CI	You are consulting with every subordinate, listen to their ideas and suggestions without making a group and after that,

	you are making the decision by yourself. This may reflect or not the influence of subordinates.
CII	You are consulting subordinates in a group meeting, listen to their ideas and suggestions and after that, you are making the decision by yourself. This reflect or not the influence of subordinates
GII	You are consulting your subordinates in group meeting. Together you are elaborating and evaluating alternatives trying to get to a conclusion. Your role is to coordinate the discursion, to focus on the problem, to be sure that are discussed all critical points. You can offer to the group your information and ideas, but you can't force them to make the decision.

Figure no 8. Management methods according to the normative model

➤ *the model of normative leadership* helps leaders to evaluate critical situation factors, that are affecting the level where they should include subordinates in decision-making. The model includes five types of decision management presented in figure no. 8. Every method is symbolized by a letter and a number: A, C, G, mean *autocrat, consultative and group*. *Autocratic* and *consultative* approaches have two variants: I and II.

Another elaborated theory belongs to Paul Hersey and Ken Blanchard and it is based on the idea that leaders have to change their behavior in accordance with the most important situational factors – competence of subordinates. The theory is concentrating on two types of leadership formulated by researchers from Ohio: *behavior oriented to duties* that is referring to the level where leader is specifying duties and responsibilities of every group, establishing what to do, how to do, when, where and who has to do it; *behavior oriented to interpersonal relations* that is referring to the level where the leader gets involved in bi or multidirectional communication and includes listening and supporting.

Because these two types of management are considered independent dimensions, a leader might adopt both of them.

In order to determine what combination of management styles has to be used in a certain situation, according to the theory of situational management, a leader has to evaluate competence of their subordinates. This is referring to the ability and goodwill of employees to fulfill a certain duty.

*The ability* includes capacity, style, knowledge and experience necessary to fulfill a duty.

*The goodwill* is referring to trust, commitment and motivation, necessary to fulfill a duty. As it can be observed in the bottom part of figure no. 9, competence has four levels: low (R1), low to temperate (R2), temperate to high (R3), high (R4). The graphic shows styles of leadership, adequate to every level of competence.

*Advising* is the style used in situations of a low competence when subordinates are incapable and don't want to take responsibility for a certain duty. In this style, leader has to advise subordinates regarding directions to follow.

*The argumentation* is used when competence is low to temperate, subordinates can't assume responsibilities, but they want to. This style is based on direction of employees, as well as on sustained of desires and individual enthusiasm.

*Participation* is the style used when the competence is temperate to high, subordinates are capable of assuming responsibilities, but don't want to. Because subordinates are capable to act, the participative style, where leader is putting the accent on communication on both senses and on collaboration, it is probably the most efficient.

*Devolution* is the style used when competence is high and subordinates are capable and want to take the responsibilities. That's why, this style is the most successful. In order to apply this theory, leaders have to establish what aspects do they have the influence, to evaluate the competence of every person and to select the adequate management style for every hierarchical level. Results of some tests regarding the situational theory shows that it can be applied better in the case of new employees.

In preoccupations of the *situational theory* it can be found the *theory way – goal* that is trying to explain the way leader's behavior might influence positively motivation and satisfaction of subordinates. Its elaboration belongs to researcher Robert J. House and his colleges.

He had named it *theory way-goal* because it is concentrating on the perception by subordinates of objectives of activity and on the possible ways to reach these organizational and individual objectives.

The theory of *way-goal* is identifying four important styles of leadership (fig. no. 6.9): *the directing style* constitute of informing subordinates on what is expected from them, their guidance regarding work methods, elaboration of work programs, identification of evaluation standards, establishing rewards; *the supporting style* represents the style, when managers are showing their preoccupation for situation, welfare and necessities of subordinates, are making their work more agreeable and more friendly; *the participative style* is characterized by the fact that managers are consulting subordinates, are encouraging their suggestions and considering their ideas in the process of decision-making; *the style oriented to reaching of the goal* represents the style where is establishing goals and for the subordinates to make maximum efforts, trusting them.

In the evaluation of the way these four styles can be used to grow the motivation and satisfaction of subordinates, managers have to consider *situation factors*, like:

➤ *characteristics of subordinates* include personal features, qualities, skills and necessities of subordinates. An employee with sufficient skill in an area is motivated by a directing style of management and a well prepared employee appreciates a participative management;

➤ *characteristics of the environment* are shared on three big categories: the duty, the group and the formal authority system of the firm (hierarchical levels, centralization degree of decision, nature of the reward system).

According to the theory *way-goal*, in order to choose the management style it has to be identified situational factors, the accent is being put on their effects on the three elements of the expectation theory (the way) and on wanted final results (the goal).

A practical approach of this diagnosis has three stages. *In the first place*, manager has to consider the three elements of the expectation theory. *In the second place*, it has to be identified situational factors that could influence positively elements of expectation theory. *In the third place* it has to be adopted that management style that could change situational factors. A few examples about how it is being applied the theory *way-goal* are given in figure no. 10.

Management styles	The analysis of situational factors	Elements of the expectance theory	Final anticipated results
Directing	Specifications of the connection between performance and reward	Growing the expectance performance - reward	Growing the effort subordinates
Supporting	Diminishing the monotony	Growth of work value	Goal
Participative	Diminishing the ambiguity regarding his post and role	Growing the expectance effort – performance	Realization (performance)
Oriented to achieving the goal	Fixing of some provocative, but tangible goals	Growing the expectance effort - performance	Satisfaction (reward)

Figure.no.10

For example, a leader can realize if his expectances regarding performance-reward are low, because of a formal reward system, where a direct connection between realized performance and the reward doesn't exist. So, manager can adopt a leadership style that would highlight this connection. In the same way, a leader can adopt a supportive style in order to reduce the monotony of the activity and to grow work value. Finally, a leader with a style oriented to the realization of duties, might encourage a subordinate, that has a low

self-trust, to fix provocative goals, that would grow the expectation effort-performance. Because it is a situational theory, the theory way-goal is showing that a management style, that is efficient in one situation, won't be necessary efficient in another situation.

An important aspect regarding the leadership is the fact that manager and leader aren't necessary the same person. There are opinions that managers have repetitive, uniform duties, but leaders are innovating, are bringing major changes and are stimulating subordinates to make efforts.

Studying this problem, Bernard M. Bass, expert in management problems, and his colleagues made the distinction between:

➤ *transactional leaders* that are motivating subordinates to make efforts of expected level. They are doing this by helping them to realize their responsibilities, to identify their goals, to trust in reaching wanted performance levels and to understand connection between their necessities, wanted rewards and achieving of goals. So, transactional management is closely to the theory of *way-goal*;

➤ *transformational leaders* are motivating employees to realize their duties below normal expectations, and in this way, determining them to concentrate on more important problems, that are outrunning their immediate interests and to focus on internal objectives, like promotion and improvement. *Transformational leadership* can not replace the transactional management, because it is a complementary form of the management, that generates supplementary performances (fig. no 11).

The main idea is: even the most successful transformational leaders have to have transactional skills in order to solve more efficiently current problems, that are representing the basis of duties.

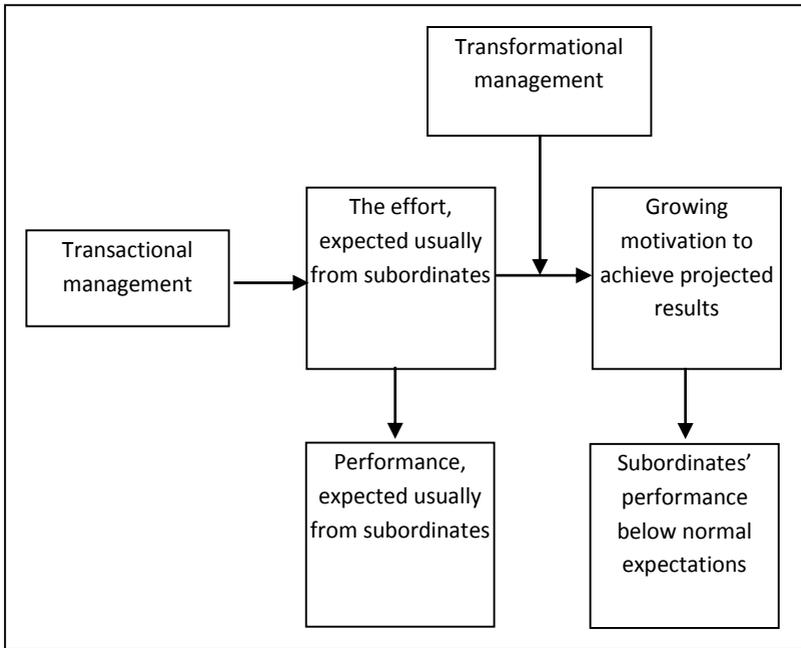


Figure no. 11. The transformational management

According to Ross, there are three important factors of the transformational management:

- *charisma* is the capacity of leader to inspire proud, conviction and respect, to admit that is really important to express clearly the sense of the mission. Researchers have tried to identify components of behavior associated to charismatic leaders. Results are showing that such a leader is trying to change the status-quo, to project future goals, that represent idealistic images, very different from current conditions and to act unconventionally. Researchers are showing, as well, the fact that charismatic leaders are relying on their professional and personal power and are trying to convince the others to share their vision about change;

- *individualized consideration* that includes distribution of projects in order to develop capacities of every subordinate, taking into

consideration everyone's necessities and treating every subordinate with respect;

➤ *intellectual stimulation* includes offering new ideas in order to stimulate subordinates to reconsider realization methods of duties, encouraging subordinates to look at problems from the perspective of obtaining advantages and encouraging creative solutions for difficult problems.

The fact that transformational leaders have to have charisma isn't generally accepted. Still, there is an unanimous opinion that leaders have to be sure that employees have an idea of wanted results, have to grow level of implication on work and have to realize changes that would allow subordinates to achieve expected results.

#### **4. Functions of firm's management**

In the context of leading process, Henry Fayol is defining five functions (attributes) of the leadership: *forecasting, organization, command, coordination* and *training*.

➤ *forecasting function* includes the totality of work processes that are leading to the determination of firm's objectives, of their components, of resources and means that are necessary for their realization. This is materializing in the elaboration of forecasts (a horizon of at least 10 years, don't have a compulsory character, etc.), plans (a horizon of one month-5 years, their determination degree has an inverse ratio with their horizon, is referring to fundamental objectives of the firm and their main resources), programs (have a smaller horizon, decade, week, day, hour, are very detailed, have a high level of incertitude);

➤ *organization function* represents the totality of processes through the agency of which, are being established and delimited work processes (physical and intellectual) form their elements, their grouping on posts, functions and compartments and attribution of their fulfillment to some persons with and adequate specialization in order to realize forecasted objectives under best conditions and based on some economic, technical and social criterions. This function includes both total organization of the firm (establishment of the organizational structure and information system) and organization of the most important functions of the firm (research and development, etc.);

➤ *coordination function* includes the totality of work processes that harmonizing decisions with actions of firm's personnel, including of its subsystems, considering forecasts and organizational system preliminary established. Coordination has a dynamic character given by: firm's dimensions and environment, complexity, diversity and originality of personnel subsystems reactions, fact that is determining the existence of some operative *feed-back* relations.

Coordination can be *bilateral* (developed between superior and subordinate, ensuring the forestalling of filtering and distortion and operative obtaining of the feed-back) and *multilateral* (concomitant communication between superior and more subordinates, usually used in meetings);

➤ *training function* includes the totality of work processes that are determining firm's personnel to contribute to the establishing and realization of forecasted objectives considering motivational factors. Training is based on *motivation*, meaning *the correlation of necessities satisfaction and personnel interests with the realization of established objectives and duties*. There can be *positive motivation* (based on the amplification of personnel's satisfaction, as a result of the realization of attributed duties under the conditions that the compulsory duties are easy to be done) and *negative motivation* (based on the threatening of personnel with diminishing of satisfactions if they wouldn't realize objectives and duties, that have a very high level, inaccessible, under given conditions, too big number of participants at the production process).

The process of motivation has to carry on simultaneously the following characteristics: to be *complex* (using material and moral incentives); to be *differentiated* (motivations and their utilization have to consider characteristics of very employee); to be *gradual* (to satisfy successively necessities in accordance with every employee condition, but considering interdependences between different categories of necessities);

➤ *control-evolution function* includes the totality of processes through which performances of the firm and divisions are being measured and compared to objectives and standards established in order to eliminate the deficiencies. This function, under the aspect of its practical realization, has to traverse next stages: *measuring of realizations; comparing of the realization with initial objectives and*

*standards; high-lighting of eventual deviations; establishing the causes that have generated these deviations; correction of deviations when it is possible.*

The process of evaluation-control has to be *continuous* (not to limit only on periods of closing the financial exercise), to be *preventive* (to prevent deficiencies), to be *flexible* and *adaptive*, but without losing its rigorous character.

Functions of firm's management have a strong interdependence, forming a system and have a dynamic character. They appear and develop concomitantly with firm's evolution and are manifesting, more or less accentuated their character in different stages of development.

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# Chapter 4

## Communication Difficulties and Accommodation Strategies of the Mainland Chinese Students in Hong Kong

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### Abstract

This study addresses and reveals the major communication difficulties and commonly-used accommodation strategies of mainland Chinese students in Hong Kong during their interactions with local people, both on and off campus, based on the theoretic framework of communication accommodation theory. Language barriers, psychological barriers, and cultural differences are generally considered to be obstacles in students' interactions with locals. The specific convergence and divergence strategies used, such as code-switching, passing, mediating, topic-avoidance, silence-keeping, and maintenance, are identified and illustrated. The research findings provide an important reference for the relevant authorities and social groups to better understand the communication difficulties of the mainland students as well as to help improve their communication strategies during their interactions with Hong Kong locals.

**Keywords:** communication accommodation theory, convergence, divergence, Hong Kong, mainland Chinese students.

### 1. Introduction

Hong Kong, the world's 9th largest trading economy, is widely known as the World City of Asia due to its existing strengths in areas such as financial services, trade, tourism, transport, communications, and its stable and efficient business environment with modern infrastructure and telecommunications. Hong Kong is also on its way to becoming a regional education hub, with world-class

universities and quality institutions, through diversification and internationalization. Of the 17 local degree-awarding institutions in Hong Kong, three are ranked in the world's top 50 and in Asia's top 10 by the Quacquarelli Symonds University Rankings 2013-14 (QS World University Rankings, 2013). Hong Kong universities also host the world's best executive business management programs. This excellent learning environment attracts many non-local students to Hong Kong every year. For example, over 26,000 non-local students from more than 70 different countries and regions studied post-secondary education in Hong Kong in the 2012/13 academic year (UGC Annual Report 2012-13).

Hong Kong universities began to recruit students from mainland China in 2002. Studying in Hong Kong has become increasingly popular among mainland Chinese students. Every year, thousands of mainland students rush to Hong Kong to pursue undergraduate or postgraduate studies. Among the factors that attract students to Hong Kong are the academic reputation of its educational institutions, the low tuition fees, which are cheaper than those in the UK and the US, the city's proximity to the mainland, and its status as an international, cosmopolitan city (Yeung, 2013). According to the 2012-13 annual report of the University Grants Committee, the government body responsible for funding local tertiary educational institutions, eighty percent of non-local students were from the mainland (UGC Annual Report 2012-13). What is more attractive, non-local graduates can stay in the city for one year to look for work and gain permanent residency after seven years (Yeung, 2013).

Hong Kong and mainland Chinese people are similar because they use the same written language and share the same cultural heritage. However, the different sociopolitical environments that they live in make them foreign to each other (Ma, 2005). Hong Kong, which was a colony for over a century and a half, has a democratic system of local government, a free press, and a culture deeply influenced by the West. Mainland China, in contrast, is one of the few existing Communist-governed countries and a fast-growing economic entity. Hong Kong has many differences from the mainland. After its handover to China in 1997, Hong Kong became a Special Administrative Region of China, but it still enjoys a different economic system and political system, under the principle of "one

country, two systems?”. These sharp contrasts in political, economic and social systems and culture have caused communication problems and even tensions between the mainland Chinese and local citizens.

Mainland Chinese students in Hong Kong have to face these communication problems. Some scholars have explored the reasons why mainland Chinese students opt to pursue their higher education in Hong Kong, and examined their cross-cultural difficulties and adjustment strategies, largely concentrating on the campus environment (Cheng & Wong, 2014; Cheung, 2012; Li and Bray, 2007). The communication problems facing mainland Chinese students when interacting with local citizens on and off campus, and the accommodation strategies they adopt in coping with such difficulties, have not received much attention.

In the study described here, in-depth interviews were conducted with 36 mainland Chinese students in Hong Kong, revealing their major communication difficulties and commonly-used accommodation strategies during their interactions with local people on and off campus.

## **2. Literature Review**

Communication accommodation theory (CAT) describes the ways that people adjust their behavior while interacting with others. It evolved from speech accommodation theory (SAT), developed by Howard Giles, professor of communication at the University of California, in 1973 (Giles, 1973). SAT focuses on the process by which participants in a conversation adjust their accent, diction, speech rates, pauses, utterance length, pronunciations and other aspects of language, according to the speech style of the other participant. In 1988, Giles and his colleagues extended the SAT from the speech level to cover both the verbal and nonverbal level, and redefined the theory as CAT (Coupland & Giles, 1988). CAT concentrates on both verbal and non-verbal communication behavior, as well as other communication aspects, such as hairstyle and dress.

The theory explains three types of basic communicative strategies: convergence, divergence, and maintenance.

Convergence is a process in which people adapt their communicative behaviors in terms of a wide range of speech patterns

(including speech rate, accents, pauses, pronunciations) and nonverbal features (including smile, gaze, gestures, dressing), to assimilate with their interlocutor's behavior (Giles et al., 1987). Based on Byrne's (1971) similarity attraction theory, convergence is a strategy that people use to become more similar to each other, facilitating social integration and identification processes as well as effective communication. Adequate and appropriate convergence could benefit communicators; however, misuse or overuse of convergence could have the opposite effect. For example, stammering in front of a stutterer is impolite and leads to hurt feelings.

Under the broad category of convergence, some specific interactional strategies have been identified (Strauss and Cross, 2005). For example, code-switching refers to the ability to communicate smoothly, effectively, and competitively in different languages with different social groups. This can be used as a convergence strategy, allowing the accommodation of people that speak two different languages. Hong Kong is an officially bilingual territory, with both Chinese and English as official languages. The everyday conversations of local people involve a mixture of Cantonese and English as a result of bilingualism.

Passing is also a convergence strategy in which an individual from minority group tries to pass as a member of the mainstream group. For example, in some circumstances an individual from Guangdong Province of China may pass as a Hong Kong person due to her or his physical features, skin color, dress, or adopted accent.

Divergence refers to "the way in which speakers accentuate speech and nonverbal differences between themselves and others" (Giles and Coupland, 1991: p.36). Divergence strategies are applied to maintain distinctiveness from others. People may "deliberately use their language or speech styles as a symbolic tactic for maintaining their identity, culture pride, and distinctiveness" (Giles, 1987, p.28). Divergence is also likely to be applied to people who "come from an undesirable group, considered to hold noxious attitudes, or display a deplorable appearance" (Street & Giles, 1982, p.195).

Convergence and divergence can each take multiple forms (Gallois & Giles, 1998). The following three seem to receive the most attention from CAT scholars.

*Unimodal or multimodal* : unimodal refers to shifts in a single dimension (e.g., accent), whereas multimodal refers to shifts on multiple dimensions simultaneously (e.g., accent, posture, topic initiation);

*Symmetrical or asymmetrical*: symmetrical accommodation occurs when one speaker's shifts are reciprocated by the other, whereas asymmetrical accommodation happens when the speaker's shifts are not reciprocated by his interlocutor;

*Full or partial*: full convergence occurs when an individual fully matches the communicative behavior of another whereas partial convergence occurs when an individual partially matches another's communicative behavior.

Maintenance occurs when an individual's communication pattern remain the same during the interaction (Katherine, 2005). In other words, maintenance is a strategic statement about preserving one's social identity in certain intergroup contexts (Giles, Reid, & Harwood, 2010), without taking into account the characteristics of one's interlocutor. For example, customer service workers answer calls with little change in tone, rate or expression.

Some CAT scholars choose to consider actions and outcomes in terms of a dichotomy of accommodative versus non-accommodative strategies (e.g., Giles et al., 2007). They regard maintenance as a non-accommodation strategy.

In summary, CAT is a multifunctional theory that provides the framework for understanding the adjustments that people make to maintain, increase, and decrease their social distance in the process of communication. It not only accounts for the strategies which individuals adopt in their interactions, but also reveals the underlying motivations of such adjustments. CAT has been applied to communication between different cultures, between linguistic groups, and to face-to-face interactions. Perhaps most importantly, CAT is a theory of intercultural communication that actually addresses communication (Giles et al, 1987).

In recent years, a few scholars have studied the experiences of mainland Chinese students in Hong Kong from different theoretical perspectives such as acculturation theory and cross-cultural adaptation theory. However, no researcher has yet applied CAT to examine the communication difficulties and accommodation strategies that

mainland Chinese students encounter during their interactions with Hong Kong citizens.

### **3. Research Questions and Methodology**

This study frames the interaction between mainland Chinese students with Hong Kong locals from a CAT perspective. The following two research questions are raised:

*RQ1: What are the major communication difficulties during your interactions with local people both on and off campus?*

*RQ2: What are the accommodation or adjustment strategies you adopt to cope with such difficulties?*

The in-depth interview was used as the major method of data collection to investigate the communication difficulties and accommodation strategies of mainland students in Hong Kong. Some semi-open questions were designed to guide the interviews. Thirty-six mainland Chinese students in Hong Kong were interviewed in this study. They were subdivided into the following three groups to highlight differences in their accommodation strategies.

Group A: interviewees who planned to work in Hong Kong after graduation (16 students);

Group B: interviewees who did not intend to work in Hong Kong after graduation (12 students);

Group C: interviewees who had not yet decided the workplaces after graduation (8 students).

Each interviewee was assigned a subject number and could be identified in the following way: B12/female/25, which means the interviewee was from Group B, a 25-year-old female, and was assigned number 12 in her group.

Among the 36 interviewees, four were from Guangdong province with Cantonese as their native language. These students have no problem communicating with the locals. The rest of the interviewees had different levels of Cantonese proficiency. Sixteen spoke Cantonese at a medium or lower level. They had little trouble with listening but have difficulty in speaking. The remaining 16 interviewees could barely understand spoken Cantonese, apart from some basic words.

The interviews were conducted for approximately 20 to 30 minutes each. All participants were assured that their identities would be kept strictly confidential. An iPhone was used for audio recording, with the interviewee's permission, for later analysis. Most of the interview data were transcribed immediately after the interview.

The interview data were subjected to thematic analysis, a qualitative method used for "identifying, analyzing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p.79). Researchers reviewed the interview data, made notes, coded the data, developed patterns or themes within the data set, and identified examples of each theme to illustrate what the analysis had achieved.

#### **4. Findings and Interpretations**

*RQ1: What are the major communication difficulties during your interactions with local people both on and off campus?*

Mainland Chinese students encounter many difficulties studying and living in Hong Kong, such as the high living expenses and tuition costs. However, this study mainly focuses on the communication difficulties the mainland Chinese students face when they interact with local citizens. The local citizens include ordinary Hong Kong people off campus as well as Hong Kong students on campus.

##### **4.1 Communication difficulties**

The research reveals the following three major communication difficulties: language barriers, psychological barriers, and cultural differences.

###### **4.1.1. Language Barriers**

English and Cantonese are the most commonly spoken languages in Hong Kong. English is the language of preference in the government, business and educational sectors, while Cantonese is spoken by nearly 90 percent of local people. Although Cantonese is frequently referred to as a language, it is technically classified as a dialect. Since 2001, the Hong Kong government has initiated a bi-literacy and tri-lingualism policy. Bi-literacy refers to the written languages of English and standard written Chinese. Tri-lingualism refers to the three speaking languages of Cantonese, English and

Mandarin (Putonghua). Although Mandarin is slowly gaining ground in Hong Kong and it is heard increasingly often in places such as department stores, which are generally crowded with Chinese visitors buying anything from luxury goods to daily necessities, Cantonese is still the predominant variety spoken in everyday life. To most mainland Chinese students, language was the number one difficulty in their communication with locals:

*“The biggest difficulty for mainland students who cannot speak Cantonese is, no doubt, language. If we are on campus, life is easier for us because most people understand English or Mandarin; when we are off campus, language barrier becomes obvious because people around you speak Cantonese. Cantonese is the everyday language in Hong Kong. You cannot expect people in local eateries or grocery markets to speak English or Mandarin.”* (C6/ female/ 24)

*“If mainland students go to study in the USA or Australia, they have to face the language problem, too. However, their language problem is only one: English language. But here in Hong Kong, we mainland students have to face the challenges of two languages: English and Cantonese. The academic English in class is already a big headache to us. The ignorance of Cantonese makes our life harder.”* (C7/ male/ 24)

Another interviewee cited a news story to illustrate how language barriers can wage war between mainland and Hong Kong students:

*“It is reported that a few mainland students demanded a teacher hold his class in Mandarin instead of in Cantonese. The lecturer then switched to instruct in both languages. This caused repeated verbal clashes between mainland and local students in the classroom. You can see how big a language difficulty is for mainland students even on campus. What is more, if you happen to be assigned to a group discussion with Hong Kong students, the locals will usually speak in Cantonese, the mainland students will find it hard to get a word in.”* (B4/ male/ 23)

#### 4.1.2 Psychological Barriers

The second major difficulty in communicating with Hong Kong locals are psychological barriers that mainland Chinese students have to overcome due to their perceived discrimination and prejudice. This psychological barrier, known as psychological noise, is a distraction caused by some physiological process that interferes with the communication process. This interferes with effective message transmission and reception in the form of preconceptions, biases, prejudices, stereotyping and assumptions.

The discrimination and prejudice that mainlanders face from Hong Kong residents have been largely unacknowledged in the past, but are now heatedly discussed and debated in the mass media. The phenomenon is widely known as mainland-Hong Kong tension or conflict. The roots of this problem can be traced back to a policy change in 2003 after the outbreak of SARS. Hong Kong authorities decided to lift tight controls on mainland visitors to Hong Kong to promote Hong Kong's prosperity. This influx of mainland visitors has contributed a lot to Hong Kong's economic development but it has aroused tensions between local residents and visitors due to differences in culture, social values, and standards of behavior. A mainlander in Hong Kong is viewed as a "locust" coming to "pillage the city's luxury goods, baby-milk powder, gold and scarce property at the expense of the downtrodden local, who must deal with higher prices, more crowded streets and fewer university places" (SCMP, June 23, 2013). In an atmosphere with so much anti-mainland sentiment, the mainland Chinese students were easy prey to discrimination and prejudice.

*"It was said that 10 years ago, Hong Kong people were very polite to mainland compatriots. But it is a pity that relationships between mainlanders and Hongkongers are getting worse now. We can easily perceive the unfriendly attitudes from locals. Not long ago, I went to a Hong Kong style café and ordered dishes in Mandarin. The servant responded in Cantonese with a long face and in a cold voice: 'I don't know Mandarin. What do you want to eat?' At this moment, two local customers came in and he turned to greet them and left me there alone. What made me a little bit annoyed is that he waited for the two to place order first. Without saying a word, I got up and left the café."* (B11/ female/ 24)

*“Maybe you heard the poster-war at Hong Kong PolyU between Hong Kong and Mainland student two years ago. Some Hong Kong students posted anti-mainland mass immigration posters on the so-called ‘freedom wall’. They even painted the old colonial Hong Kong flag. Mainland students fought back by tearing off Hong Kong students’ posters and putting up their own anti-discrimination posters. How can the two sides communicate if they are so hostile toward each other?” (A15/female/24)*

Although most interviewees often found themselves in the middle of Hong Kong-mainland tensions, they still believed that they, as mainland students studying in Hong Kong, experienced less discrimination than mainland tourists. Two students even cautioned other mainland students against perceiving discrimination.

*“We mainland students should be cautious not to relate some actions of Hong Kong people to discrimination. If you have low confidence and if you always place yourself in an inferior status, you might have an impression that you are discriminated or treated impolitely by others. To me, this phenomenon is common and not unique to Hong Kong. It is more about competition for limited social welfare than discrimination. Even in the mainland, Beijingers and Shanghainese complain about new migrants in their cities.” (A8/male/ 24)*

#### *4.1.3 Cultural Differences*

The combination of one country, two systems, three languages and many cultures, are what make Hong Kong so special and fascinating. Many interviewees admitted that the differences between attitudes, values, interests and behaviors between mainland and Hong Kong students were obstacles to their communication activities.

*“I once shared a room with a local student in the dormitory. He slept very late, got up very late and missed classes often. I was kept busy all semester with my studies but he seemed busy only at the last minute before the exam. We disturbed each other because of the different living habits. It is said that many local students have such bad—maybe bad in our eyes (laughter) —habits.” (B7/ male/ 23)*

*“Hong Kong students have different interests from ours. They pay a lot of attention to money and do quite a few part-time jobs to earn money. They pay a lot of attention to even the tiniest affairs of*

*their beloved celebrities. They care more about their clothes and hairstyles. They are keen to have many on-campus activities. However, they do not care too much about their studies. They even scoff at mainland students with outstanding academic achievements. It is hard for us to communicate academically with them” (B9/ female/ 24)*

Many interviewees came to the conclusion that the cultural differences accounted for the fact that local students tended to socialize with locals, and mainland students often formed mainland-only groups, in line with the old saying, “birds of a feather flock together”.

#### **4.2 Accommodation Strategies**

*RQ2: What are the accommodation or adjustment strategies you adopt to cope with such difficulties?*

Based on the theoretical framework of CAT, accommodation strategies adopted by the mainland Chinese students fall into two broad categories: convergence and divergence. Specific accommodation strategies are identified and explained with examples.

##### *4.2.1 Convergence Strategies*

Three specific convergence strategies adopted by the mainland students are identified: code-switching, passing and mediating.

*Code-switching* refers to the ability to select or alter linguistic elements to contextualize speech in interactions (Nilep, 2006). For example, the students from Guangdong province of China, who can speak both Cantonese and Mandarin fluently, spoke Cantonese when they communicated with Hong Kong people, but switched to Mandarin when they interacted with mainland friends. Bilingual speakers used the code-switching strategy to deal with two different membership groups (Strauss and Cross, 2005).

*“I switch language when I talk to different people. Most of my classmates are from mainland and they are non-Cantonese speakers, so I speak Mandarin to them. When I communicate with friends from Guangdong province or HongKongers, I normally speak Cantonese. This can make the conversation more efficient.” (A5/female/24)*

Code-switching can be used as a full convergence strategy by mainland students who can speak both Cantonese and Mandarin

fluently. Interviewees from other provinces of China found it hard to switch between the two languages when talking to different people. However, code-switching can be a partial convergence strategy for mainland students when they use a mixture of Cantonese and English to express themselves when interacting with locals. Cantonese learners often adopt this partial convergence strategy to greet others or in their casual communications.

*“When I communicate with Hong Kong students, I usually speak Cantonese first. If they can’t understand, then I speak in Mandarin.” (A10/ female/24)*

*“During my casual communication with locals, I will try to use Cantonese as much as possible. However, when I need to express myself with accurate information, for example, in hospital or in the Immigration Department, I speak Mandarin because I am still not that confident about my Cantonese proficiency.” (A6/ female/ 23)*

Passing is a strategy in which an individual from a minority group tries to pass as a member of the mainstream group. Passing is a multimodal convergence strategy which involves shifts in multiple dimensions simultaneously, such as accent, posture, and dressing style. For example, an interviewee from Guangdong province was successful in passing as a Hongkonger due to his physical features, dressing style, and adopted accent.

*“When I buy food in market, the vendors thought I am a local person because I speak Cantonese to them. This situation really brings me lots of convenience so I don’t tell them I am from Guangdong. For example, some vendors charge tourists more money for the same merchandise.” (A9/ male/ 24)*

The interviewee (A9) used a passing strategy by remaining silent and not revealing his mainland identity. Passing is a full convergence strategy.

Those mainland students who adopted convergence strategies often took an active part in learning Cantonese. The most common ways for them to learn Cantonese were taking training courses, watching local TV dramas, practicing with Hong Kong classmates and private study.

Mediating strategies occur when two interlocutors with different languages communicate with each other through a third

language. As English is one of the official languages in Hong Kong, many local people can communicate in the language. The mainland students sometimes found it more helpful to use English as a mediation language when interacting with locals.

*“When they can’t understand my Mandarin and I can’t understand their Cantonese, English is often the language that we can communicate with each other. To my surprise, Hong Kong people’s English is quite good, even the vendors in the food market can communicate in English.” (A2/ male/ 23)*

Some mainland students preferred to use English as a mediation language when they hold coursework discussions with local students because both sides can understand the meaning of the specialized technical terms in a specific field.

*“It is quite common that the Chinese translations of some technical terms in English are different from those of Hong Kong. For example, the term ‘film’ in photography science is translated as ‘Jiao Pian’ in mainland simplified Chinese but it is called ‘Fei Lin’ in Hong Kong traditional Chinese. So to use English in the discussion of photography skills with local students surely prevents misunderstanding. Such terms as “shutter speed” and “aperture” are more precise in English. Therefore, English in this situation makes our communication more efficient.” (B12/ male/ 24)*

#### 4.2.2. Divergence Strategies

In this study, divergence is broadly defined as individuals altering their verbal and nonverbal communicative features (accent, tone of speech, dress style, etc.) to distance themselves from their conversational partner’s communicative habits. Such verbal and nonverbal features serve as core dimensions of a group identity that reflects a sense of group pride and self-worth. This study also classifies maintenance as a divergence strategy because it is often viewed as psychological equivalence to non-accommodation/divergence.

Three specific divergence strategies are identified: topic avoidance, silence-keeping, and maintenance.

Topic avoidance occurs when a Hong Kong local initiates some sensitive or controversial issue during their interaction with a mainland

Chinese student. The mainland students usually tried to avoid such topics when they find they have different views on the topic.

*“Once I had a very good chat with two Hong Kong students. But one of them suddenly asked me: ‘what is your view about Tiananmen Square Massacre in 1989? Will you attend the candlelight vigil on the evening of June fourth at Victoria Park?’ I know that I have different views on the June Fourth Incident and I don’t want to get into heated discussions or even quarrels with them. I just told them that I knew very little about the incident and then changed the topic.”* (C3/ male/ 24)

*“Sometimes, my Hong Kong friends will raise some topics that seems so controversial to us mainlanders, such as the Occupy Central movement, the anti-National Education campaign, and the anti-high speed rail protest. I shy away from such topics because I hold quite different views from them.”* (B8/female/25)

Silence-keeping is a strategy applied by mainland students when they face hostile, aggressive, threatening situations or in response to the possibility of encountering prejudice. It is a defensive strategy to avoid direct confrontation with hostile or unfriendly interactants.

*“Once one of my mainland friends donated blood in Hong Kong and I kept her accompany. The doctor complained to us that the mainland students occupied a lot of places so that Hong Kong students couldn’t get educated. We got mad but just said nothing. We can’t change his mind after all.”* (A14/ female/ 24)

*“One evening the neighbor met me and said ‘your apartment is too noisy at night. This is Hong Kong, not mainland!’ It happened so suddenly that I didn’t have time to respond to her, so I just kept silent and walked away.”* (B3/ female/ 24)

However, some participants said that they would agree with Hongkongers if what they said was true and they didn’t mean to embarrass mainlanders.

*Once a Hong Kong classmate and I talked about the illegal cooking oil issue in the mainland. He was so angry with such unethical business conducts. I know this is the truth and it really happens in mainland China, so I agreed with him and shared my views on how to prevent such unethical businesses.”* (B4/male/23)

Maintenance, often viewed as a passive response, occurs when a person persists in his or her original style of communication, regardless of the communicative behavior of the interlocutor. A few interviewees admitted that they adopted maintenance during their interaction with locals.

*“I identify myself as a mainlander. I speak Mandarin always. All my friends around me are mainland friends; my life style or habits haven’t changed since I came to Hong Kong. I am just living in Hong Kong for a while and I will go back to where I really belong to sooner or later.” (B6/ female/ 25)*

*“I don’t speak Cantonese at all or intend to learn Cantonese since I didn’t plan to work in Hong Kong from the very beginning. I come from the north of China, so the pronunciation of Cantonese is so different to my way of speaking.” (B7/ male/ 23)*

Divergence can manifest partially or fully as well as symmetrically or asymmetrically. Maintenance is usually viewed as a full divergence strategy whereas topic avoidance is a partial divergence strategy. Silence-keeping is an asymmetrical divergence strategy whereas maintenance can be a symmetrical one.

## **5. Conclusion**

Hong Kong and mainland Chinese people are similar yet foreign to each other. The interactions between the mainland Chinese students in this study and Hong Kong citizens provide a unique scenario for studying cross-cultural adaptation within two Chinese societies. The in-depth interviews with 36 mainland students in Hong Kong and the thematic analysis of the collected data have yielded the following insightful conclusions on the communication difficulties and the accommodation strategies of mainland Chinese students during their interactions with Hong Kong locals both on and off campus:

**Communication Difficulties.** The major communication difficulties facing mainland students during their interactions with locals are language barriers, psychological barriers, and cultural differences. The number one difficulty for the mainland students is language, because they have to deal with two languages at the same time: English in the academic learning environment and Cantonese in their daily life. The second major difficulty is the psychological

barriers that mainland Chinese students have to overcome due to the perceived discrimination and prejudice toward mainlanders, especially amid the current anti-mainland sentiment atmosphere in Hong Kong. Such psychological barriers interfere with effective message transmission and reception and reduce the intentions of students to interact with locals. Cultural differences in terms of attitudes, values, interests and behaviors between mainland and Hong Kong students are also obstacles to their communication activities.

**Convergence Strategies.** Code-switching, passing, and mediating are three commonly used specific convergence strategies. The mainland students with bilingual language abilities switched between Cantonese and Mandarin, sometimes with a mixture of both languages. When both sides were unable to understand each other in their own languages, they tried to use English as a mediating language. A few Cantonese mainlanders passed themselves off as Hong Kong locals for equal treatment during their interactions with locals.

**Divergence Strategies.** The mainland Chinese students also adopted such divergence strategies as topic-avoidance, silence-keeping, and maintenance. Topic avoidance is a divergence strategy in which highly sensitive or controversial topics are avoided during interactions, whereas silence-keeping is a defensive strategy to avoid direct confrontation with unfriendly or hostile interlocutors. A few interviewees admitted that they persisted in their original style of verbal and nonverbal behaviors, regardless of the communicative behavior of the interlocutor.

Interviewees from Group A with the intention to work in Hong Kong adopted more convergence strategies than interviewees from Group B and Group C. The major dimensions of the identified convergence and divergence strategies (full or partial, unimodal or multimodal, and symmetrical and asymmetrical) are briefly analyzed.

This study is of theoretical value because it contributes to the literature on the communication difficulties and accommodation strategies of mainland Chinese students in Hong Kong from a Communication Accommodation Theory perspective. The data collected in this study can serve as valuable documents that contain important information on the cross-cultural adaptation of the mainland students in Hong Kong. The study is also of practical significance because the research findings will provide an important reference for

the relevant authorities or social groups to better understand the communication difficulties of mainland students, as well as to help improve mainland students' communication strategies during their interactions with Hong Kong locals.

### Notes:

<sup>1</sup> The Occupy Central movement is a civil disobedience protest in Central, Hong Kong that has the aim of forcing the Chinese central government to grant Hong Kong citizens the right to universal suffrage.

<sup>1</sup> The anti-National Education campaign is a reaction to the introduction of Chinese civic education into Hong Kong public school curriculum that has sparked protests among residents who equate national education with brainwashing.

<sup>1</sup> Participants in the anti-high speed rail protest oppose a proposed high-speed railway that would link Hong Kong with mainland China's growing high-speed rail network.

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# Chapter 5

## Innovation process modelling

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### 1. Introduction

The competitive advantage is the result of full adaptation actions for the changing demands of external and internal environments. It may be assumed that the process of shaping the basic success factors is determined by corporate activity in research and development, production, distribution and customer service. Integration of these actions demands constant market analyses as well as flexibility and organisational efficiency.

The process of constant change is the success factor in reaching the desired speed of products, processes and organisations development and thus in improving corporate potential<sup>1</sup>. Modelling phenomena in accordance with the structural approach enables one to simplify the observed relations and to present the classification grounds. An example may be a model of organisational structure identifying the logical relations between particular units and presenting the division of authority, work, etc.

Functional modelling is widely applied in organisation and management as it offers the possibility to present phenomena in a way facilitating their evaluation on the basis of the data introduced to the model.

### 2. Innovation process

The problem of technological innovations has not been considered a priority by the classic theorists.<sup>2</sup> Due to the fact, no special importance is ascribed to the innovation development theory,

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<sup>1</sup> Technical, organizational, informational, economic and social

<sup>2</sup> E. Okoń-Horodyńska, *How to Build Regional Innovation Systems?* Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice 2002, p. 37-38.

in spite of the fact that Smith, Ricardo, Marks, Marshall, Keynes and Solow are almost unanimous, stating that long-term efficiency growth is inextricably related with introduction and diffusion of technological and organisational innovations. Joseph Schumpeter has stressed the role of innovation by pointing to the special interdependence between economic development and innovation development observed in the process of qualitative and quantitative application of innovations in business practice. However, the neoclassical theory does not identify any special role of innovation development, as it focuses on removing market imperfections and return of price and wage flexibility.<sup>3</sup> Subsequent development of institutionalism has resulted in research on the existence, power and character of the correlation between economic development and innovation development. Interest in the process of learning in the light of economic results has changed the perception of the role of innovation. This approach has enabled deep understanding of the sources and determinants of technological changes, thus enriching the classical approach focused on the impact of technology on economy.<sup>4</sup> Since that time, innovations have been considered to have major importance on socio – economic development. Researchers are now of the opinion that economy development does not depend on material, capital or human resources but mostly on modern technologies.<sup>5</sup>

Nowadays, research and development lay at the basis of economic power and social welfare.<sup>6</sup> Innovative activity, especially in the field of goods and technology, may be considered a must in the global market conditions. Increased instability of the external

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<sup>3</sup> E. Okoń-Horodyńska, *How to Build Regional Innovation Systems?* Instytut Badań nad Gospodarką Rynkową, Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice 2002, p. 39.

<sup>4</sup> E. Okoń-Horodyńska, *How to Build Regional Innovation Systems?* Instytut Badań nad Gospodarką Rynkową, Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice 2002, p. 41.

<sup>5</sup> R.M. Sollov, *Growth Theory and After*, American Economic Review, vol. 78, No 3, p. 315.

<sup>6</sup> J. Mujżel (ed. by), *Companies Undergoing Transformation*, Poltext, Warszawa 1997, p. 234.

environment influences the number and frequency of scientific and technical discoveries.

Moreover, innovation is considered a special business tool, applied in order to introduce new business solutions or new services<sup>7</sup>.

Today, innovation is understood as:

- introduction of new products or improvement of the already offered ones,
- introduction of new implementation methods or improvement of business processes (primary, auxiliary and management),
- introduction or improvement of a production system, including the production and management subsystems,
- introduction of a new organisational structure or improvement of the already existing one, with special stress put on hierarchical relations and dependencies in the sphere of information, competence, responsibility and decisions,
- introduction of new organisational and management culture or improving the already existing one.

It is commonly believed that the character and intensity of the process of implementing innovations in the field of goods, processes or organisational structure depend on both corporate research and development initiatives and on transfer of technology and know-how from the external environment of the particular organisation.

The complexity of business processes, focused primarily on managing knowledge, information, technology, staff, finance and marketing, results in the fact that contemporary companies notice the necessity to transform the present business priority sectors (Figure 1).

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<sup>7</sup> I. Durlík, *Restructuring Economy. Reengineering, Theory and Practice*, Placet, Warszawa 1998, p. 16.

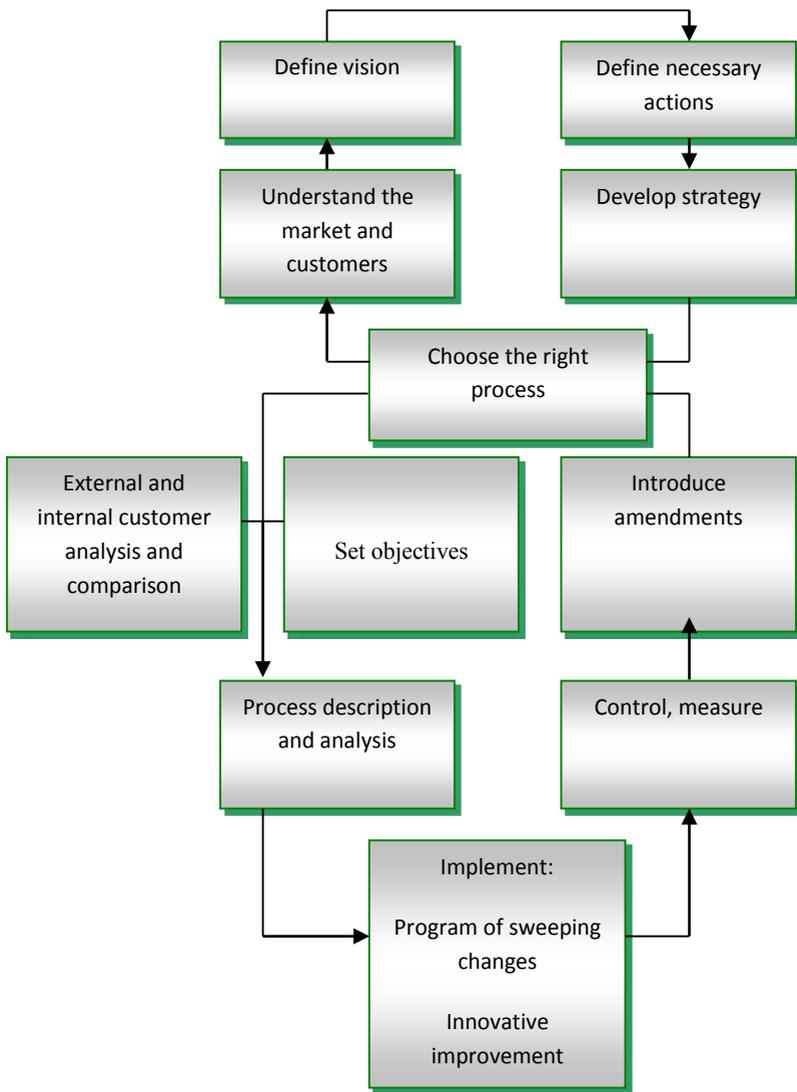


Fig. 1. Process facilitation model

Source: Adair Ch.B., Murray B.A., *Breakthrough process redesign: new pathways to customer value*, Wydawnictwo Naukowe PWN, Warszawa 2002, p. 40.

One may thus state that management, including change management, applying the total organisational (social, material and financial) potential is the basic development paradigm. Customer value is conditioned by the synergy of process complexity and speed of innovative changes. Thorough reconstruction of processes aiming at restructuring an organisation may be achieved thanks to the application of the process approach and focus on continuous innovation introduction. One-time change aimed at the introduction of a new concept in the process of organisation management is frequently not sufficient to reach the desired objectives and implement strategic goals of a company of the future. Special importance is ascribed to the ability to identify the main processes – *megaprocesses*, taking into account resource limitations and reorganisation possibilities. It is most frequently observed that changes aimed at development or innovation should prevail in a well-managed enterprise. Innovation introduction is identified with the process of generating new solutions, conceptualization of projects, their optimisation and implementation (Figure 2). The basic objective of actions undertaken in this respect is better organisation and efficiency of an organisation, especially in the sphere of market service<sup>8</sup>.

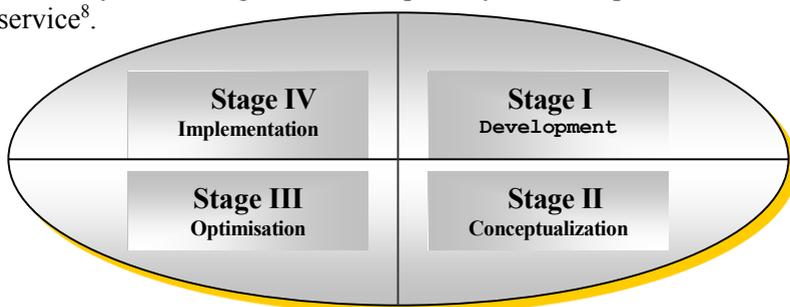


Fig. 2. Stages of innovation development

Source: Basadur M., *The Power of Innovation. How to Make Innovation a Way of Life and Put Creative Solutions to Work*, Pitman Publishing, 1995, p. 34.

<sup>8</sup> J. Penc, *Innovations and Transformations. Transformation and Development Management in a Company. Principles and Success Factors*, Agencja Wydawnicza Placet, Warszawa 1999.

Complex approach to innovativeness enables one to compare innovative activity to the search for innovative ideas and solutions covering a complex process originating in research and finding its end in complete implementation of the particular innovation.<sup>9</sup>

### **3. Modelling of innovation process**

Developmental cycle of an innovation, especially its scope, time and efficiency in reaching corporate goals influences directly not only the degree of innovativeness of the goods produced or services rendered but also of the whole company.

Contemporary technological progress results in shortening development cycles and thus faster implementation of innovative solutions into business practice.

From the point of view of retrospective analysis, the character of innovation processes has changed considerably, starting from the linear model up to network integration approach.

There are five basic generations of innovation process models (Tab. 1).

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<sup>9</sup> A.H. Jasiński, *Innovative Company on the Market*, Wydawnictwo Książka i Wiedza, Warszawa 1992.

Tab. 1 Five generation of innovation process models

<b>Generation</b>		<b>Key features</b>
<b>I / II</b>	1960's +	simple linear models – need pull, technology push
<b>III</b>	1970's +	coupling model, recognizing interaction between different elements and feedback loops between them
<b>IV</b>	1990's +	parallel model, integration within the firm, upstream with key suppliers and downstream with demanding and active customers, emphasis on linkages and alliances
<b>V</b>	2000 +	systems integration and extensive networking, flexible and customized response, continuous experimentation and testing

Source: Davenport T.H., Leibold M., Voelpel S., *Strategic Management in the Innovation Economy. Strategy Approaches and Tools for Dynamic Innovation Capabilities*, WILEY, Germany 2006, p. 131.

In case of the four generations, the innovation process took the form of subsequent linear stages (Generation I / II). In Generation III, interactive relations between different factors (including feedback) were identified. The fourth Generation of the innovation process is a parallel model, taking into account the importance of key suppliers, customers and numerous interdependencies. “For most of the 20<sup>th</sup> century, the ‘closed innovation’ model worked well – internal R&D focus, product innovation orientation, self-reliance, tight control and generation of own ideas to develop, manufacture, market, distribute and service new products<sup>10</sup>. Another, fifth generation of the innovation process is characterised by erosion of the “closed innovation” phenomenon. Networks are created, tests and experiments are very popular in the sphere of new technological and organisational solutions.

A model is commonly defined as a graphical, mathematic or physical representation of a particular phenomenon or action. In case of

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<sup>10</sup> Davenport T.H., Leibold M., Voelpel S., *Strategic Management in the Innovation Economy. Strategy Approaches and Tools for Dynamic Innovation Capabilities*, WILEY, Germany 2006, p. 131.

organisation and management, a model is a logical construct playing an instrumental role in organisation theory and practice. There may be two approaches distinguished: a structural approach, in which a model is defined as a construct reflecting the real object with the use of abstraction and a functional approach, in which a model is a construct substituting the real, original object in cognitive and empirical operations<sup>11</sup>.

Modelling phenomena in accordance with the structural approach enables one to simplify the observed relations and to present the classification grounds. An example may be a model of organisational structure identifying the logical relations between particular units and presenting the division of authority, work, etc.

Functional modelling is widely applied in organisation and management as it offers the possibility to present phenomena in a way facilitating their evaluation on the basis of the data introduced to the model.

The degree of materialisation of the phenomena presented by a model, understood as a degree to which it reflects reality is most frequently dependent on the character and complexity of the described phenomenon and is a resultant of demands and competences of business entities.

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<sup>11</sup> L. Pasieczny (ed. by), *Encyclopedia of Organisation and Management*, PWE, Warszawa 1981, (in:) M.W. Jerzak, *Engineering Organisation Theory*, Part 1: *Methods and Techniques of Creative Thinking*, Wydawnictwo Politechniki Częstochowskiej, Częstochowa 1994, p. 140.

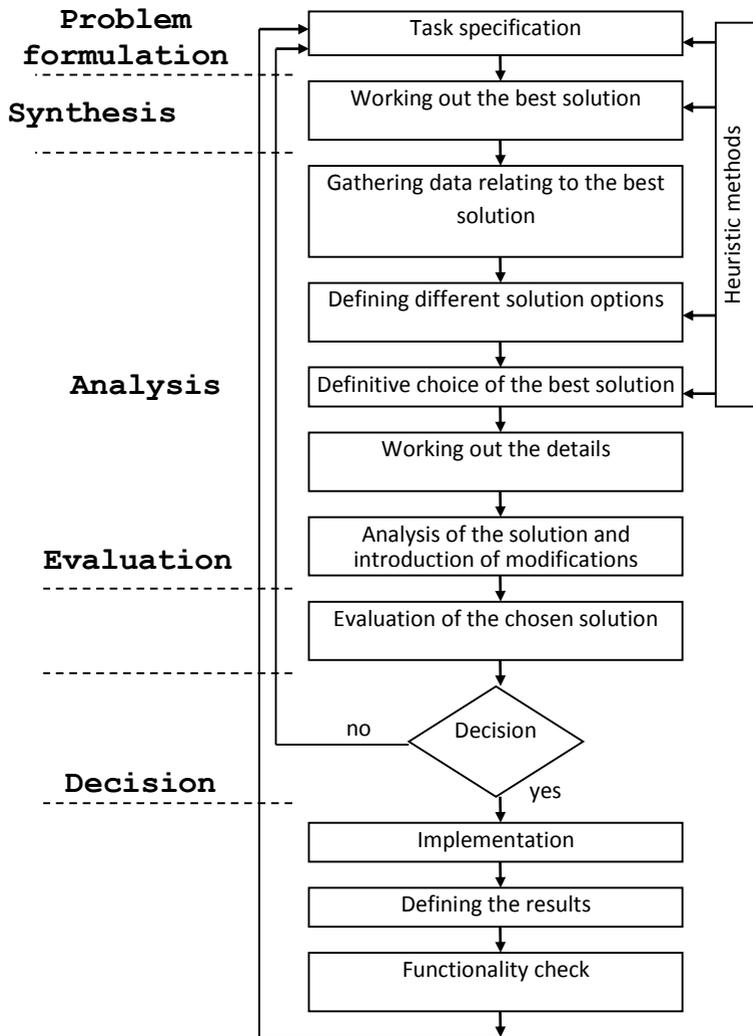


Fig. 3. Nadler' algorithm (prognostic problem solving method)  
 Source: Durlik I., Restructuring Business Processes. Reengineering, Theory and Practice, Agencja Wydawnicza Placet, Warszawa 1998, p. 96.

In organisation and management processes, modelling often takes the form of a research procedure characterised by various types of methodology of study. The following models are frequently enumerated among the discussed approaches: G. Nadler's models (Fig. 3), models based on Altszuler's deduction and models developed on the basis of the D. Buschardt's block method.

G. Nadler's method of ideal concept, identical with the IDEALS<sup>12</sup> concept consists in<sup>13</sup>:

- considering the designed (improved) object as a system whose constituents are: system functions: input and output, sequence of steps between input and output, system environment, physical catalysts and human beings,
- application of a design procedure consisting in the search for the ideal solution and idea materialisation during the implementation stage,
- dependence of the design procedure on the people involved in the process.

This approach necessitates the adoption of a prognostic strategy in the process of problem solving. The concept of search for the ideal is primarily focused on the synthesis of the best solution, working out the details of the one to be implemented and search for possible implementation problems (Fig. 3).

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<sup>12</sup> IDEALS - Ideal Design of Effective and Logical Systems.

<sup>13</sup> M.W. Jerzak, *Engineering Organisation Theory, Part 1: Methods and Techniques of Creative Thinking*, Wydawnictwo Politechniki Częstochowskiej, Częstochowa 1994, p. 141.

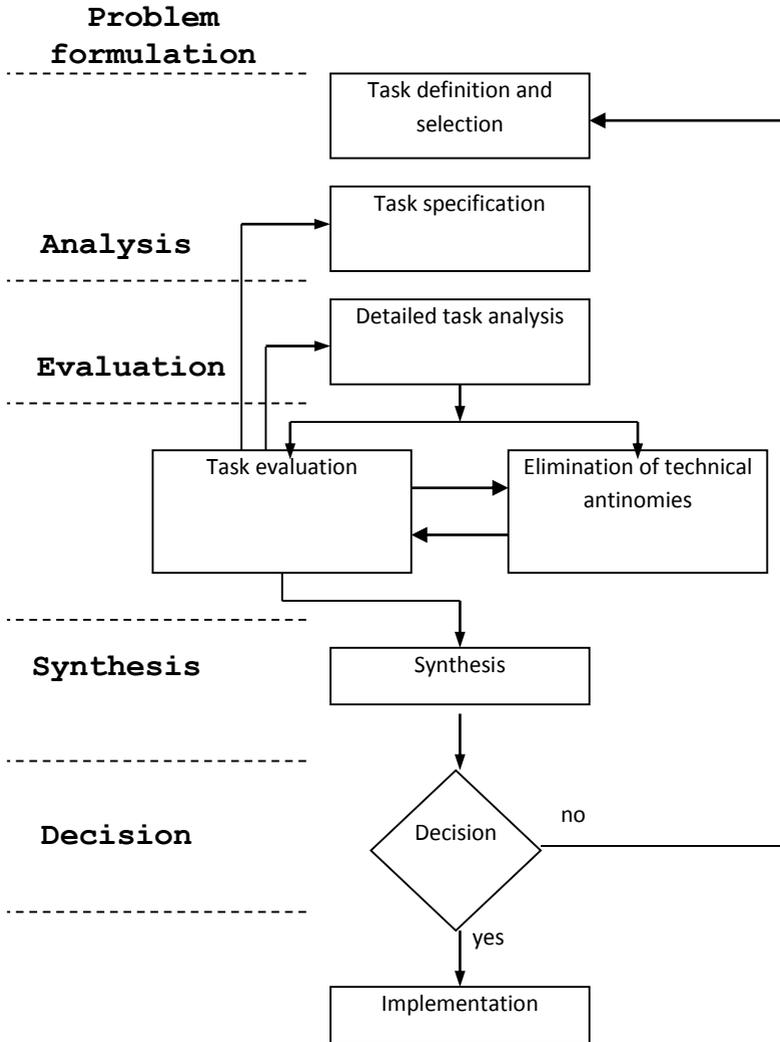


Fig. 4. Altszuler's invention algorithm (diagnostic method of problem solving)

Source: Durlik I., Restructuring Business Processes. Reengineering, Theory and Practice, Agencja Wydawnicza Placet, Warszawa 1998, p. 95.

The process of modelling based on the Altszuler's concept approach identifies the necessity of problem definition. According to the above discussed procedure, a problem is identified and working hypotheses concerning its solution possibilities are tested. The Altszuler's implementation procedure covers the following stages (Fig. 4):

- problem formulation,
- search for potential solutions,
- evaluation of particular options,
- solution selection,
- implementation decision.

D. Buschardt's organisation method consists in the following stages<sup>14</sup>:

- arbitrary isolation of model subsystems and definition of relations between them,
- definition of tasks performed by subsystems and their local objectives,
- definition of agendas responsible for the implementation of particular tasks,
- graphic design of the model achieved by drafting a scheme of the designed subsystem elements,
- verification of the model's internal compatibility with regard to e.g. occurrence of all necessary blocks, supplies and carriers of information, solution correctness, etc.,
- definition of the aspects differing the designed model from the present state,
- practical implementation and verification.

Complexity and variety of problems observed in enterprises, necessitate frequent application of prognostic methods of their solution. The demands of competitive markets and the possibilities offered by modern information technology necessitate transformations of the already existing structures and procedures. Due to the fact, one of the transformation option seems to be the application of methods consisting in creating ideal solutions.

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<sup>14</sup> M.W. Jerzak, *Engineering Organisation Theory*, Part 1: *Methods and Techniques of Creative Thinking*, Wydawnictwo Politechniki Częstochowskiej, Częstochowa 1994, pp. 142-143.

## 1. Summary

Theoretical studies on innovations confirm the interest in the problem of innovative activity both among theorists and practitioners of organisation and management sciences. Comparative approach to the innovation theory in classicism, neoclassicism and institutionalism may be the basis for considerations on the importance of innovative activity in the contemporary global economy. Implementation of organisational innovations conditions better coordination of actions undertaken by different elements of the organisational structure and is thus a factor facilitating efficient management. In contemporary business practice change is most frequently observed in the sphere of goods, processes, systems, organisational structures and recently in organisational culture and social capital. The question of innovation process modelling in practical business activities is important scientific challenge.

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# Chapter 6

## The role of communication in the main assumptions of Sustainable Development

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### **Abstract**

Due to the increased interest in issues of sustainability, it takes a particular significance. It is a multi-layered phenomenon, encompassing such research plane as ecology, philosophy, culture, society, politics, technology and economics. The main goal of sustainable development is the introduction of an integrated governance, which pays special attention to corporate merger of environmental sustainability, socio-economic, spatial and institutional and political. This concept is realized by carrying out environmental, socio-economic and spatial category policy, with an emphasis on sustainable development in the political sense as well as in the field of management. But also the communication and information play an important role in this concept realization and presented article is trying to describe its importance and value.

**Keywords:** sustainable development, communication, principles, concept

### **Introduction**

The principles of sustainable development in the economy, concern including the organic matter, so far unprecedented in the economic history, in the area. This reorientation of the world economy, gives rise to questions concerning the major determinants of determining the possibility of developing the concept of philosophical and practical solutions, applied, for example, by the companies.<sup>15</sup>

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<sup>15</sup> Sadowski A: *Zrównoważony rozwój z perspektywy logistyki zwrotnej*, Problemy Ekorozwoju nr 3, 2008, p.129-132.

The main objective of sustainable development, is to protect the natural capital as a few important rules. This concept is important to reproduction of renewable resources, the integrity of the natural environment, the greening of the economy and its development-environment cannot be in conflict with the interests of the economy. The last principle refers to the economization or policy in a way that minimizes the social cost.<sup>16</sup>

Sustainability factors are usually assigned to three categories of environment, economy and society. When it comes to their interaction, the views on this subject are different, according to some, they are the pillars on the same level, while others think that they are three distinct but closely related aspects of sustainable development.<sup>17</sup>

Environment or ecosystem is the basis for sustainable development. However, human activity cause his over-exploitation. It is about meeting the needs of people, while reducing the impact of human activity on the environment. This aspect of sustainable development is closely related to the protection of the living environment, and the physical environment, including natural resources, processes and environmental balance. An important element is to establish a number of key objectives, namely<sup>18</sup>:

- global warming reduction,
- halt the process of biodiversity disappearance,
- controlling and reducing emissions of chemical pollutants,
- back to the natural cycles of nutritional substances.

With this purposes, it is easier to introduce principles of sustainable development gradually.

The economy, actually economic development, as an aspect of sustainable development is seen as a goal, and the natural environment as a tool, that allows the use of natural resources. This is an extremely important element of sustainable development, as it gives the possibility to combat poverty or make changes in our

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<sup>16</sup>Ibidem.

<sup>17</sup>Zrównoważony rozwój – polityka i wytyczne, Mechanizm Finansowy oraz Norweski Mechanizm Finansowy 2004-2009, dokument przyjęty 5 kwietnia 2006r., p 3-5

<sup>18</sup> Karaczun Z. M. *Rozwój zrównoważony potrzeby, definicje, mity, możliwości*, Polski Klub Ekologiczny Okręg Mazowiecki, 2011, p. 13-15

development. However, not all aspects of economic development, means progress towards sustainable development<sup>19</sup>.



Figure 7. The levels of sustainable development.

Source: Author's own work based on: Mao J., Sustainable Development for the Logistics Industry in UK, University of Westminster, London 2010, p. 38.

The implementation of the principles in economic development, can only speak, if this development proceeds, while reducing the impact on the environment. Economic growth should no longer be associated with negative effects on the environment. It should take any action, that will allow for more environmentally friendly economic

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<sup>19</sup> Grabara J., Bajdor S.: *Implementation of the Solutions Compatible with Sustainable Development Conception and Its Impact of SME Enterprises Economic Condition*. [in:] "Economic Policy in the European Union Member Countries". 10th International Scientific Conference. September 19-21, Vendryne, Czech Republic 2012, p. 135-143

development. Thus, economic policies must support sustainable development, rather than (as at present) work to its disadvantage. It is, therefore necessary to take the following actions<sup>20</sup>:

- Make investments related to sustainable development, viable in, both the public and private sectors. Thanks to these, potential investors will be more willing to take 'profitable' actions, both for them and for the environment,
- Focus research on areas of expertise and solutions to promoting sustainable development. These activities require initial investment but also can bring mutual benefits,
- Impact on consumers' decisions at all levels. Try to educate consumers, for example by coaxing them to recycling.

Would the economy will become an effective tool for sustainable development, while making economic and business activities, should take into account all the costs of such activities. Of course, this is about the cost of environmental and social costs. All costs of this kind should be reflected in market prices.<sup>21</sup>

Another, and perhaps, the most important aspect of sustainable development is society. The main purpose of this development, is, previously mentioned, consideration in the process of meeting the current needs and the needs of future generations. Thus, providing enough good quality of life for all people with both current and future generations. The social dimension in this case, is so important due to the fact, that sustainable development can be achieved, only by the people who feel, that they have a fair share of the prosperity, security and influence. Because the foundation here is not the individual benefit, but to ensure equitable growth in the participation of a whole society.

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<sup>20</sup>Dima I.C., Grabara J., Pachura P., Conceptual Approaches Regarding the Company Logistics, in: Polish Journal of Management Studies Vol.1/2010.

<sup>21</sup> Ibidem, p. 14.



Figure 8. Sustainability activity matrix.

Source: Author's own work based on: Pieters R., Glockner H.H., Omta O., Weijers S., Dutch Logistics Service Providers and Sustainable Physical Distribution: Searching for Focus, international Food and Agribusiness Management Review, vol 15/2012, p. 120.

Social aspects of sustainable development involves support and involvement of the public, in solving various issues, and participation in decision-making process at various levels. Principles of sustainable development for social issues, based on the commitment and awareness of society, that properly instructed and motivated, can achieve a lot.<sup>22</sup>

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<sup>22</sup>Modrak V., Dima I.C. Kot S., Bunaciu M., Systemic Concept of Company's Logistics, in: CECOL 2011. Proceedings of the II Central European Conference on Logistics 2011. Ed. by Maria Nowicka-Skowron. October 20 - 21, 2011. Częstochowa

The main message of sustainable development is the fact, that a well-functioning natural capital determines the development of social capital and economic development. Sustainable development is guided by a few important rules. The first one is to maintain the ability to regeneration a resource - effective use of energy and non-renewable resources and the desire to replace their substitutes<sup>23</sup>. Another refers to the gradual elimination of hazardous substances and toxic to all kinds of business processes. Extremely important is the continued protection and recovery (if there is one), biodiversity at the landscape, ecosystem, species and gene. Another essential principle of sustainable development, is to create for businesses, like such as small and medium-sized enterprises and large corporations, conditions for fair competition for access to limited resources. Socialization processes of environmental, particularly local, decision-making process is also important. It is also important to provide a sense of individual unit of ecological security, understood as the conditions conducive to mental health, physical and social development.<sup>24</sup>

The concept of sustainable development, due to its wide range, is often not fully understood. Here are seven different concepts that involve sustainable development. Together they form a clear picture of the principles and objectives of sustainable development concept<sup>25</sup>. In each of them, communication process plays a significant role and have some influence on the final shape of sustainable development conception.

### **The conception of ethical paradox**

In sustainable development concept occurs so called. 'Ethical paradox'. On the one hand sustainable development is seen as a feature of the process or condition that can be maintained indefinitely. On the other hand, the development is associated with some kind of

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<sup>23</sup> Brzeziński S., Grabara J., Pietrasiński S.: *Concept of Sustainable Development as an Opportunity for Energy Sector in Poland*. Metalurgia International Vol.18 No 11, 2013, p. 36-38

<sup>24</sup> Ibidem p. 13-15.

<sup>25</sup> Jabareen Y., *A new conceptual framework for sustainable development*, Environ Dev Sustain 10, 2008, p. 180.

modification of the environment, and requires intervention in nature and use of natural resources which, unfortunately, are limited.<sup>26</sup>

The concept of sustainable existence belongs to the field of ecology, refers to the capacity of the ecosystem, which spans centuries, without any changes. Since the concept has been combined with the development, it cannot be seen from the point of view of environmental protection only, but also from the society and the economy. This paradox is presented by the most common definition of sustainable development, from the Brundtland Report, which reduces pressure on the environment, emphasizing human needs realized through development. Accordingly, the first part is defined as a "logo" of the environment, and the other as a "logo" of the economy. The objective of sustainable development is to alleviate and moderate paradox between these two objectives.<sup>27</sup>

Sustainable development attracts many supporters, because it seems to strive to combine ecological and economic interests. Its assumptions are able to deal with the environmental crisis, without affecting economic relations between countries' governments. Capitalism and ecology do not contradict, when they are combined under the banner of sustainable development. "Limits to Growth" has become negotiable and enforceable.<sup>28</sup>

The concept of sustainable development is defined as "discourse ethics", which defines a man in relation to good and evil. "Human survival and well-being may depend on the success of raising the sustainable development of the global ethics". Therefore, people urgently need a shared vision of basic values, to provide an ethical basis for the emerging global community.<sup>29</sup>

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<sup>26</sup> Ibidem, p. 180.

<sup>27</sup> Dima I.C., Nowicka-Skowron M., Management of Serving Activity, in: Industrial Production Management in Flexible Systems. Ed. Ioan Constantin Dima, IGI Global 2013.

<sup>28</sup> Baeten, G., *The tragedy of the highway: Empowerment, disempowerment and the politics of sustainability discourses and practices*. European Planning Studies, 8(1), 2000, p. 69–70.

<sup>29</sup> Baeten, G., *The tragedy of the highway: Empowerment, disempowerment...* op. cit., p. 182; Dumitrescu L., Mihaescu L., Mihaescu D.: *Managing economic solutions for a global sustainable development*.

Although there is no one agreed definition of sustainable development, it is virtually all definitions are related to the tension between the economic and the environment, with a preference for achieving economic growth. It covers the development of progressive transformation of economy and society. Paradoxical relationship of stability and development are associated with different ideological spectrum, which ranges between two radically different ethical concepts "domination of nature" and "the inherent right of nature". The first concept is represented by the so-called doctrine. "Light ecology", and the other by the doctrine of "deep ecology". Both of these doctrines apply many methods to solve this paradox and to find a balance between environmental and economic objectives.<sup>30</sup>

Here the role of communication is to find an appropriate definition or terms of sustainable development, which will be for all parties concerned, understandable and transparent. In the communication process must, however, emphasize the importance of both of these issues - ecology and economy, as the two to some extent complementary. Also, in order to connect these two doctrines: the light of ecology and deep ecology, can serve communication processes taking place between the parties. Good communication it possible not only to understand the "other" point of view, but also identify some common points that can lead to subsequent agreement.

### **The concept of natural capital**

This concept represents a natural development of tangible assets. These resources are defined as "all the resources of the natural resources of oil in the ground, water and soil, groundwater, fish stocks in the ocean around the world, the recyclability and carbon sequestration". Equity includes all the natural advantages: people can modify and expand the opportunities for its use, however, these goods cannot be produced by humans. Natural capital is usually divided into three categories: non-renewable resources, such as mineral resources, renewable resources such as crops. The third group is the natural

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WSEAS International Conference. Proceedings. Mechanical Engineering Series. Eds. M. A. Rosen, et al. No. 5. World Scientific and Engineering Academy and Society, 2010.

<sup>30</sup> Ibidem, p. 182.

systems, that have the ability to absorb pollutants resulting from human activities, without incurring losses due to their harmful effects.<sup>31</sup>

In the communication processes concerning on sustainable development a natural capital has been often determined as its criterion. The rules should be kept on the same level all the time. Thus concepts are being developed, which are aimed at the exploitation of natural resources in the way to suffice them for future generations. Thus, the green economy is to emphasize the importance of non-replacing natural capital and its role in the further development.<sup>32</sup>

So how to measure the depreciation of natural capital resources? It is not easy to answer this question, the more so that there is no specific method commonly used for this type of measurement. In recent times, several attempts to measure the planet's natural capital values has been taken. However, many scholars claim that natural capital has great power, and ecological economists should deal with its properties, instead of focusing on accurate measurements.<sup>33</sup>

Some researchers argue, that maintaining something that exists in the environment during its continuous change, is both logical and functional. For them, sustainable development rules of conduct, on both to maintain a certain resistance to change, on the other, to adapt to changing internal and external conditions. What's more, there is no such thing as a universal state of balance, which is wrongly affirm by many researchers, who even have a set of indicators for this type of measurement<sup>34</sup>. These indicators are tools of communication between people dealing with this issue. However, even in this case, is how these indicators are formulated, and how is their interpretation, can affect the overall perception of the pillar.

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<sup>31</sup> Roseland, M., *Sustainable community development: Integrating environmental, economic, and social objectives*, Progress in Planning, 54(2), 2000, p. 78

<sup>32</sup> Jabareen Y., *A new conceptual framework for sustainable...* op. cit., p. 183.

<sup>33</sup> Ibidem, p. 183.

<sup>34</sup> Kohn, J., Gowdy, J., & Van der Straaten, J. (Eds.), *Sustainability in Action: Sectoral and Regional Case Studies*, Cheltenham: Edward Elgar, 2001, p. 3.

## The concept of equality

The concept of equality represents the social aspect of sustainable development. The social dimension is critical, because it is unlikely, that the unjust society respected the principles of sustainable development, continuously over a long time. The very notion of equality includes a variety of other concepts, such as the environment, social and economic justice, equal rights to development, quality of life, freedom and democracy<sup>35</sup>. Everywhere in the world, where there is destruction and degradation of the environment, questions about social justice, equality, human rights and quality of life in a somewhat broader sense, are put. It is believed that a sustainable society is one, in which questions about the need for social justice, prosperity and economic opportunities are integrally related to the limits imposed on them in order to support the ecosystem. Many researchers, environmentalists and governments agree that sustainable development can be achieved through an effective balance of social, economic and environmental objectives. Most often quoted definition of sustainable development comes from WCED, highlights the issue of equity between generations.<sup>36</sup>

There are two types of equity related to sustainable development, intergenerational and intergenerational. Intergenerational equity refers to the fair allocation of resources between present and future generations. It is a development that "meets the needs of the present without compromising the ability of society for future generations". It is important here such action and decision-making, that does not damage the prospects for maintaining or improving the conditions of life in the future. This means that our current economic systems should be managed in such a way that we can use the "dividend" of our resources, and thus, that future generations will enjoy them as

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<sup>35</sup> Agyeman J., Bullard R. D., Evans B., *Exploring the nexus: Bringing together sustainability, environmental justice and equity*, Space & Polity 6(1), 2002, p. 77

<sup>36</sup> Jabareen Y., *A new conceptual framework for sustainable...* op. cit., p. 184.

much. It is a concept, which comes to the ability to share wealth between generations. However, intra-generational equity in terms of fairness in the allocation of resources between competing interests at the moment. In the literature, much less attention is devoted to this type of equality, although it is also an important aspect of sustainable development, as more equitable and thoughtful allocation of resources and power can contribute to the improvement of environmental quality. Greater inequality of power leads to greater environmental degradation. Therefore, before we focus on intergenerational equity, we should first obtain the equality of the current generation.<sup>37</sup>

I guess that's the most important role of communication and the processes taking place in society. It may in this case to bring both positive and negative effects. Positive effects will become more sustainable society, for it whether it behaves in a sustainable manner depends largely on information, communication and communication processes. Information, for example, on how to conduct in accordance with the concept of sustainable development should be legible and no problem getting to the persons concerned. On the other hand, ill-formed or malformed messages can even backfire. The allocation of resources, all actions are taken under the influence of certain messages, their role in the fair distribution of wealth and resources should primarily be very good reasons for their action, so you do not cause public resentment.

### **The concept of eco-form**

This concept is related to the form and structure of human habitats, such as urban space, buildings or houses. This concept focuses on the design and definition of urban environmental companies to help protect the environment and creating buildings more environmentally friendly than the current.<sup>38</sup>

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<sup>37</sup> Ibidem, p. 184.

<sup>38</sup> Ibidem, p. 185.

According to the researchers that "energy efficiency" is the key to achieving organic forms by designing buildings, cities and regions. Better design helps to reduce air pollution, but also increase energy efficiency. Under this concept, it is the architects are more responsible for the world's consumption of fossil fuels, global warming and natural gas production. The literature review also indicates that sustainable development can be achieved through proper planning at the local and regional level. By proper design of habitats can be solved a lot of problems, because they often arise precisely from improperly designed urban system.<sup>39</sup>

### **The concept of management integrity**

This concept represents the integration of sustainability aspects relating to economic growth and environmental protection. It is believed that, in order to achieve sustainable development and ecological integrity, the preservation of natural capital must be integrative together with holistic approach to management. Economic goals, such as poverty reduction growth, should take precedence over the protection of the environment at the same time stating that, a healthy environment is a prerequisite for economic and social success. What's more, it is believed that poverty and environmental degradation affect global crisis, and the choice between the environment and development should be pursued, in order to achieve sustainable development<sup>40</sup>.

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<sup>39</sup> Ibidem, p. 185.

<sup>40</sup> Dodds H. S., *Pathways and paradigms for sustaining human communities* [in:] Lawrence R.J., *Sustaining human settlement: A challenge for the new millennium*, Great Britain: Urban International Press, 2000, p. 28 -29.

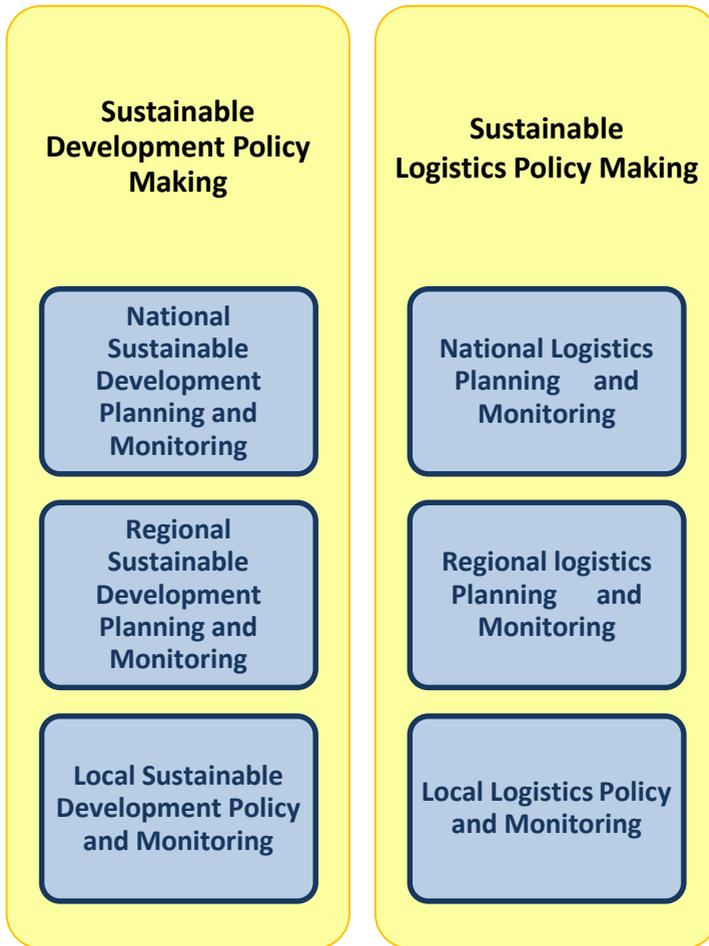


Figure 9. Planning and policy-making structure for sustainability.  
 Source: Author's own work based on: Castillo N.H., A Methodological approach for Indicitaro-Based Sustainable Transport Assesment, London 2004, p. 124.

From a policy perspective, the concept of integration of management, emphasizes the importance of maintaining a safe minimum for all living and non-living activity needed to maintain ecosystem functions, and at least representative of all forms of living

natural resources. Thus, conservation should be an integral part of the development process. The current decision-making systems, in many countries still tend to separate economic, social and environmental factors on policy, planning and management levels, which affect the operation of all sections of society, the development of performance and stability<sup>41</sup>. Therefore, the proposed integrated management system should ensure consideration of environmental, social and economic together in the framework of sustainable development. Were identified four areas of work<sup>42</sup>:

- integration of environment and development policy, planning and management levels,
- providing effective legal and regulatory framework for the development,
- effective use of economic instruments and market,
- establishment of an integrated environmental and economic accounting.

Thus, the adjustment or even a fundamental reshaping of decision-making procedures and communication flow, may be necessary for the introduction of environmental issues and the development of the economic and political center of decision-making. A holistic approach to sustainable development is to bring together all interested parties and provide them all necessary information. However, the responsibility for bringing change rests with the government, with the private sector and local authorities, in cooperation with national, regional and international organizations, which will become a part of the whole communication process, existed within them. In addition, in this case, good communication includes also national plans, objectives and targets, regulations and laws, and the specific situations, in which there are different countries, should be included in the general framework for the integration of some of these countries (eg within the EU).

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<sup>41</sup> Ibidem, p. 185.

<sup>42</sup> Jabareen Y., *A new conceptual framework for sustainable...* op. cit., p. 185

### **The concept of utopia**

The concept of utopia predicts the development of human settlements (communities, cities, regions), based on the concepts of sustainable development. Usually utopias of sustainable development represent a perfect society, where justice prevails, people are happy to live and develop with nature in harmony, and life goes on smoothly, without fraud and loss. Power utopian thinking is properly understood as a vision of a new society, which challenging now all considered assumptions. This is due to the inherent ability to see the future in terms of radically new forms and values.<sup>43</sup>

Utopian thought is important in the search for environmentally responsible society. Utopian vision and communication, which includes all the necessary information about utopia, are necessary inspirations, which should draw activists. The so-called. "Greens reformers" radically need an alternative image of post-industrial society, far-reaching ecological vision, delusions study sustainable community, and paradoxically also need the so-called. brought to the Earth and remind them of the limitations of growth.

### **The concept of global political order**

This concept presents a new global discourse, that has been renovated and inspired by the ideas of sustainable development. This concept takes the earth as a single world and aims to address global environmental problems at their core, and to provide to a developing country tools and resources, good communication process, needed to equal opportunities and enable them to address urgent problems such as deforestation, climate change, loss of biodiversity, the increase in the number of population, disease, etc.

Sustainable development is more often being seen as a challenge to global governance, and as one of the greatest challenges facing humanity. Johannesburg Declaration on Sustainable Development states that the major threat to global prosperity, security and stability is the gulf, which divides society between rich and poor and the growing gap between developed and developing countries. So the main effort in the pursuit of sustainable development should focus

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<sup>43</sup> Ibidem, p. 186-187

on eradicating poverty, changing consumption and production patterns and how to manage natural resources for economic and social development, taking into account environmental issues.<sup>44</sup>

These concepts together create the theoretical framework of sustainable development<sup>45</sup>. Each of them represents typical meaning and aspect of the theoretical foundations of sustainable development. Moreover, they are related to each other as illustrated in the figure below.



Figure 10. The conceptions of sustainable development  
Source: Author's own work based on: Jabareen Y., A new conceptual framework for sustainable development, *Environ Dev Sustain* 10, 2008, p. 188.

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<sup>44</sup>WSSD – World Summit on Sustainable Development, *Report of the World Summit on Sustainable Development*, Johannesburg, South Africa 2002.

<sup>45</sup> Jabareen Y., *A new conceptual framework for sustainable...* op. cit., p. 188.

In the middle of the figure there is the concept of an ethical paradox. The paradox occurs between sustainability achievements and development, and is formulated in terms of ethics and, somewhat, is associated with all the concepts discussed<sup>46</sup>.

## Conclusion

In this paper presents a role that communication plays in achieving the main goals or objectives of the concept of sustainable development. First of all, the communication processes must accompany all efforts to achieve a state of sustainable development, both by governments, corporations, NGOs and ordinary citizens. It plays a role then not only informative but also cognitive and stimulate creativity. Communication in relation to the concept of sustainable development can be seen as the so-called. nervous system of this phenomenon, because without information, and their circulation, the concept of sustainable development was not in the place he is and rather not have gained such popularity. It is communication, information flow and the pressure and the attention devoted to this concept, caused that she has gained such popularity on.

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# **Chapter 7**

## **Role of production technologies in the production process for machine building companies**

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### **Abstract**

This publication presents a systematic analysis of the role and functions of production technologies in the production process of machine building enterprises. The aim of the study is to summarize and systematize the existing terms and relationships of the elements of industrial enterprise as a production system. In essence the production process is the set of all activities and processes that create or contribute to the creation of the production.

**Keywords:** production technologies, technological process, production process, production system.

### **Introduction**

In microeconomics production is the act of doing things, a specific act of creating products that will be advertised or sold. Production decisions focus on what goods are produced in such a way that their price is optimized mix of cost of production and cost input resources. This production information can then be combined with market information for determining the quality of our products and optimize pricing.

In macroeconomics, production is measured by the total domestic product and other measures of national income and output. Production is the transformation of the raw materials into finished goods for sale through instruments in a production environment, involving all intermediate processes involved in manufacturing or tuning components ("semi-production"). (Figure 1)

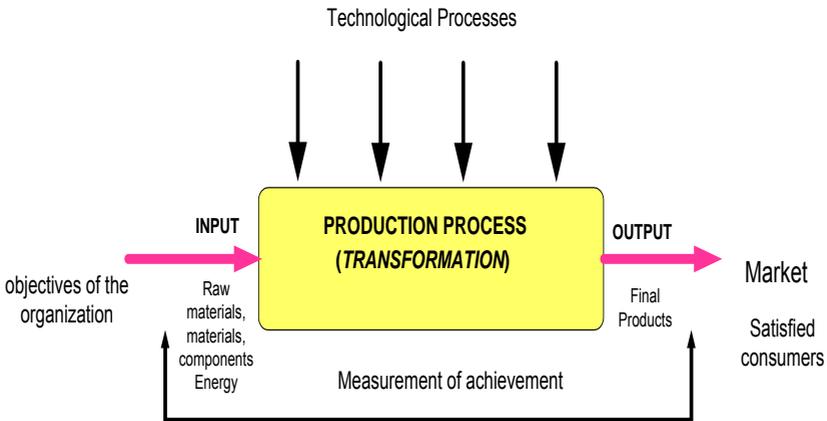


Figure 1. Production process

For much of the contemporary world economy-about a quarter of the world's output of goods and services, many of the rich nations of the world spend a small part of its workforce for production related moving of firms in countries with low-wage and increase the proportion part of economic activities related to services. Economy and the commercial management of the plant determine its business.

## 1. History and development of production and production technologies

Although the manual production existed many centuries ago, it is considered that a modern contemporary *production* started around 1780. English industrial revolution which spread later in continental Europe and North America and eventually worldwide. Originally, the term applies to commercial *products* or products which have been made by hand. The beginning is known as the Industrial Revolution. Development of productive skills are applied at the factory. Application of science in the beginning of the production process of industrialization. Changing production methods are called *production systems*.

In economy - all activities that occur when creating products using raw materials, value added, or the ability to meet human needs

and desires are defined as manufacturing or production activities (Colombian encyclopedia, 2001-05.). Production is the main progress of the industry since the beginning of II century, when trade and the market began to be considered of equal importance in transferring goods from producers to consumers. Today, the dominant style of production is called mass production.

Many historians place the beginning of mass production around 1800, With armament Eli Whitney approaching the work process to modern industrial production. The method of mass production is linked of individual standardized interchangeable parts of a number of workers, peaking in the automotive industry at the beginning of XX century. Increase automation is associated with increased division of labor, which allows manufacturers to hire unskilled or semi-skilled workers, which leads to repetitive execution of small tasks in the final production of commodities consumption. Mass production is often carried out at assembly lines, which run continuously flow of products and continuously falling production.

For most types of production in modern society are required to invest large capital equipment. Equally significant are the earth and its natural resources, which produce raw materials and labor which for the purposes of capital extract and transform resource inputs. These basic factors of production are added and entrepreneur who organizes the production facilities and take risks. Under capitalism is produced for the market, an important function of the entrepreneur is to anticipate as far as possible the economic demand for goods and produce the types and quantities of goods that match this search. To meet the high costs of mass production, practical basic necessities in most industrial manufacturing group of speculators often take risks in production and then individual entrepreneurs become redundant.

A later trend of XX century is aimed at increasing computerization of the production process; computers not only are integrated to production machines, but increasingly replace human labor.

Computerization makes assembly lines faster, more accurate and more flexible. Through computerized instruction design and manufacture of many products of mass production can be easily modified at the request and needs of the individual client.

Development of manufacturing technology in engineering is focused on machine tools and material of the workpiece, both in real and virtual environments. With knowledge of the nature of production processes and methods in the early planning process, ensure successful competitive engineering in modern product development.

Management of the elements of the production process, changes in the early stages of the design can be stimulated and to establish qualitative aspects. Furthermore, the acceleration of the process is visible in the presence of vital information for the selection of machines and optimization of the times.

**Process** is the natural running or designed sequence of changes in the characteristics of the system or object.

**Enterprise** - almost any business or organization can be called enterprise and should be managed by an entrepreneur. Now can be seen as a production system consisting of two sub-systems - managing and managed. (Figure 2.)

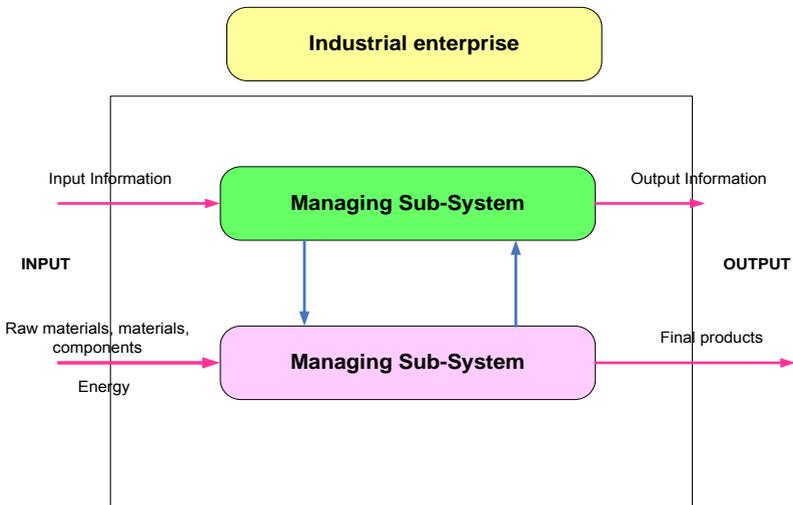


Figure 2. Production System

**Factory or plant** – large industrial building where workers manufacture goods or manage the machining of a product to be transformed into another. Most modern factories have large warehouses or buildings that contain heavy equipment used for assembly production lines. Originally factories collect and accumulate resources - people, capital and equipment.

**Factors of production** - resources in the production of goods and services in the economy. Classical economics is characterized by three factors:

- **Natural resources** – natural ways derived products, such as salts and materials, which are used to produce the products.
- **Labour** – human effort used in production which also includes technical and marketing expertise. Remuneration in the form of salary.
- **Tools for production** – made by those devices which are used in production of goods. These include machinery, tools and buildings.

In the microeconomic **production function** is expressed in the fact that maximum performance of a given technological process is a mathematical tool input factors of production. Numerous technically feasible combinations of input and output factors ensure maximum productivity for a given set of input factors form the production function. Production function can be defined as a specification of the minimum input requirements needed to produce the projected amount of output, according to the capabilities of a given technology.

## **2. Nature and structure of the production process**

In essence the production process is the set of all-work and processes that create or contribute to the creation of the production. The entire production process is a combination of a large number of partial production processes that are united in technological complex forming phases of the basic process. Individual processes could be organized so that they can be implemented in the shortest possible time at minimum cost. Depending on their nature and their relation to production, the partial production processes can be grouped into two main groups:

- a) basic processes;
- b) auxiliary processes.

### ***1.1. Basic production processes***

Basic processes are those that are associated with an immediate impact on the subjects of labor and their transformation to finished product. Depending on the sequence of their technological development, the main production processes can be grouped into three main phases: preparation, operating and assembling.

To the basic processes in the preparation phase in mechanical engineering are included: casting, forging, cutting, etc., which are related to the preparation of details for subsequent machining.

To the basic processes in the operating phase are included: machining, heat treatment, thermo-mechanical processing, chemical, electrochemical and other of processing on the details.

To the basic processes in the assembly phase belong the installation of components, their regulation, testing and packaging.

### ***1.2. Auxiliary production processes***

Auxiliary processes are those that are associated with the operation of the main processes and the creation of conditions for their implementation and their smooth implementation. These include: repair mezhdutsehova and inland transport workshop, tool production, the production of steam, electricity, supply of necessary tools, resources, materials, etc.

Aside from the main and auxiliary production processes in mechanical engineering enterprise is possible also to organize and lateral processes designed to process waste from primary production, and additional productions which use of spare production capacity and more fully meet customer needs.

### ***1.3. Technological operations***

In the process of production, objects of labor passing through workplaces for processing in accordance with the course of the process in which previous operations produced parts and products are

subjected to quality control. Therefore each production process is built by three successive elements: technological, transport and control.

Individual part manufacturing processes are a system of production processes, which in turn are divided into working movements and manipulations.

The production operation is a system of interrelated actions that are performed by workers individually or in groups of workplace with one or more instruments of production on a particular product. These are characterized by unity and immutability of the elements of production process - jobs, tools, objects of labor, etc. If one of the elements of the production process is changed - such as machine instrument etc., it affects the course of another operation.

Depending on their relationship to production, operations can be: basic, auxiliary and control. (Patarinsky P., 1970.)

**Basic operations** are those operations in which the objects are processed and the main goal of the corresponding part of production process is achieved - such as turning, milling, etc.

**Auxiliary operations** are those operations that are associated with service, maintenance, equipment setup, etc.

**Control operations** are directly related to the quality control of manufactured products to maintain in working order the equipment, etc.

Depending on their performance manufacturing operations can be: hand, hand-machine, machine or automated.

#### ***1.4. Working manipulations***

The working manipulation is simple completed action within its structure a transaction that is characterized by its own peculiarities. For example: turning operation consists of the following manipulations: insertion of detail, propelling the machine, removing the chip, stop the machine, release the workpiece. Depending on the attitude towards its production, manipulations can be: **basic** and **auxiliary**. Basic manipulations are those in which direct influence on the product of labor - removal of swarf when turning, and auxiliary that create conditions for implementation of the main manipulations - placing and tightening of detail, propelling and stopping, discharging and unloading. (Patarinsky P., 1970).

### 1.5. Working moves

The manipulations are divided into working movements.

**Working movement** - the smallest of all the movements involved in the structure of a manipulation that can be measured - touch the hand to detail, catching detail, lifting the workpiece, move it to the machine, etc. (Patarinsky P., 1970)

The overall structure of the production process is shown in Figure 3.

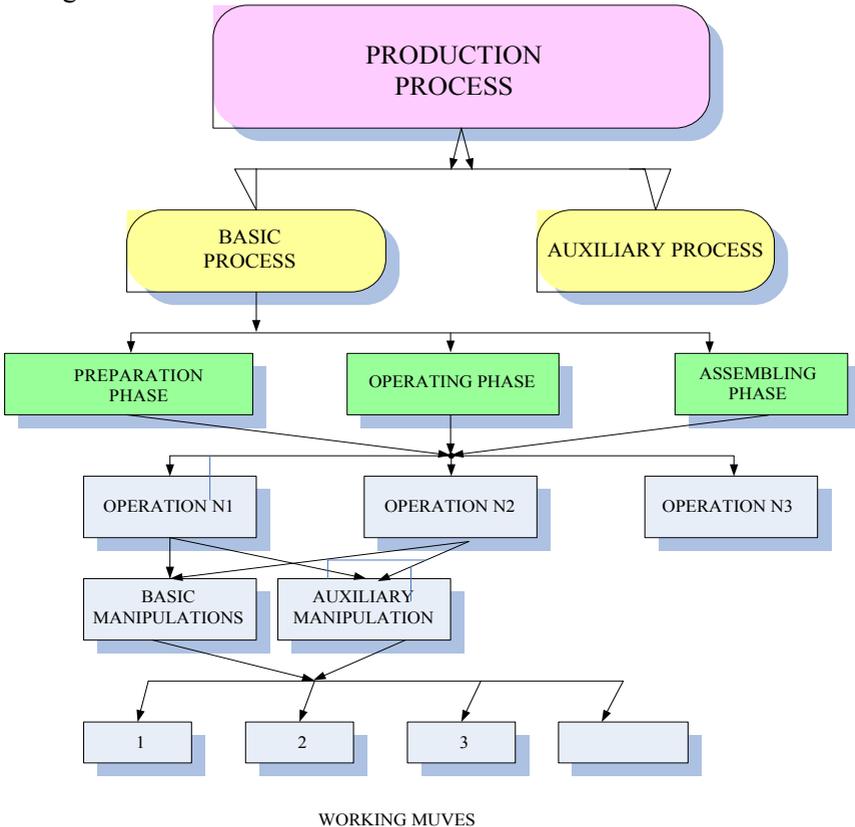


Figure 3. Production process - structure

## 2. Systematization of basic terms in the production process in machine building industry

In relation with the processing of natural raw materials into relevant products virtually every day we meet the definitions: product handling, production, production process technology and process. The result of the final stage of machine production is called product. The content of this term is determined by the subject of the proceedings and this may deem to be finished machine node or detail. (Patarinsky P., 1970r.):

The **machine** is a product that is generally composed of separate units and parts.

The **assembling unit** is an element of the machine, which is a combination of two or more elements, regardless of the type and nature of the connections between them (joint or rigid, fixed or mobile, etc.). A characteristic feature of the flow assembly is that it can be assembled separately from the other elements of the machine. It is known that: the assembling unit that is attached directly to the machine is called **group**; - A the assembling unit that is part of the machine as part of another joint (group) is called a **subassembly** or **subdivision**; - the assembling unit, which is assembled and subjected to various measurements and tests, but in the assembly of the machine or together with other assembling units partially is disassembling, is called a **set of parts for assembly**.

The **detail** is a primary component of each product, which is characterized by the peculiarity that in the composition there are no aggregates. In relation with the production of parts it is used the term "**billet**".

The **billet** is original, restored to the condition which is convenient and necessary for further processing to produce the finished piece.

**Machining** involves the use of machine tools, with an electrically-driven electricity, lathe, milling machine and drilling machine to give some form of metal. Machining is part of the production of most metal products. Certain types of plastic parts are also treated with metaloreshti machines.

## **Conclusion**

This publication systematizes some existing concepts used in the engineering industry and the relationships between them and their base is an attempt to clarify the role of manufacturing technology in the manufacturing process of the machine-building enterprises. This is an important reference to the management of production processes in manufacturing systems. This study could be used in the training process in the discipline Production technologies in Industrial management education.

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# Chapter 8

## Environmental study of communicational elements in energy sector

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### Abstract

The environment is the area which includes forests, fields, lakes, rivers, ponds, mountains, hills and valleys. In Poland, the environment is visible from all sides, as opposed to fully urbanized areas, such as occurring in China, bigger parts of our country has not yet been destroyed by human activities. And, for a few years, awareness of environmental protection gradually increases in both, private individuals and large companies. This article shows how the power plant in Belchatow, one of the biggest polluters and the units responsible for environmental degradation, can cope with the problem of what is the impact of its activities on the environment. In this article will be presented all the activities of power plant in order to minimize its negative impact on the surrounding environment.

**Keywords:** environmental management, power plant, energy sector

### 1. Introduction

The concept of "environmental protection" is not a new concept. This definition has been known from the beginning of the civilization. At the beginning, in ancient Rome, the issue of urban waste water which caused pollution of the Tiber was recognized. In modern times the cause of many negative occurrence which disturbing agreement between the man and the environment was a constant technological progress. Many people are familiar with a short video showing the new marvel of technology as it was at that time a car capable of breakneck speeds 20km/h and producing huge quantities of gas. In general, the twentieth century is a symbol of rapid growth with the simultaneous degradation of the environment. At the time, concern

for environmental protection was neglected topic because everyone aspired above all to achieve the greatest profits without paying attention to costs, whether it was appropriate treatment for a worker, or just the environment. The effects of some of these activities are still visible today, and many of them will affect our environment, for a few or for a several dozen years.

Today, the idea of environmental protection is gaining wider acceptance in our society. It is almost fashionable to be "organic" - sort the garbage, save water, energy and gas, have solar panels and drive a car with a hybrid engine. Eco -Fashion has reached to a many large companies, which are now willing to implement a pro-ecological solutions, trying on all fronts of its business to reduce its negative effects on the environment. Almost all companies, both small and large, make tools, procedures and regulations which can be described as the environmental management

## **2. Environmental management**

Environmental management is the management of company's operations that have, had or may have an impact on the environment. The aim environmental management is to preserve the natural resources and environmental and occupational health and employee's and population's protection<sup>47</sup>.

Throughout the 1990s and the beginning of XXI century, most of the companies in America and Europe became more aware that environmental issues and regulations required a new approach. It was recognized that environmental laws are products of ideas and social forces (most of them) whose time had come. Companies saw that enforcement of these laws is very important as a matter of public policy and the companies who ignore that law can be no longer more competitive to the others. In addition, the recognized that public (customers in other words) with the environment, together, cannot be asked to take all the risks associated with scientific uncertainty. And the industry must accept controls before all the evidences of science become conclusive. It is because, the public is their customers and the

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<sup>47</sup> Szydłowski M., Werner-Engel H., Ociepa A., *Wprowadzenie do systemów zarządzania środowiskowego*. NFOS, Warszawa 2005.

main companies' policy is to satisfy the public even they are wrong. Acceptance of the reality of environmental costs, liability, and risks led to the development and increasing importance of the field of environmental management. Until 1998, there were no environmental management courses in business schools. Now many business schools incorporate "environmental business" courses into their curricula, as well as consider other social impact issues<sup>48</sup>. Today, most of the companies are working to make environmental issues effectively-cost and spend the money in a right way; the reason of this is the costs of various environmental programs are very high. Sometimes, the companies and government agencies are working together to make sure that the money are well spent. Companies can also use many management techniques to improve their environmental performance and control costs. These techniques can include: Total Quality Management, careful, Life-cycle analysis, sustainable manufacturing and full cost accounting. Now, environmental management has grown and achieved the international level, and many various companies (now eco-friendly) have developed lots of programs and initiatives in purpose to help managers and businesses in making changes and, more important, identifying opportunities to make further improvement in environmental management field.

There are many definitions, terms and concepts in such a wide field which is environmental management, the short descriptions a few of them can be very helpful to gain a general understanding what is environmental management.<sup>49</sup>

**Life Cycle Assessment** - the main definition of LCA is that life-cycle assessment is a technique to assessing the environmental aspects and potential impacts associated with a product, by compiling an inventory of relevant inputs and outputs of a product system, evaluating the potential environmental impacts associated with those inputs and outputs and interpreting the results of the inventory analysis

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<sup>48</sup> Friedman F. B., *Practical Guide to Environmental Management*. Environmental Law Institute, Washington 2006.

<sup>49</sup> Based on Wilson G. W., Sasseville D. R., *Sustaining Environmental Management Succes*. John Wiley&Sons, Canada 2008.

and impact assessment phases in relation to the objectives of the study<sup>50</sup>.

**Cleaner Production** – involves the application which continuously integrates preventive environmental strategy to products, services and processes in purpose to increase efficiency together with risks minimalisation. Cleaner production also includes the conservation of raw materials and energy, reduction of quantity and toxicity of all emissions and wastes.

**Design for Environment (DfE)** – it is a technique which can be used to incorporate environmental considerations into the process', products' and services' design. By assessing environmental impacts over the whole life cycle at the development stage, firm can practice DfE to reduce material and energy intensity as well as emissions and waste. DfE also provides a framework through which to undertake eco-efficiency, pollution prevention, cleaner production<sup>51</sup>.

**Eco-Efficiency** – this term describes the goods and products with the price and service that satisfy human needs and bring quality of life. In addition these goods and products progressively reduce ecological impacts. At the beginning the Eco-Efficiency term contains two elements: economics and ecology. To be fulfilled, companies must take other steps to add the third element which is social progress.

**Pollution Prevention** – this term is close to “cleaner production” and is often used to describe the strategy of continuously reducing pollution into environment, i.e. eliminating waste during the process. EPA defines “pollution prevention” in terms of source reduction, i.e., preventing or reducing waste where it originates, at the source, including practiced that conserve natural resources by reducing or eliminating pollutants through increased efficiency in the use of raw materials, energy, water and land<sup>52</sup>.

**Industrial Ecology** – it is a field of science that checks global, regional and local flows of materials and energy in products, processes, economies and industrial sectors. It focuses on the industry's role in reducing environmental burdens through the

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<sup>50</sup> ISO 14040. *Draft: Life Cycle Assessment – Principles and Guidelines*

<sup>51</sup> Fiksel J., *Design for Environment*. McGraw-Hill, New York 2009.

<sup>52</sup> Collin R. W., *The Environmental Protection Agency. Cleaning up America's act*. Greenwood Press, Connecticut 2006.

products life cycle – beginning from the raw materials, production process, use those goods till the end of its life (products’). Industrial Ecology’s aim is to achieve closed loop system, in which wastes from one products can be reused or become a raw materials for other goods.

**Supply Chain Environmental Management** – this definitions contains a wide range of activities, such as screening suppliers, working collaboratively with them on a green design initiatives or providing training to build environmental management capacity for the suppliers. It involves a co-working with the suppliers from the top of the supply chain and with the consumers and distributors from the bottom of the supply chain. This definition is also being applied to promote sustainability development.

**Enviromental Management Systems (EMS)** – it is a part of business’ overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintain environmental policy<sup>53</sup>.

**Total Quality Environmental Management (TQEM)** – this definition describes the process to approach a constantly improvement the quality of products’, processes’ and services’. This field has a few primary key elements: a very high level of management commitment, a strong customer, employee involvement, teamwork and a long term focus. According to Global Environmental Management Initiative (GEMI), in TQEM four basic elements assure right guidelines for planning in business: customers’ identification, continuously improvement, eliminating environmental problems before they occur and looking at each environmental part as a system.

### 3. ISO 1400 series

ISO 14000 is a series<sup>54</sup> of standards which can be very helpful with establishing and maintaining a structured and systematic environmental effort to improve companies’ performance at an

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<sup>53</sup> Cortes U., Poch M., *Advanced Agent-Based Environmental Management Systems*. Girona University, Girona 2009.

<sup>54</sup> Based on Piper L., Ryding S. O., Henricson C., *Continual improvement with ISO 14000*. IOS Press, Netherlands 2003.

environmental field. These standards are using tested and internationally methods to provide the most accurate guidelines to the companies. ISO (International Organization for Standardization) 14000 series is divided between organization and production parts. Organizations' part includes the following:<sup>55</sup>

- Environmental management systems and communication (ISO 14001, ISO 14004 and ISO 14063)
- Environmental auditing (ISO 14010 and ISO 19011)
- Environmental performance (ISO 14030) and productions' part includes:
  - Environmental labels and environmental declarations (ISO 14020)
  - Life Cycle Assessment (ISO 14040)
  - Environmental aspects (ISO guide 64 and ISO/TR 14062)

All these standards have been developed in the way that they can be used together or independently and they constitute a rational flow of activities which is presented below:

As the environmental management and Life Cycle Assessment were presented in the first part of this article, below are shortly presented the following standards:

Environmental performance provides a way of describing and expressing a company's environmental aspect which are significant for it. These forms or "key-terms" can be very helpful when it comes to recognizing and judging the relevance of the environmental work as a whole, separate part.

Environmental labeling and environmental declarations provide many different tools that company can use during the communication between various parties about the products' and services' impact on the environment. These tools also are clearly related to other tools in the ISO 14000 series.

Environmental review is very close to environmental management. The review gives the company a guidelines for following-up and checking the result if their environmental work agree with the starting points. The reviews should compare, regularly,

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<sup>55</sup> Johnson P., *ISO 14000. The business manager's complete guide to Environmental Management*. John Wiley&Sons, Canada 2007.

the results of the company's environmental work in many various areas.

#### **4. Belchatow power plant activity and its impact on the environment – case study**

The government decision to build a team of Mining and Energy Station was taken in 1971 on the basis of discovered in the 60's brown coal's large deposits in those surroundings. Start of construction of the plant occurred in 1975. After carrying out research on plant location, the resort decided on Rogowiec, placed 1.5 km from the northern slope pit. The plant has a power of 4,320 MW and consists of 12 power units of 360 MW each. Since the 90s the plant provides heat in the amount of power needed and the entire city estates. It is the largest both in Poland and Europe, coal-fired power plants. Its annual consumption of coal is approximately 28 billion kWh and due to its favorable location, modern technology and the size scale, Belchatow power plant produces the cheapest electricity in Poland.

Negative aspect of Power Plant is its negative impact on the environment, both at the local level and, also, national as well as the entire continent. The losses which arise in the environment under the influence of power can be classified as follows:

1. Depletion of non-renewable resources - a process which is due to overexploitation of resources during the wastage of raw materials are associated with major raw material extraction, mining activities also significantly affects the degradation of the surface;
2. Air pollution - is caused by burning fossil fuels (coal and lignite) as a result of penetration into the atmosphere of large quantities of dust and gases: sulfur oxides, nitrogen compounds and carbon monoxide.
3. Pollution of water - they are associated with atmospheric pollution and soil. This phenomenon is extremely dangerous for the sake of fundamental importance of water in sustaining life processes and the important role it plays in many industries. Power by discharges of waste heat changes affects the habitat and the aquatic environment biocenosis, leaving one organisms killed with new organisms appearing instead.

4. Contamination of soil - the destruction of soil structure changes its water retention, which is very important in terms of flora and fauna. Excessive soil chemization brings catastrophic consequences, resulting in the soil is excluded from crop production. To restore the original condition of the soil time, money and experience is needed;
5. Negative changes in the flora - as a result of diminished power of communities of bogs and meadow vegetation, have increased the derelict former agricultural areas;
6. Lowering the standard of living - all these negative aspects of power significantly contributes to the deterioration of living conditions in its close neighborhood.

## **5. Environmental management at Belchatow Power station**

Since the inception of the Power Station has taken actions whose main purpose was to reduce its negative impact on the environment. Used in the power system of environmental protection includes:

- Air protection
- Water conservation
- Rational management of water resources and waste
- Noise protection.

The system consists of research and measurement to investigate the activities of the Power Plant on the environment. From the beginning of its, power is working closely with a number of measurements and research institutions within which are conducted the following tests:

- Environmental monitoring in the area of landfill furnace
- Measurement of dust around a waste landfill furnace
- Monitoring the environment in the storage area of the FGD gypsum which is located on the outer dumping
- Study of the effects of dust in storage on the environment.

The Regulations MOSZNiL of 12 February 1990 on air protection against pollution, presented of emission standards in the exhaust gas boiler has set the Power Station to the task - meet the required standards. At the beginning the power applied dry flue gas desulfurization method, but after a while it was found that this method

is insufficient and must be applied highly effective method - wet and semi-dry. The choice of the wet it was decided because of the following advantages:

- A high desulfurization efficiency, above 90%;
- Relatively low operating costs;
- High flexibility of the system;
- High reliability technology and equipment;
- Availability of sorbent and its low cost;
- The possibility of development of gypsum as a high-quality waste ;
- Entries in the "National Program for SO<sub>2</sub> reduction by 2010";
- The universality of this method in the world, extensive knowledge about technology.

After a decision on the method, Power signed a contract with Dutch company Hoogovens HTS to build flue gas desulphurization system - the first four were built in 1994-1996, a further four were built in 1999-2003 (by the Polish company Rafako), and in 2007 the construction of the next two installations was completed. Since the installation of FGD Plant observed a significant reduction of SO<sub>2</sub> in the coming years:

Table 1. SO<sub>2</sub> reduction, years 2000-2008

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Reduction (%)	33,6	36,8	45,8	51,0	50,8	55,9	62,6	64,0	70,0
Reduction (thousand tones)	128,4	166,8	208,3	210,9	180,0	184,4	234,3	203,3	216,3

Source: Environmental report, Power station in Belchatow 2009

As the energy sector is seen as a source of negative impacts on the environment, the Power Station shall take any action to change that opinion. To this end, the power station was implemented Environmental Management System which is based on meeting the requirements of the PN-EN ISO 14001 The purpose of this system is a comprehensive approach to action to protect the environment, meaning, the desire to reduce the negative impact of power on the

surrounding environment through monitoring and continuous reduction of the contamination.

Power Station has also received PCBC and IQNet certificates in 2003 as a confirmation of the implementation and integration of the Quality Management System, Environmental, Health and Safety in the area:

- Manufacture and sale of electricity and heat
- Repair, telecommunications and supply service
- Improving safety and health of workers

Additional evidence of the fulfillment by the power of all these standards for the protection of the environment is to issue "Licenses Integrated" which arises from the IPPC Directive. The permit is an administrative decision and represents a sort of license to conduct the installation, under the conditions set for all components of the environment as well as meeting the technical studies identified as the best available techniques (BAT). The permit specifies the type and amount of energy used, materials and raw materials and fuels, while also assessing the methods used by the power to prevent the emission of pollutants into the environment.

## **6. Conclusion**

The main purpose of this article was to present how the introduction of environmental policy to the company in the energy sector, which is the Belchatow power plant, may affect its activities in the field of environmental protection. Crew from the Power Station seems aware of this for many years, and has long been taking important, both for power and the environment, measures to minimize its negative impact on the surrounding environment. It can be safely said that the Power Station is an extremely involved in matters of care for the environment is using. Its purpose is to provide to a market a product, which is environmentally friendly and can already boast achievements. It may take great satisfaction from the activities carried out since the effects of these activities are considered and the positive assessment by the environment, institutions and government organizations. Confirmation of this may be the next licenses obtained to operate the License Integrated and let generating electricity and

heat power of not less than 300 MW and permits for a water abstraction from groundwater source through upper cretaceous level.

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# Chapter 9

## IT Role in Supply Chain Collaboration

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### 1. Review on Supply Chain Collaboration

The idea relationships and collaboration with suppliers made an appearance in the literature several decades ago (*Farmer, D., Macmillan, K., 1978*). Since then the idea has re-emerged under a variety of names including: co-makship (*Merli, G., 1991*); reverse marketing (*Leenders, M.R., Blenkhorn, D.L., 1988*); supplier alliances (*Kannan, V.R., Tan K.C., 2004*) and partnership sourcing (*Gould, B., 1997*). Variations have also appeared within the marketing domain under the title of relational or relationship marketing (*Evans, J.R., Laskin, R.L., 1994*) as well as within the strategic management field as strategic alliances. At the same time, the idea of cooperative relationships has been extended from immediate suppliers to encompass the wider supply chain (*Macbeth, D., Baxter, L. and Neil, G., 1989*).

Ramsay (*Ramsay, J., 1996*) argues that the majority of the academic literature emerged from an outright attack on the traditional, adversarial approach to supplier relationships with the assumption that collaboration and partnerships are the sine qua non of successful supplier relationship management.

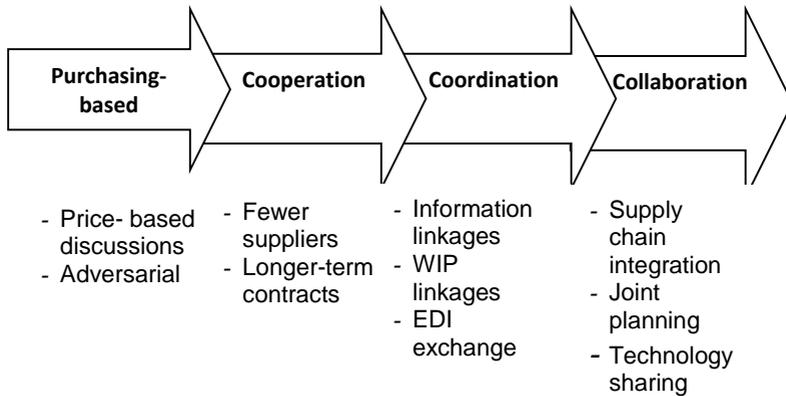


Figure 1. The transition from purchasing negotiations to collaboration  
 Source: Author's elaboration based on: Speckman, R, Kamauff, J and Myhr, N.: An empirical investigation into supply chain management: a perspective on partnerships, *Supply Chain Management*, 3 (2), 1998, pp 53–67

The traditional supply chain relation description is purchasing-based view where SCM was to leverage the supply chain to achieve the lowest initial purchase prices whilst assuring supply, and was characterized by: multiple suppliers; supplier selection based primarily on purchase price; arm's length negotiations; formal short-term contracts; and centralized purchasing.

Speckman, Kamauff and Myhr (*Speckman, R., Kamauff, J. and Myhr, N., 1998*) conceptualize the transition from traditional purchasing-based view to collaboration as a continuum, noting that the cooperation and coordination stages are necessary but not sufficient to reap the benefits of effective collaboration Figure 1.

This popular view is not without its critics, and a balanced approach to collaboration gives a picture of the determinants of successful SCM. The authors also note that the road from open-market negotiations to collaboration is a long one and should not be traveled by every buyer–seller relationship.

The technical committee of the Supply-Chain Council presents different definition of collaboration. It is as follows (*www.supply – chain.org*) :

*A relationship built on trust that is benchmarked by the commitment to the team objective and where consensus may not always be achievable but where nothing takes place without the commitment of all involved.*

The committee defined also three levels of collaboration. Ranging from lower to higher levels, these were:

1. Data exchange collaboration where partners (internal or external) exchange information as required, principally to complete day-to-day transactions. Data exchange can be one way or two way.

2. Cooperative collaboration where partners (internal or external) share systems and tools so that all have access to information simultaneously.

3. Cognitive collaboration is the highest level requiring “joint, concurrent intellectual and cognitive activity between partners.” This level embraces information sharing to reach joint decisions.

Collaboration within supply chain demands a business transformation in which managers attempt to mitigate uncertainty and exploit opportunity through the creative use of both suppliers and customers by evaluating who best supplies value and then leveraging that expertise or capability through the entire supply chain. Speckman, Kamauff and Myhr (*www.supply – chain.org*) note that this requires sharing what once might have been considered proprietary information, relinquishing control to others in the supply chain and trusting that your supply chain partners will act in your best interest. Trust clearly emerges throughout the literature as a key issue determining the success or otherwise of supply chain collaboration efforts.

Many authors have identified that the primary role of trust in inter-organizational relationships is to mitigate risk. Das and Teng (2001) contend that trust and control are two principal antecedents of risk. Ring and Van de Ven (1992) argue that varying levels of risk and reliance on trust will explain the governance structures of transactions. Zsidosin (2003) highlights the lack of grounded definitions of risk within the context of supply.

On the contrary Cox (2001) suggests that dominant power is a crucial element of supply chain partnership elaboration. He wrote that there will be only some power conditions that will be conducive to collaboration

and that they will be in situations of buyer dominance or where power is equally distributed between buyer and seller to create interdependence. He elaborate practitioners map the dominant Power regimes in which they are located in order to formulate an understanding of which strategy – either proactive supplier selection (or traditional arm’s length approaches) or proactive supplier development (more contemporary collaborative approaches) – is most suitable (Figure 2).

However, any attempt to do so will reveal that power is itself a multifaceted concept and therefore subject to various interpretations. Power, most commonly viewed as market leverage, forms another determinant factor to effective supply chain collaboration (Cox, A., 2001).

Considering relationships in supply chain it is important to analyze the exact level of performance and relations between partners in particular supply chain to find where is the supply chain in its development, through tracking the progress and to make plan where the supply chain “want to be”.

The great help in this process can be supply chain maturity modeling. Thank to the models the managers can estimate the development of their supply chain and to make a map of SCM improvement.

<i>High</i>	<b>Buyer dominance</b>	<b>Interdependence</b>
Power buyer attributes relative to supplier	<b>Independence</b>	<b>Supplier dominance</b>
	<i>Low</i>	<i>High</i>
<i>Low</i>	Supplier power attributes relative to buyer	

*Figure 2. The power matrix*

*Source: Cox, A.: Understanding buyer and supplier power: a framework for procurement and supply competence, Journal of Supply Chain Management, 37 (2), Spring, 2001, pp 8–15*

For example, we can use Poirier SCM maturity model, that consists of following four levels (*Poirier, C., 1998*):

1. Sourcing and logistics - characterized by functional excellence and programs like supplier reduction, inventory reduction, cost reduction.

2. Internal excellence - use of activity-based costing and process management.

3. Network construction - development of differentiated processes across the enterprise and cooperative planning with partners.

4. Industry leader - wide use of technology tools, demand-supply linkages and a global perspective.

For these four levels, Poirier's model has nine factors that help its user define a particular level. These include executive sponsorship, benefits, types of projects, tools used, financial targets and alliances. Poirier's model is a good representation of how a company might develop excellence within its departments and then move outward, using its "network," or supply chain, to achieve industry leadership. At Level 4, the model argues for wide use of information technology to tie the supply chain together.

The second model is similar to Poirier's one. The consulting firms PRTM and the Performance Measurement Group (PMG), both of which are active in the Supply-Chain Council, have also developed another four-stage model (*Montcrief, B., Stonich, M., 2001*). Its stages are the following:

1. Functional focus - department level activity with functional measurement.

2. Discrete supply chain processes are well understood and documented.

3. Internal integration - resource management at functional and enterprise levels. There is a companwide process and data model.

4. External integration - partners along the supply chain collaborate on objectives and action plans. Common processes and data sharing occur along the chain. Management reacts to performance metrics.

5. Cross-enterprise collaboration - enabled by IT and e-Business solutions. Real-time planning, decision-making and

execution to customer requirements mark this level. Multicompany business process alignment including objectives has been achieved.

I would like also to presents Cavinato model of supply chain maturity. He maintains that there is no one-size-fits-all supply chain design (*Cavinato, J.,2002*).

In fact, because of current fashion, many refer to their operations as a supply chain. Yet these companies have no supply chain at all. In reality, they are a loose-knit group of departments, perhaps like Level 1 in the models described above. Cavinato notes that there are many types of supply chain and that the supply chain must be aligned with company goals for competing. Also, under scrutiny, most companies have multiple, not just one, supply chain.

This supports the idea that all companies need not pursue the same destination. Based on strategy, a company may choose any number of levels of integration internally or with its partners. Cavinato identified 16 supply chain types - a spectrum of possible models. Models presented in Table 1 contains summary descriptions of each supply chain type. The table has a column describing the complexity of operating a supply chain of a particular type.

Table 1. Supply chain types regarding to relationships

	<b>Type of Chain/Network</b>	<b>Description/Characteristics</b>	<b>Relative Complexity</b>
1.	No chain	Functions act freely, no strategic advantage from supply chain	Low
2.	Don't know	Mostly outsourced supply chain operations. No strategic advantage. "Blank check to outsiders," like 3rd party logistics providers.	Low
3.	Chains that tie down the firm	Internally focused. Lagging competitors, catch-up mode. Logistics-centered with measures focused on warehousing and transportation cost.	High
4.	Nano-chain	Internally focused. Focused on manufacturing efficiencies in plants requiring high utilization. Inbound and	Low

		outbound processes are secondary. Examples include autos and aircraft manufacturing.	
5.	Micro-chain	Logistics model with integrated physical and information flows. Balances inbound, production and outbound distribution.	Low
6.	Project logistics chain	Efficient at project supply and execution. Integrates multiple suppliers to the project. Like the nano-chain except it's a project environment.	Medium
7.	Cash-to-cash cycle chain	Focused on cash flow, perhaps to detriment of suppliers. The starting point is a cash flow goal, with operations structured accordingly.	High
8.	Synergistic chain	Eliminates duplication. No competitive advantage. Seeks to leverage buying power. Common in large companies with multiple independent divisions. Focus on common commodity purchases.	High
9.	Demand chain	High collaboration often dictated by dominant customers like Wal-Mart. Interdisciplinary with sales and operations. Tailored arrangements by customer. Flexible company. Uses technology.	Medium
10.	Extended supply chain	Has a supply chain mindset. Managers developed in the supply chain role. Good processes for new products and production of existing ones.	Medium
11.	Market dominance and blocking	Enjoys a monopoly with control over market and pricing. Often illegal in developed countries.	Low
12.	Supply integration	Highly interdisciplinary, evolving from process-oriented cost reduction efforts. Complete supply chain view, platform for competitive initiatives.	Medium
13.	Speed-to-market	Emphasizes new product development. Flexible. Uses time as a metric. Seeks	Medium

		to tap unused capacity in the supply chain to speed roll-outs.	
14.	Innovation	Network of manufacturing and logistics suppliers for flexibility. Focuses on product creation, launch and growth phases of product life cycle. Examples are high technology electronics and seasonal toys.	Medium
15.	Value chain	Chain-to-chain competition, seeking innovation throughout the chain. Shared outcome arrangements are common. Procurement coordinates. Partners invest to develop capabilities needed for their part of the chain.	High
16.	Information networks	Flexible networks with few physical assets processing a flow of innovations. Supply chain managers are network creators and leaders. Data is accessed and converted into information, knowledge, and intelligence.	High

*Source: Cavinato J.: What's your supply chain type? Supply Chain Management Review, May/June 2002, pp.60-66*

These 16 models capture the realities that go with different industries and the relationships that exist in those industries. Auto manufacturing is a much different environment from that in a high-technology industry or in food distribution (*Dima I.C. 2013*). These environments place constraints on how far one should or can go in implementing technology or other supply chain solutions. A solution that we use later is to reframe the maturity model in terms of the five competencies that compose our SCM knowledge areas, not what kinds of technologies a company employs. Another reality in Cavinato's model is that, while supply chains can be a source of operating efficiencies and competitive advantage, they can also hold a company back. That is, they can be "dysfunctional" when it comes to reaching goals for growth and profits.

## **2. Informatics Technologies in Supply Chains Performance**

Data, information and knowledge are critical assets to the performance of logistics and supply chain management (SCM), because they provide the basis upon which management can plan logistics operations, organize logistics and supply chain (SC) processes, coordinate and communicate with business partners, conduct functional logistics activities, and perform managerial control of physical flow of goods, information exchange and sharing among SC partners.

Information technology (IT) is an important enabler of effective supply chain management (*Bowersox, D., Closs, D.J., Cooper, M.B., 2006*). Supply chain management the entire enterprise and beyond. Encompassing suppliers on the one end to customers on the other. Therefore, consideration on IT for supply chains should include both systems, that are internal to an individual company and external systems, which facilitate information transfer between various companies and individuals.

*Efficiency and effectiveness functions orientation of IT systems in supply chains*

From an information management perspective, IT systems is conventionally utilized in the applications of efficiency-oriented SCM to increase productivity and reduce operational costs. Specifically, IT systems is used to (*Waters, D., (ed.), 2007, Grabara J., Kolcun M., Kot S. 2014*):

- capture and collect data on each product and service at a specific logistics activity, such as purchasing, to provide accurate, reliable and real-time raw facts.
- store collected data in a specific IT systems in predetermined categories and formats, such as a customer database management system.
- analyze stored data to generate meaningful information for management decision making in response to SCM events, and to evaluate SCM performance for cost reduction and productivity enhancement.
- collaborate and communicate with SC partners, to reduce information time lag and misunderstanding, and make the data resources available and visible to all SC partners.

- standardize logistics operations and data retrieval procedure, and develop generalized and rigorous information management policies, regulations and control measures.

- apply transaction cost theory to SCM to gain economies of scale and implement low-cost strategies.

Nowadays, IT systems is widely applied in the areas of effectiveness-oriented SCM to enhance SC competitive advantages, value-added SCM and globalized operations. In particular, IT systems is deployed to:

- enhance core competence and positioning of a focal SC organization through designing and controlling the information sharing and flows.

- re-engineer SC operations and eliminate duplicated facilities or activities – such as vendor-managed inventory (VMI) instead of physical warehouses.

- manage marketing, customer, product and service knowledge or expertise developed (accumulated) in SCM, and share this with suppliers and partners - such as collaborative planning, forecasting and replenishment (CPFR).

- manage partner and customer relationships through resource-based and relational views, to stabilize SC structure and enhance relations with adjacent upstream and downstream partners.

- deploy SC resources and capabilities to compete with other SCs at worldwide level, and through international sourcing and offshore manufacturing.

There are two main driving forces for organizations to invest in IT systems, develop technological advantages in SCM and push the development of IT systems applications in SCM. These are business environmental change and technological advancement. Business environmental change demands a growing capacity for data and information management in SCM; thus it continuously pulls organizational IT systems investment. Technological evolution supplies the tools and systems to facilitate and satisfy the demands of data and information processing and transmission, and delivers innovative technology, such as wireless technology and radio frequency identification (RFID).

## **Data Capture and Data Communications**

The first functional area is composed of systems and technology that create high speed data capture and communications networks. It is this technology that can overcome the lag times and lack of big picture information that gives rise to the bullwhip effect. They are as follows:

- The Internet
- Broadband
- EDI
- XML.

**The Internet** is the global data communications network that uses what is known as Internet Protocol (IP) standards to move data from one point to another. The Internet is the universal communications network that can connect with all computers and communication devices. Once a device is hooked into the Internet it can communicate with any other device that is also connected to the Internet regardless of the different internal data formats that they may use.

Before the Internet, companies had to put in expensive dedicated networks to connect themselves to other companies and move data between their different computer systems. Now, with the Internet already in place, different companies have a way to quickly and inexpensively connect their computer systems. If needed, extra data protection and privacy can be provided by using technology to create virtual private networks (VPNs) that utilize the Internet to create very secure communication networks.

**Broadband.** Basically, this means any communications technology that offers high speed (faster than a 56Kb dial-up modem) access to the Internet with a connection that is always on. This includes technologies such as coaxial cable, digital subscriber line (DSL), metro Ethernet, fixed wireless, and satellite. Broadband technology is spreading and as it does, it becomes possible for companies in a supply chain to easily and inexpensively hook up with each other and exchange large volumes of data in real-time.

Most companies have connected themselves internally using local area network (LAN) technology such as Ethernet that gives them plenty of internal communications capability. Many companies have

connected some or all of their different geographical locations using wide area network (VAN) technology such as T1, T3, or frame relay. What now needs to happen is high speed, relatively low cost connections between separate companies and that is the role that broadband will play.

**Electronic Data Interchange (EDI)** is a technology that was developed to transmit common types of data between companies that do business with each other. It was first deployed in the 1980s by large companies in the manufacturing, automobile, and transportation industries. It was built to automate back office transactions such as the sending and receiving of purchase orders (known as an "850" transaction), invoices (an "810"), advance shipment notices (an "856"), and backorder status (an "855") to name just a few. It originally was built to run on big, mainframe computers using value added networks (VANs) to connect with other trading partners. That technology was expensive.

Many companies have large existing investments in EDI systems and find that it is very cost effective to continue to use these systems to communicate with other businesses. Standard EDI data sets have been defined for a large number of business transactions. Companies can decide which data sets they will use and which parts of each data set they will use. EDI systems can now run on any type of computer from mainframe to PC and it can use the Internet for data communications as well as VANs. Costs for EDI technology have come down considerably.

So now, EDI is the most widely deployed extranet system for inter-firm information exchange. La Londe and Cooper (1989) have addressed EDI as one of the most important changes to affect SCM, and 'it is the glue that binds long-term relationship, and plays an important coordinating role in managing the interfaces between firms as business processes go beyond the boundaries of the firm' (*Mentzer, J.T., 2001*). The main benefits from using EDI are: upstream SC partners can access timely and accurate information from markets and customers, and incorporate this into planning and scheduling; downstream SC partners can provide better customer services, responding to market changes and customer demands; all SC partners can reduce paperwork and enjoy quality communication. Other

derived benefits from deployment of EDI are increased productivity, cost saving, accurate billing and improved tracing and expenditure.

*XML* (extensible Markup Language) is a technology that is being developed to transmit data in flexible formats between computers and between computers and humans. Where EDI uses rigid, pre-defined data sets to send data back and forth, XML is extensible and once certain standards have been agreed upon, XML can also be used to communicate a wide range of different kinds of data and related processing instructions between different computer systems. XML can also be used to communicate between computers and humans because it can drive user interfaces such as web browsers and respond to human input. Unlike EDI, the exact data transactions and processing sequences do not have to be previously defined when using XML.

There are many evolving XML standards in different industries but as yet none of these standards has been widely adopted. The industry that has made the most progress in adopting XML standards is the electronics industry. They are beginning to implement the RosettaNet XML standards.

In the near term, XML and EDI are merging into hybrid systems that are evolving to meet the needs of companies in different supply chains. It is not cost effective for companies with existing EDI systems that are working well enough to replace them with newer XML systems all at once. So XML extensions are being grafted onto EDI systems. Software is available to quickly translate EDI data to XML and then back to EDI. Service providers are now offering Internet-based EDI to smaller suppliers who do business with large EDI-using customers.

In the longer term, EDI will be wholly consumed by XML as XML standards are agreed upon and start to spread. As these standards spread they will enable very flexible communications between companies in a supply chain. XML will allow communications that are more spontaneous and free form, like any human language. This kind of communication will drive a network of computers and people interacting with other computers and other people. The purpose of this network will be to coordinate supply operations on a daily basis.

## **Data Storage and Retrieval**

The second functional area of an information system is composed of technology that stores and retrieves data. This activity is performed by database technology. A database is an organized grouping of data that is stored in an electronic format (*Grondys,2010*),. The most common type of database uses what is called "relational database" technology. Relational databases store related groups of data in individual tables and provide for retrieval of data with the use of a standard language called structured query language (SQL).

A database is a model of the business processes for which it collects and stores data. The model is defined by the level of detail in the data it collects. The design of every database has to strike a balance between highly aggregate data at one extreme and highly detailed data at the other extreme. This balance is arrived at by weighing the needs and budget of a business against the increasing cost associated with more and more detailed data. The balance is reflected in what is called the data model of the database.

As events occur in a business process, there are database transactions. The data model of the database determines which transactions can be recorded since the database cannot record transactions that are either more detailed or more aggregated than provided for in the data model. These transactions can be recorded as soon as they happen and that is called "real-time" updating or they may be captured and recorded in batches that happen on a periodic basis and that is called "batch" updating.

A database also provides for the different data retrieval needs of the people who use it. People doing different jobs will want different combinations of data from the same database. These different combinations are called "views" Views can be created and made available to people who need them to do their jobs. For instance, consider a database that contains sales history for a range of different products to a range of different customers. A customer view of this data might show a customer the different products and quantities they purchased over a period of time and show detail of the purchases at each customer location. A manufacturer view might show all the customers who bought their group of products over a period of time and show detail for the products that each customer bought.

### *Data Processing and Reporting*

Different supply chain systems are created by combining processing logic to process and display data with the technology required to capture, communicate, store, and retrieve data. The way that a system processes and displays the data that flows through it is determined by the specific business operations that the system is designed to support. Information systems contain the processing logic needed by the business operations they support. Chopra and Meindl (2001) define several kinds of systems that support supply chain operations:

- Enterprise Resource Planning (ERP)
- Procurement Systems
- Advanced Planning and Scheduling
- Transportation Planning Systems
- Demand Planning
- Customer Relation Management (CRM) and Sales Force Automation (SFA)
- Supply Chain Management (SCM)
- Inventory Management Systems
- Manufacturing Execution Systems (MES)
- Transportation Scheduling Systems
- Warehouse Management Systems (WMS).

### *Enterprise Resource Planning*

Enterprise Resource Planning (ERP) systems gather data from across multiple functions in a company. ERP systems monitor orders, production schedules, raw material purchases, and finished goods inventory.

They support a process-oriented view of business that cuts across different functional departments. For instance, an ERP system can view the entire order fulfillment process and track an order from the procurement of material to fill the order to delivery of the finished product to the customer.

ERP systems come in modules that can be installed on their own or in combination with other modules. There are usually modules for finance, procurement, manufacturing, order fulfillment, human resources, and logistics. The focus of these modules is primarily on

carrying out and monitoring daily transactions. ERP systems often lack the analytical capabilities needed to optimize the efficiency of these transactions.

#### *Procurement Systems*

Procurement systems focus on the procurement activities that take place between a company and its suppliers. The purpose of these systems is to streamline the procurement process and make it more efficient. Such systems typically replace supplier catalogs with a product database that contains all the needed information about products the company buys. They also keep track of part numbers, prices, purchasing histories, and supplier performance.

Procurement systems allow people to compare the price and performance capabilities of different suppliers. This way the best suppliers are identified so that relationships can be established with these suppliers and prices negotiated. The routine transactions that occur in the purchasing process can then be largely automated.

#### *Advanced Planning and Scheduling*

Advanced Planning and Scheduling, also known as APS systems, are highly analytical applications whose purpose is to assess plant capacity, material availability, and customer demand. These systems then produce schedules for what to make in which plant and at what time. APS systems base their calculations on the input of transaction level data that is extracted from ERP or legacy transaction processing systems. They then use linear programming techniques and other sophisticated algorithms to create their recommended schedules (*Dima I.C., Grabara J., Kot S., 2012; Kot S., Ślusarczyk B., 2009*). .

#### *Transportation Planning Systems*

Transportation Planning Systems are systems that calculate what quantity of materials should be brought to what locations at what times. The systems enable people to compare different modes of transportation, different routes, and different carriers. Transportation plans are then created using these systems. The software for these systems is sold by system vendors. Other providers known as content vendors provide the data that is needed by these systems, such as mileage, fuel costs, and shipping tariffs.

#### *Demand Planning*

These systems use special techniques and algorithms to help a company forecast their demand. These systems take historical sales

data and information about planned promotions and other events that can affect customer demand, such as seasonality and market trends. They use this data to create models that help predict future sales.

Another feature that is often associated with demand planning systems is revenue management. This feature lets a company experiment with different price mixes for its different products in light of the predicted demand. The idea is to find a mix of products and prices that maximizes total revenue to the company. Companies in the travel industry such as airlines, rental car agencies, and hotels are already using revenue management techniques. These techniques will spread to other industries.

#### *Customer Relation Management and Sales Force Automation*

Systems of this type automate many of the tasks related to servicing existing customers and finding new customers. Customer Relation Management (CRM) systems track buying patterns and histories of customers. They consolidate a company's customer-related data in a place where it is quickly accessible to customer service and sales people who use the data to better respond to customer requests.

Sales Force Automation (SFA) systems allow a company to better coordinate and monitor the activities of its sales force. These systems automate many of the tasks related to scheduling sales calls and follow-up visits and preparing quotes and proposals for customers and prospects.

#### *Supply Chain Management*

Supply Chain Management (SCM) systems are suites of different supply chain applications, such as those described here that are tightly integrated with each other. An SCM system could be an integrated suite that contains advanced planning and scheduling, transportation planning, demand planning, and inventory planning applications. SCM systems rely on ERP or relevant legacy systems to provide them with the data to support the analysis and planning that they do. These systems have the analytical capabilities to support strategic level decision making.

#### *Inventory Management Systems*

These systems support the activities that are part of inventory management such as tracking historical demand patterns for products, monitoring inventory levels for different products, and calculating

economic order quantities and the levels of safety inventory that should be held for each product. These systems are used to find the right balance for a company between the cost of carrying inventory and the cost of running out of inventory and losing sales revenue because of that.

#### *Manufacturing Execution Systems*

The focus is on carrying out the production activities in a factory. This kind of system is less analytical than an APS. It produces short-term production schedules and allocates raw materials and production resources within a single manufacturing plant. A Manufacturing Execution System (MES) is similar in its operational focus to an ERP system and frequently MES software is produced by ERP software vendors.

#### *Transportation Scheduling Systems*

Systems in this category are similar to ERP and MES applications in that they are less analytical and more focused on daily operational issues. A transportation scheduling system produces short-term transportation and delivery schedules that are used by a company.

#### *Warehouse Management Systems*

These systems support daily warehouse operations. They provide capabilities to efficiently run the ongoing operations of a warehouse. These systems keep track of inventory levels and stocking locations within a warehouse and they support the actions needed to pick, pack, and ship product to fill customer orders.

In some literature, the IT systems supporting logistics performance in supply chains are called Logistics Information System and they are distinguished as follows:

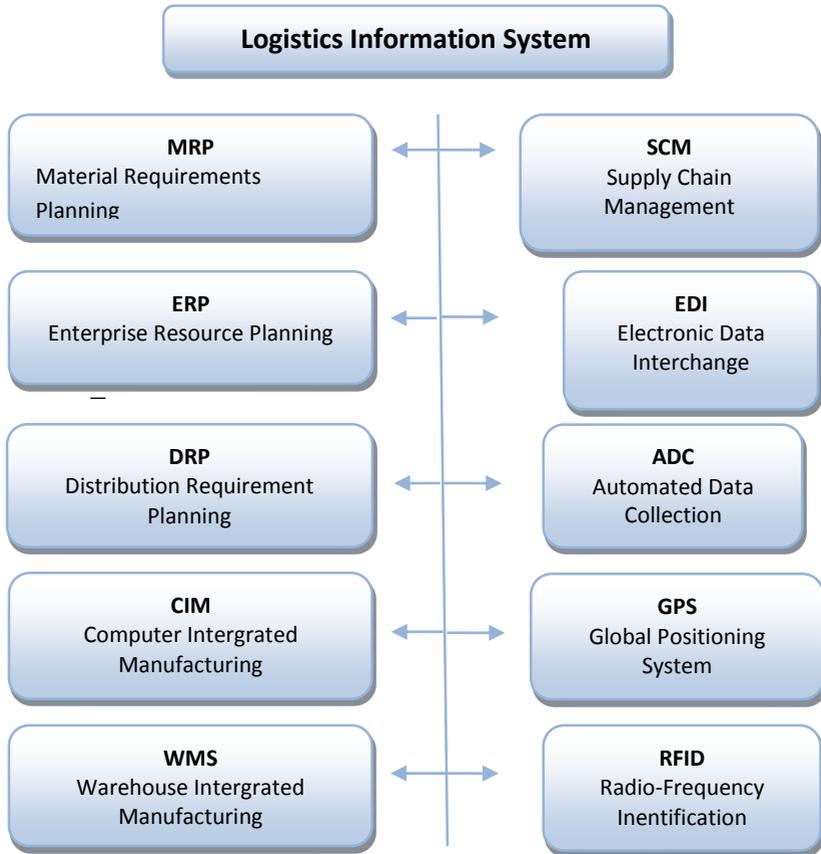


Figure 3. Logistics Information System

Source: Authors elaborations based on Wiczerzycki W., *Technologie informacyjne w logistyce*, Akademia Ekonomiczna in Poznań, Poznań 2003.

When evaluating different systems that can be used to support your supply chain it is important to keep in mind your goal- the reason for using any of these systems. Customers desire good service and good prices. That is what guides them when they select companies to do business with. Technology is a means for a company to be of service to its customers. Companies that keep this in mind do well.

In business, technology is only important insofar as it enables a company or an entire supply chain to deliver valuable products and services to its customers profitably. Do not let the complexity or the details of any technology or system be a distraction from this basic truth. Technology can be impressive but it is not an end in itself.

Success in supply chain management comes from delivering the highest levels of service at the lowest cost. Technology is expensive and can quickly add a lot of cost to a business. It is a far better thing to use simple technology well than to use sophisticated technology in a clumsy manner.

### **3. Strategic Support for IT Systems in Supply Chains**

Following Waters (2007) consideration I can point on the strategic framework of IT systems adoption in supply chain.

Figure 4. shows that there are four strategies for focal organizations to adopt:

1. *First move strategy*. This is an aggressive and self-motivated strategy driven by intrinsic organizational demand for advancement, privilege and advantages over SC partners. A firm using this strategy clearly recognizes the benefits of IT systems, and initiates changes for the firm and SC as a whole. Through adopting IT systems, the firm can further consolidate its SC position and enhance its influence. However, this strategy is expensive, and needs high technology competence and resources; it also presents a higher risk and lower measurable return of investment than other strategies. Further, deployment of this strategy may require the firm to exercise its power to force any unwilling SC partners to accept and use IT systems accordingly.

2. *Second move strategy*. This is a conservative strategy, and is driven by the focal organization's management style and policies – and stakeholders' interests – rather than potential opportunities from the IT systems adoption. A firm deploying this strategy has organizational resources, technology capability, SC position and influence – but it may regard IT systems adoption as an investment, with evaluation focusing on the return on investment and risk management. The firm may strive to be a competent technology user, but not a pioneer of IT systems or SCM systems, because its core values and assets may not be derived from technological innovation. When facing innovative IT systems change, the firm may have

knowledge barriers, and will hold back and take a ‘wait and see’ attitude.

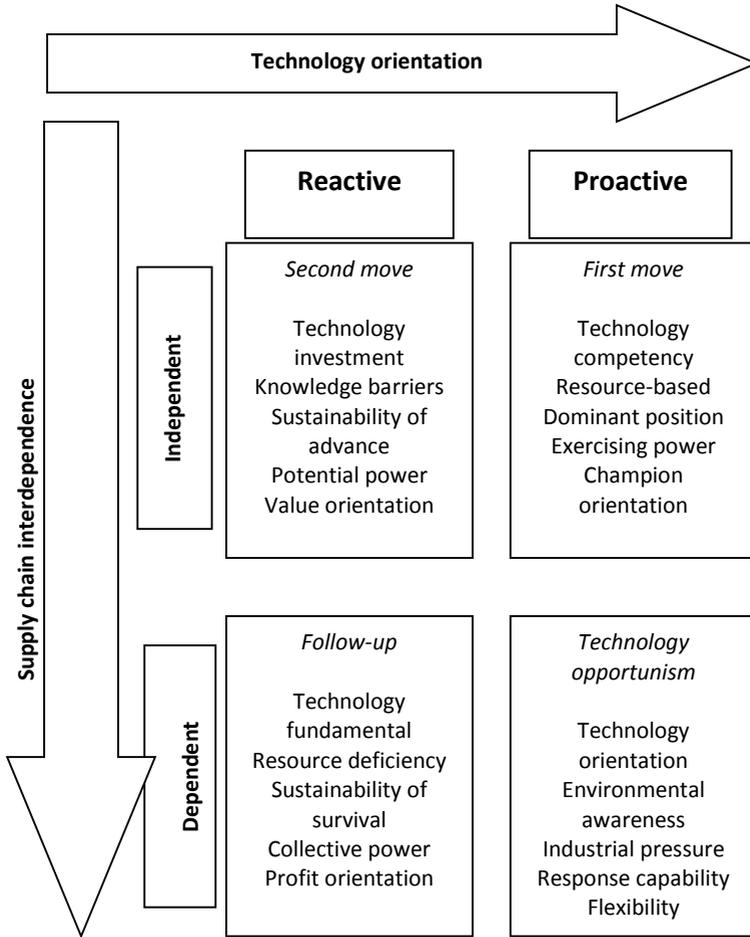


Figure 4. Strategic framework of IT systems adoption in SCM  
 Source: Author elaboration based on: Waters D. (ed.): Global Logistics. New Direction in Supply Chain Management. Kogan Page Limited. Philadelphia 2007

The advantages of this strategy lie in its value orientation – and its rationale is in transaction cost theory. A firm does not invest

resources in uncertain projects without obviously added value. Only when the investment environment is favorable, the IT system is approaching maturity and the value-add from investment in IT systems is achievable and accountable will the firm take a positive view towards IT systems adoption. So it mainly uses IT systems to enhance operational efficiency and cost-effectiveness – but cannot fully utilize the strategic benefits of IT systems. The disadvantage of the strategy is obvious, as delayed adoption of IT systems cannot give technology leadership and it cannot establish competitiveness based on an SCM system.

*3. Follow-up strategy.* This is a passive strategy for those SC partners that do not have an initiative for active IT systems adoption. It is adopted by organizations that have limited resources, small-scale operations and little influence on their SC partners. For firms taking this strategy, the theoretical foundations are transaction cost theory and resource dependence theory – and their business transactions are largely dependent upon the dominant organization in the SC network. These firms generally adopt some nearly outdated IT systems to support their business operations, to connect with the dominant firm and to process essential business information – with EDI adoption in small businesses being a typical example.

These firms may regard investment in new IT systems as a waste, or at least a luxury, and they hardly achieve technology competency, using technology to satisfy leading business partners' requirements and business procedure.

*4. Technology opportunism strategy.* This is defined as a sense-and-respond capability for proactive IT systems adoption, responding to new opportunities in ways that do not violate the principle of fairness. There are two components of technology opportunism: technology sensing and technology response. Sensing is a firm's ability to scan internal and external innovations, acquire knowledge about and understand new technology and then provide innovative products and services derived from, utilizing or deploying the technology. Response is an organizational willingness and ability to respond to new technologies, re-engineer business strategy and explore opportunities.

A firm using a technology opportunism strategy strongly believes that new IT systems can create a substantial opportunity, so

it proactively scans technological opportunities and seeks to capitalize on them. The firm is not restricted to traditional principles and experience, but understands, analyses and utilizes new IT systems technology for developing innovative products and services. It is a strategy for ambitious and strongly self-motivated firms. The firm may be small or dependent on the dominant firm in the SC context, but it wants to be powerful by using IT systems. It may actively cooperate with the dominant SC firm to adopt IT systems and create unique value for the firm itself and its SC partners.

Effective SCM requires SC partners collaboratively to develop a plan for coordinating the flows of goods and services, with timely information to ensure these are delivered at the right time, to the right place and at the right price. IT systems play an important role in achieving SCM objectives. To utilize IT systems potential fully, organizations need an effective strategy that fits the organizational resources and relationships with SC partners – and they need to work together with SC partners to share the risk and costs of IT systems development and to enjoy the benefits derived from SCM systems.

However, it should be noted that IT systems alone is no panacea for all SC problems. Further, the most often quoted problems of online purchasing, ordering, distribution or warehouse or transport management, they are not related to technology but to logistical and SC problems.

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## Chapter 10

### Production cost in conditions of the global economy - a form of nonverbal communication

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#### 1. Firms competitive in the global economy

Supply and demand in market economy is based on the initiative by private property, and the active form of this initiative is competition by itself as the essential feature of market economy, an *economy with a competitive mechanism*. Being the expression of the specific behavior of firms on the terms of free initiative, competition represents the dynamic relation between the participants to the bills of sale.

*Competition represents the confrontation, the economic rivalry between industrialists, bankers, traders, the doers of services in order to win the favor of the consumer custom through more reasonable prices, through a better quality of goods in order to obtain higher and more reliable profits.* But competition is an open and trusty confrontation in which firms, as sellers, learn, through a continuous process of *probing and errors*, to improve their situation. The freedom of choice, which is realized under the form of each one's tendency of receiving for them a monetary income, is the basis of competition. That is why for theorists it is the existence of a large number of purchasers and sellers, each of them acting independently as possessors of different products and resources. At the same time, through this process their freedom of participating or of refraining from exchanges appears.

Often, competition is considered *the way of satisfying all participants' interests in the economic life*, making possible the fact that in society should be produced only what and how much is necessary, demanded and desired by consumers at the lowest possible costs, competition thus ensuring the profits discounted by the firm and the satisfaction of consumers' needs.

The mechanism of competition expresses the numerous relations between the subjective actions of firms and the objective background of their development. Through this mechanism, the participants' subjective deeds to the social life are transformed in necessary actions, in accordance with the requirements and the reason of market economy. Under the pressure of competition, the economic producers are forced to reduce costs. In order to achieve this objective they introduce new technologies, improve the organization and the running of the company as well as the quality of products etc.

Competition and its mechanisms differ from one stage to another, from one country to another according to multiple factors and varied conditions namely: the sellers' number and size on one hand, and those of the buyers on the other hand in a national economy, in line of business, in area or in locality; the differentiating degree of the product; the facilities and the compulsions of large producers of entering one line or another; the transparency degree of the market; the flexibility or the rigidity of prices ;the level of economic development ;the internal and international political context ;the economic knowledge of the population ,of different economic factors etc.

At the beginning of the 20<sup>th</sup> century, there were two opposite competitive states, which were fighting for primordality: *the perfect competition market* and *the monopoly market*.

In the countries with a solid market economy the following types of competitive markets were imposed: *perfect competition market (pure)*; *pure competition market*; *imperfect competition market*; *monopoly market*, *monopsony* respectively.

*Perfect or pure competition implies such market ratios that all sellers (producers) are able to sell all their production, all goods supplied at the market price. They do not firmly establish it, and the purchasers (consumers) can buy all they need and how much they want at the same market price without influencing it at will.*

Some specialists believe that pure competition market is the one that ensures the best functioning of market economy. It is the sovereignty corollary of the consumer and of the ideal balance. In fact, such a competitive market represents especially a theoretical model of analysis.

The opposite of this market is *the monopoly market*. This one is characterized by the fact that a single producer (seller), respectively a single consumer (purchaser), imposes his conditions in relation to the partners met on the market.

*Monopoly* is that market situation where a single offeror producer imposes his interests on a certain market. On the contrary *monopsony* is that market situation when a single consumer requires certain goods making the numerous producers of the latter to accept and to bear the conditions he imposes.

A special form of competitive market is the *bilateral monopoly*, which expresses the market situation when a single producer meets (negotiates and confronts) a single consumer. Such a market is often found on the market labor, when a certain trade union or trade union federation negotiates and confronts a single patron, respectively a single head union.

A variant of competitive market is the *pure competition*, whose characteristic consists in the fact that the market preserves all the particularities of the perfect competition market except the one regarding the homogeneity of the product, which is replaced with the product's differentiation. In such a situation, the purchasers have the opportunity to choose the desired product from a certain category, and the sellers can impose the price and even the quantity using the policy of the new range of products.

*The imperfect competition market* represents that market situation when firms, acting as sellers or purchasers, can influence through unilateral actions the ratio between demand and supply of goods as well as the level and the dynamics of prices.

In the case of imperfect competition market one or more of the pure competition premises are broken and replaced with other states and relations such as: either there are a few relatively powerful sellers and lots of small dispersed purchasers (*oligopoly*); either a few purchasers and many sellers (*oligopsony*); products are differentiated really or just imaginary, even through forgeries; there are conditions so that the different economic agents may wield an effective control on prices; the appearance of new difficulties regarding the entry of the new producers in lines and sectors; visible rivalries in public relations regarding products' quality, consumer's multiple frustrations.

The ways through which the imperfect competition takes place are the following: *specific selling policies, promoted by firms with the help of the state; the differentiation of products and the amplification of the false differences as a result of advertising; the push money, using persuasive selling brands and slogans* etc.

Effective, loyal and legal competition has as its general effect the development of scientific research, of techniques and technologies, the increase productivity, the cost cutting, the products' diversification. At the same time, competition also generates dishonest confrontations between partners, the sacrifice of some consumers' interests, the simulation of some irrational consumption of resources etc.

*Effective competition results from the interpenetration of all forms of competitive mentioned above.* In the countries with market economy there is neither *pure competition* nor *absolute monopoly*, but *a combination of imperfect competition and controlled monopoly.*

## **2. Elasticity of demand and supply in the global economy**

Demand analysis represents the continuation of the p[roblems regarding human needs, their characteristics and the economic interests. At the same time, demand theory constitutes the basis of income allocation limited by rational consumers.

In order to characterize demand it is necessary to clarify firstly two concepts namely: *consumer's purchasing capacity* which consists firstly in the available monetary resources, only these generating the solvent demand; *the purchasing will* which represents the subjective aspect of the decision of affective distribution of some financial reserves for purchasing goods, which depends on the structure and the intensity of needs, on the anticipations regarding incomes and prices evolution etc.

*The demand expresses the relation between the quantity from merchandise, qualitatively homogenous, desired by the purchaser (consumer) who is disposed to acquire it in certain period of time at the existing price.*

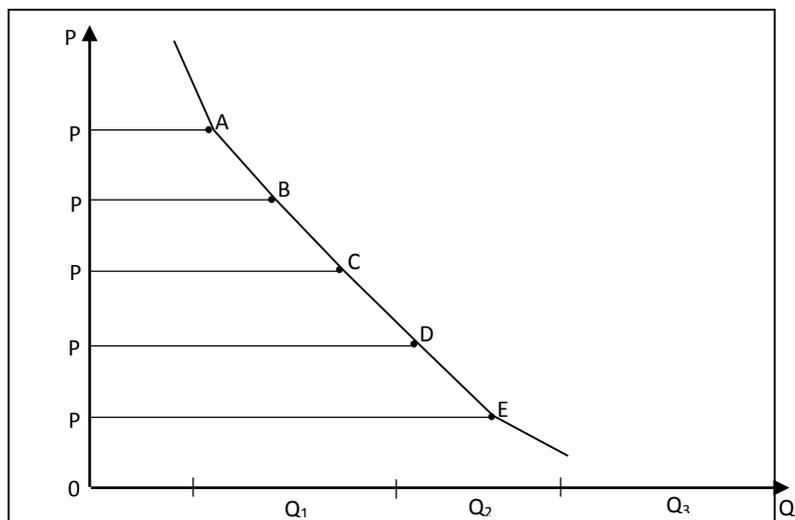
The demand can be: *individual demand* that results from the consumer/purchaser's option and from this one's reactions towards the variations of income that can be allocated for the acquirement of a good as well as towards the price variations of those of that good; *market demand* which is the sum of the requested quantities of a

certain good, at each price level, with the condition that those who request the good to take their decisions independently from each other.

The size of the demand depends mainly on the *price level* proposed for the desired good and on the *income quantum* of the purchaser's, respectively of the part of income which can be allocated for the acquisition of that certain good.

The general dynamics of demand *is a decreasing one* and it is represented on a left-right slope, which signifies the fact that, when price decreases, demands increases quantitatively. This effect of price decrease towards the dynamics of demand is explained trough the law of decreasing marginal utility, the consumer desiring maximum satisfaction trough the increase of the consumed quantities. Such a relation leads to *the convex shape of the curve towards the origins of the axis*, which is represented in figure no. 1.

Figure no. 1. The demand curve



The relations between the requested quantities of a certain good (the dependent variable) and the evolution of mean price (independent variable) can be emphasized in figure no. 2.

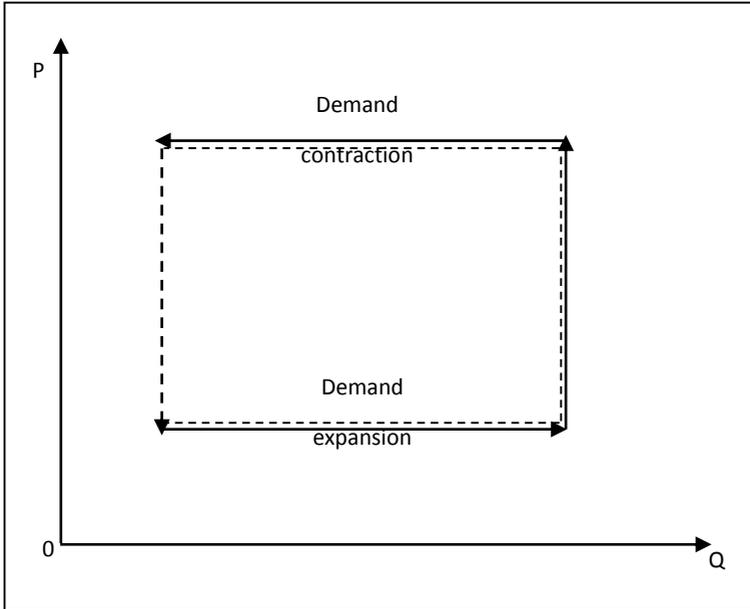


Figure no. 2 Demand-price correlation

Of course that these relations between the dynamics of the price and of the requested quantities are not identical in all cases, for all goods. Usually, the nature of goods and of human needs makes these relations very specific.

*The general law of demand expresses the essential ratios that appear on a free market between the modification of the price of the supplied good and the change of the size of the requested quantity from that good. This means that in the case of goods with a normal statute in people's consumption, when the price increases the demand contracts and, vice versa, when the price decreases, the demand increases.*

Besides the factor of price, other factors act upon the dynamics of the requested quantity namely:

➤ *the modification of consumers' financial incomes* focuses on the fact that in the case of normal goods, between the evolution of family's incomes and the demand for these goods there is a direct and positive relation. Once with the incomes increase, the demand for such goods also increases and vice versa. If inferior goods are taken into account, then there is a negative relation between incomes' dynamics and demand;

➤ *the modification of the price of other goods* takes place when two substitutable goods. There is a positive relation between the modification of the price of good A that is replaced and the demand for good B that substitutes. In the case of complementary goods there is a negative relation between the increase of the price of a certain good and the quantity requested from the other one;

➤ *the number of purchasers* influence the relation between the number of purchasers-petitioners and the total quantity requested for a certain good when there is a positive relation;

➤ *the purchaser's preferences* refer to the fact that the intensification of purchasers' preferences for a good leads to the increase of the market demand and vice versa;

➤ *the anticipations regarding the evolution of price and of income* focus on the fact that, if the price increase of a good is estimated, then the demand for that good will increase. Every time, when general or partial increases of price are expected, consumers make stocks of provisions, buying more than they currently need. On the other hand when the decrease of the price is expected, if the increase of the income is estimated in the near future the current demand for normal goods will decrease and vice versa.

Thus, every factor has a greater or less influence, some factors influence in the sense of the increase of the required quantity, others in the sense of its decrease and the *total modification of demand* is obtained through the algebraic *summing up of partial influences*.

The demand degree of sensitivity to the change of the factors that influence it is called *demand elasticity*, which is measured with the help of the *elasticity coefficient in a point*.

The normal types of elasticity of the demanded quantity are:

➤ *unitary elasticity*, when the modifications of the two dependent variables take place in the same proportion, demand elasticity curve has a 90 degree inclination;

➤ *the inelastic elasticity*, rigid (sub-unitary) when, in the case of price cutting with a unit (in a certain degree) the demanded quantity from that good will increase with less than a unity in a smaller proportion and its curve has a inclination lower than 90 degree;

➤ *elastic elasticity* (supra-unitary) when the demanded quantity of a good increases in a higher degree than price decrease and the curve inclination is higher than 90 degree;

➤ *null elasticity* (zero) when, although the price decreases, the demanded quantity of that good remains the same, namely a straight line parallel to the price axis;

➤ *perfectly elastic elasticity*, if, in the conditions of maintaining the price level, the demanded quantity of the respective good registers increases, being a straight line parallel to the quantity axis;

➤ *unitary elasticity* (-1) is represented as a equilateral hyperbola, graph in which on the x axis the demanded quantities are placed and on the y axis the price.

In figure no. 3. types of demand elasticity are presented according to the level and the dynamics of the price in the case of normal goods.

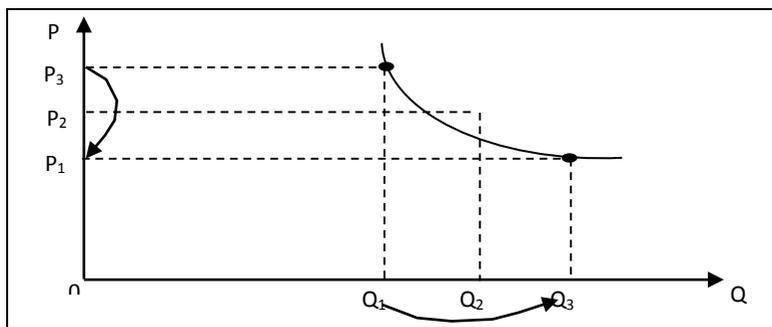


Figure no. 3. Bow elasticity

The different types of elasticity of the required quantities are characteristic for some goods, some consumers and some historical conditions on the market (fig. no. 4.).

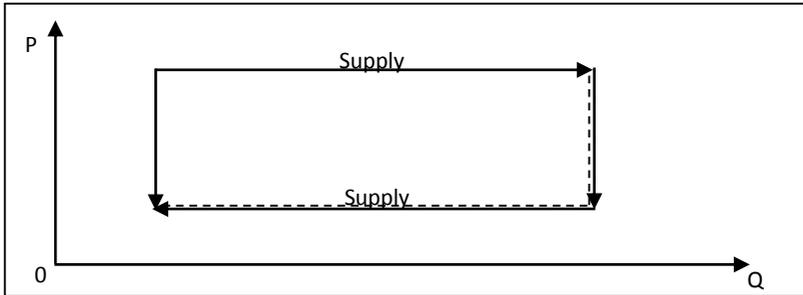


Figure no. 4. Offer's dependency on price

In this sense some generalizations can be made regarding the following:

- *rigid elasticity* of the required quantities is characteristic for some goods such as: goods of prime necessity (bread); goods with a low weighting in the consumption expenses of the population (salt); complementary goods, without whom the entire system of utilities of the complex good can not be used;
- *net elasticity* of the required quantity refers those semi-luxury goods that are not essential for our life, but which have become or are about to become part of the consumption habits, as well as, easy substitutable goods required by consumers with a average income and status.

Besides the types of elasticity mentioned before, in some conditions and for some goods, the *abnormal elasticity* (atypical) manifests, when the required quantity increases simultaneously with the increase of the price. This type of elasticity is rendered through a positive coefficient.

The so-called *Giffen paradox* is part of the abnormal demand elasticity. It is known that, on the terms of generalized but differentiated increase of prices, simultaneously with the decrease of incomes (in real terms), some purchasers give up goods consumption, considering them prohibitive (as price, on the basis of the available income). In this context, they increase the required and the consumed quantity of a certain good, which they consider absolutely necessary for their existence, even if its price has also increased.

From a theoretical and practical point of view it is very important to know the demand and the elasticity of the required quantity. Without the demand theory the law of demand and supply can not be understood without the law of demand and not being familiar with the former, the competitive

mechanism of market economy can not be explained. At the same time, the entrepreneur knows that the profit can be increased only in the case of an elastic demand and the size of the profit is given by the equation demanded quantity- price.

*Supply represents a relation between the quantity of a material good or service, from a group of goods that a seller is disposed to demise, supply, in consideration of a sum, in a determined period of time, at the level of the existing price.*

Supply takes place through its confrontation with the demand during commercial transactions. Supply has different forms: *of corporation goods and of services; firm or optional; engagement or with fixed term; with an average degree of complexity and of superior complexity; internal or external* etc. According to the content of goods supply can be: *of independent goods; of complementary goods, mixed.*

Irrespective of its type, the supply is in direct relation with the level and modification of the price. If the price of a good increases, the other conditions remaining the same, the seller is disposed to demise additional quantities on the market, but only in the limits of the existing stock of that good or goods. On the contrary, when the price decreases, the seller tends to reduce the supply.

Supply contraction and expansion can be rendered through the graph from figure no. 5.

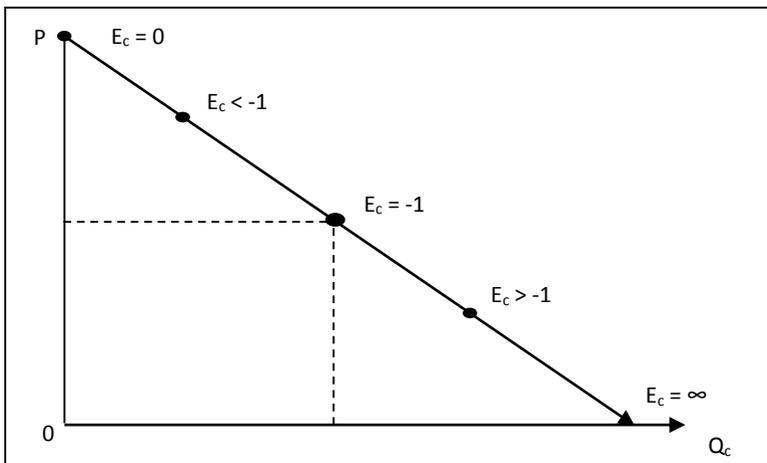


Figure no. 5. Normal types of demand elasticity

The increase of supply together with the increase of price take place only if the seller has the stock in the store (on short run) or if he has resources to eke out the lots of supplied goods (on a medium run). On the other hand the supply can not be substantially diminished when the prices decrease considerably. This happens especially if the goods are not storing or perishable. The entrepreneur's behavior in relation to the modification of price is not related only to the production possibilities, but also to the existing or possible conversion costs. *The general law of supply renders that relational situation in which, at a certain price level, a certain quantity of goods is supplied.*

At the same level of the price, the supplied quantities are also influenced by other factors such as: the level and the dynamics of conversion cost; the modifications in the size of prices of other goods; the number of firms that bring the same goods on the market and the relations between them, the taxes and the subsidies; the prognosis regarding price evolution; political and social events; natural conditions etc.

The sensitivity of goods supply to the variations of different factors, especially to the variation of prices, is called *the supply elasticity*, which is measured through the positive coefficient of supply elasticity, the two registered measures varying in the same way.

According to the size of price modification and to that of supply, the size ratio between them, supply elasticity is of several types namely:

➤ *unitary elasticity* of supply is defined by the fact that the supply modifies (rises) the same as the price (rise);

➤ *net fluid elasticity* (elastic) or just elastic supply takes place when the increase of the supply is higher than that of the price, being *supra-unitary*;

➤ *rigid elasticity* or *inelastic supply* is characterized by the fact that the supply of goods increases in a smaller proportion than the increase of the price of goods, such an elasticity being considered *sub-unitary*;

➤ *nule elasticity* (zero) signifies the maintenance of the supplied quantity although the price of goods increases;

➤ *perfect elasticity* takes place when the volumes of goods supply increases and the price does not modify (does not increase).

*The time factor* is very important in the expansion of supply. For example, at a given time and on a certain market the supply is more or less rigid.

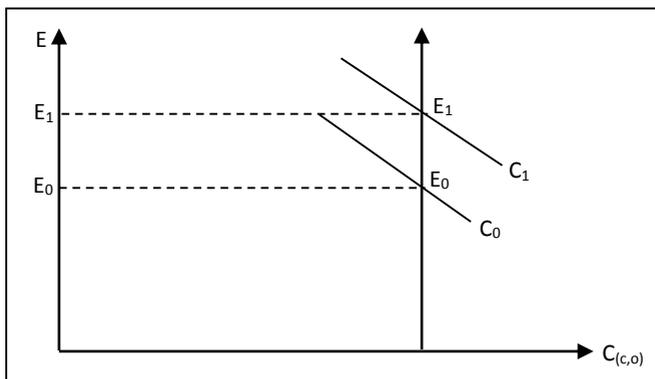


Figure no. 6. Very short run supply

*Market period* is characterized through a very short run of time. Price modification is the result of the increase of demand. Supply remains perfectly inelastic. *The short run period* is characterized by the possibility of elasticity of using the circulating capital, fact that gives the supply an inelastic nature (fig. no. 6.). On these terms the price increases as a result of the increase of demand, and *the increase of supply is dependent on the existing available resources.*

*On the long run period*, all factors become variable. In such time horizons, the firms, and the sellers can adjust the productive capacities. New firms can enter the line. Thus, *long-run periods ensure the possibility of an elastic supply of goods*, producers succeeding in increasing the supply through their investments. The relatively rigid nature of the elasticity of supply on short and medium run leads to biased errors on the market of goods and services.

### 3. Conversion costs theory

Price has continuously played a central part in economic theory and practice. Some authors have said that price *is the fundamental notion of economic science*, and respectively of political economy. Even since

the beginning of its implementation in the economic language, the term of price has been given varied meanings, but all of them have guessed the fact that the *price measures something*.

Price has always been considered as relative measure, as something that is measured through something else. From this perspective, *price is the ratio between two quantities of economic goods proposed for exchange or the quantity of a good that must be given in the exchange of a unit from another good*.

The emergence of coin has not lead to a general change in the concept of price. Initially this meant only the expansion of the sphere of the exchange value upon money-goods. Money has facilitated the development of exchange economy. In time, money has acquired the general function of measuring the exchange value. Namely, money has made possible the purchasing of goods (by those who had money) anytime, anywhere and in any quantity (large or small).

While the exchange economy developed, the universal function (in time and space) of expressing the exchange value has been taken over by coin, the latter measuring *that something* existing in all goods meant for selling and purchasing.

In nowadays *price expresses the amount of money that the purchaser pays in exchange of a unit of economic goods, respectively, it is the monetary expression of the exchange value collected by the seller for a unit of the transactions good*. Price is thus the sum of money collected-paid for the final transfer of the attributes of property right from one person to another.

In the monetary exchange economy, prices have the following functions:

➤ *the function of transmitting the information on the evolution of the market's requirements*, because through their level and dynamics, prices represent the main message through which the producers are signaled the changes in the consumers' preferences. The consumers are showed the modifications in which production takes place;

➤ *the function of stimulation of the interests of the producing firms* in the way of creating the goods necessary for people, goods of an appreciated quality. The incomes of the firms depend on the size of the prices and these ones direct the economic activities towards lines and sectors where relatively high profits per product are collected trough

prices (the costs being given). Price is that neutral instrument that scales the producers according to costs and profitability;

➤ *the function of costs' recovery and firms' recompense, of income distribution according to activities*, because the premises of restarting the activity on the same scale or on a higher one are created through collecting the price of goods. The higher the price is, in relation to the costs, the entrepreneurs are satisfied by their efficient activities;

➤ *the function of measuring the purchasing power of nominal incomes*, because the goods that can be purchased by the population depend not only on the sum of nominal incomes but also on the price level of these goods. Real incomes (real wages) are inversely proportional to the prices of consumer goods and to the tariffs of the services with the same destination;

➤ *the function of the distribution of incomes*, because the continuous modification of prices in unequal rhythms and with different directions of movement-lead to the redistribution of people's income, from the lines that can not impose (obtain) prices over the average of the increases towards those lines in which such prices are practiced;

➤ one of the most important economic problems is that of fixing and determining the price. Often, *fixing the prices is reduced to some factual aspects, formal-juridical*, such as the exact way of establishing negotiating the price of a certain commodity; the juridical means registering the agreement between parts upon the price of a commodity, its modifications as well as the sanctions that can be applied to that agent who does not observe the agreement; the place of price fixing and the area of use; the means of information of the interested parts upon the price of a commodity, the price on a certain market etc. According to the aspects mentioned above there are prices such as the *stock market price, the auction price, the catalogue price, the adjusted price, the price diffused to firms* etc.

In the specialist's vision price formation has a much deeper meaning. This process refers to the general price determining (without any attribute), to the factors under whose influence its size (level) as well as its modifications are.

It is generally acknowledged that price fixing takes place under the influence of a multitude of factors that are divided into two groups: *internal and external factors*.

The group of internal price fixing factors refers to those products that are specific to the mechanism of competitive market. Some of the internal factors of price fixing act *from the consumers' demand* such as: the utility of goods in the purchaser's opinion; the payment capacity of the consumers; consumers' needs and the structures of demand, both of them being formed on the basis of some social, cultural behaviors etc.

Other internal factors of price fixing manifest their *influence from the producers' offer*. The most important of which being the following: the level of unitary costs; the entrepreneur's ability and capacity to obtain the highest profit; the structures of the supply and the producers' possibility to address to the needs of the consumers; the price of goods on other markets (the substitution perspective in production and consumption).

There are internal factors of price fixing, which act on the market: *the free gamble of competition, the pressure of the two forces of the market; the monetary factors, the demand and supply of money, as a component part of the market, in general*.

External factors of price fixing-factors exogenous to the market but subordinated to this one-refer to: the indirect governmental intervention both in supply and demand field, in the way of diminishing or supplementing them in order for their mechanism to function normally; the specific measures taken by the government for maintaining social economic balance (on the labor market, the protection of some agricultural producers), these measures having results the level and the dynamics of price; the behavior of some major economic organizations with a monopolist tinge.

On the basis of the action of the factors mentioned above and of the major influence of one or another group of factors several types of prices have appeared:

➤ *free prices* are those which are formed in the conditions of opened competition, in which none of the market agents can influence or decide unilaterally the level and the dynamics of prices;

➤ the *administered prices* are considered as those prices(theoretical models)that are forming and modifying especially under the influence of the firms, the government playing a main part;

➤ *mixed prices* which in fact, in a real market economic system, are formed on the basis of all mentioned factors (internal and external).

The intervention of the state in the mechanism of price fixing

has multiple determinants such as: the scarcity of material and power resources, the necessity of protecting and using them in a rational manner; the rapid growth of prices on the free market, implying the negative effects which they can have over economy, consumers' social status, the tendency of major firms to create monopoly and/or oligopoly situations etc.

Taking into account the fact that *the process of price fixing is mixed* and that in this process there are both endogenous and exogenous factors, it can be said that the implication of government's administration is the most important exogenous factor. *Several actions and measures* regarding the formation of *maximum and minimum prices* as elements of the governmental policy of price represent this governmental function. Generally through the fixing of maximum prices it is desired both the increase of demand and consumption as well as that of the offer. In order to obtain the desired effect the maximum price needs to be under the level of the balance price.

#### **4. Production price in market competitive economy conditions**

Using multiple criteria (the number and the size of the participants in the exchange relations, the differentiation degree of the product, the facilities-limits regarding the entrance on the market, the transparency degree of the market etc.) the model of the market with perfect competition has been formed. It is characterized by:

➤ *perfect atomicity*, the existence of a large number of small participants with little, equal or similar economic power, who act independently so that none of them can decisively influence in his favor the volume of production and the price level;

➤ *the homogeneity of the product* that is the object of transition, and this is the reason why the purchaser agents are almost indifferent to which of the sellers they will buy the goods they need;

➤ *the accessibility in the branch*, the new sellers and purchasers' free entrance on the market;

➤ *fluidity, respectively the adjustment of the supply to the demand*, without any monopolistic dirigisme obstacles or vice versa, the consumer's' free choice;

➤ *the total transparency of information* regarding the prices and their dynamics as well as the relation with the requested and supplied

quantities of a commodity, the perfect familiarization with the market, complete and real information upon the present and future market of a product;

➤ *the free mobility of resources and of factors of production* – the existence of such conditions that the labor factor, the capita; factor can move freely from one branch to another, from one area to another.

On the basis of these premises, the participants to the exchange relations on such a market have specific behaviors. Consumers and producers, if taken separately, are considered *receivers of prices*, in the sense that the prices appear to be of exogenous sizes in forming the functions of demand and supply. If demand and supply are taken together, then the price and *the quantities demanded and supplied appear as endogenous sizes*, which are formed on the basis of market forces, in that point where the balance state is.

In order to render the unitary way of approaching demand and offer, the market supply will be marked with O and the corresponding demand with C, at the market level of a product (Q) and they are to be considered as functions of the price of the product (P). While demand is a normal function decreasing in proportion to the price, supply is a normal increasing function in proportion to the same price. Considering the market balanced, then the requested quantity is equal to the offered one and the equilibrium price appears when the demanded and the supplied quantities of product Q are equal. This is represented in figure no. 7.

The purchasers' and sellers' specific behaviors in rapport to price modifications are based on *the principle of rationality and economics*. According to this, the economic subject tends to maximize the results of his actions and to minimize their cost. The intersection point of the two curves represents the equilibrium price (E) and the effective quantities demanded and supplied.

The consequence between demand and supply is a point towards which the market tends on the basis of sellers and purchasers' pressure. In fact, on the market there is always either a *scarcity* situation (bigger or smaller), either a *surplus* situation.

In the former situation (scarcity), both forms of market act towards the increase of the price, while in the latter situation (surplus) there is an inverted pressure, of price decrease, both on the part of demand and of supply.

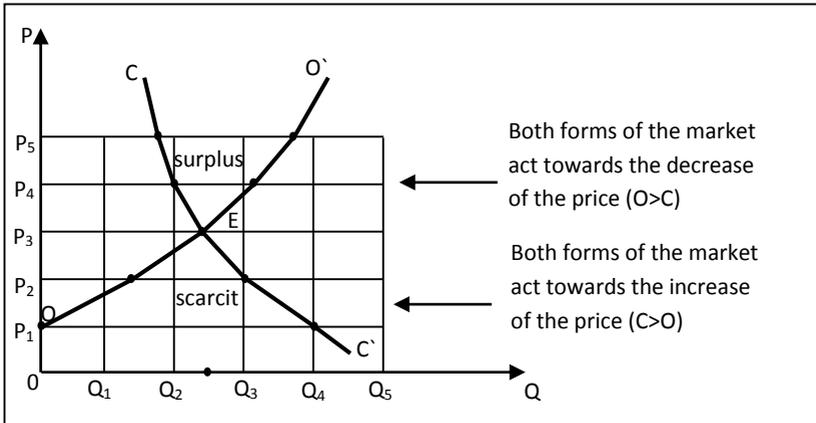


Figure no. 7. Equilibrium price formation

There are numerous interdependencies between the market forces and the price level. The means of equilibrium price modifications differ from one situation to another (each time the starting point is the equality between the demanded and the supplied quantities).

Figure no 8. presents the graphic representations of the ratio between demand and supply which were analyzed before.

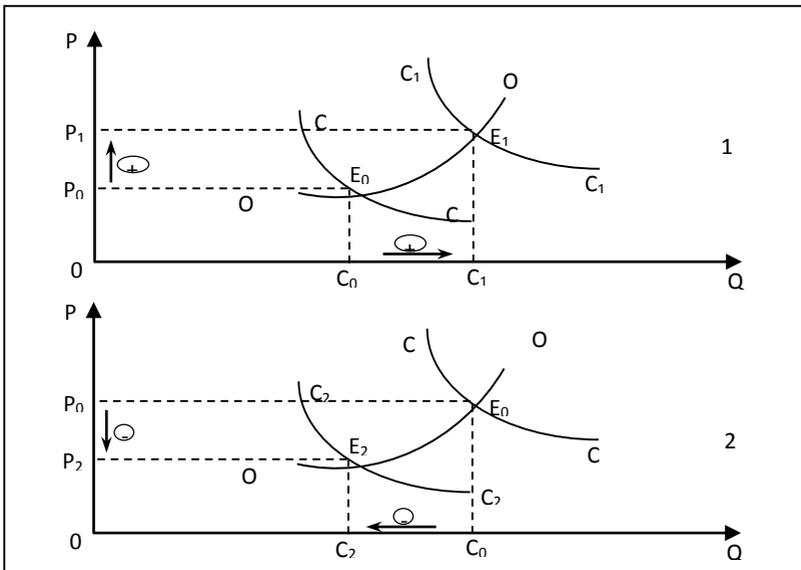


Figure no. 8. Demand-supply correlation

If it is taken into account only the *demand modification*, there is also the opposite situation if the *supply decreases* from  $O_0$  to  $O_2$ . The demand stays the same and the price increases from  $P_0$  to  $P_2$  and in the case of a given demand, *the increase of the supply* from  $O$  to  $O_1$  will lead to the decrease of the price from  $P_0$  to  $P_1$  (fig. no. 9.-1 and 9.-2).

In fact, *demand and supply are modifying simultaneously and in different rhythms*. As a result, the evolution of the price is different according to the influences of the market forces, to the size ratios between their influences. If supply and demand of a commodity increase in the same proportion, the price remains unchanged. If the supply increases in a smaller proportion than the demand then the price decreases and the equilibrium price does not modify. If the demand decreases in a higher proportion than the supply then the equilibrium price is realized at a higher level. Taking into consideration the previous observations, the characteristic features of equilibrium price are: *it appears spontaneously, as a result of the free gamble of market forces, in that point where the quantities demanded and supplied from a commodity become equal; equilibrium price formation is also related to the situation of independent markets; market equilibrium does not mean stagnation, respectively the absence of exchanges*.

Up to this level of analysis the *time factor* was not taken into consideration but it is generally acknowledged that equilibrium price formation is realized in different ways, according to the horizon of time in which *demand and supply* confront each other. Therefore, *on short-run periods, demand is the one, which forms itself into the main factor of price formation*. Supply, which is based only on the existing stocks and factors of production, is automatically adjusted to the consumer's requirements, ensuring the equilibrium on the consumer goods market or on the factor market at different price levels.

*On short run periods*, producers can modify the sizes of supply by changing the labor factor (they can not act upon the fixed capital). The price that characterizes this horizon of time is called *normal price*. It implies the equality between marginal cost and the selling price. At this price level producers can sell any quantity of goods. *On long run periods, supply represents the prevalent factor of price evolution*. Producers can modify the supply by taking into account the change of the fixed capital. The graphical representation of supply fluctuations depending on the price is presented in figure no. 9.

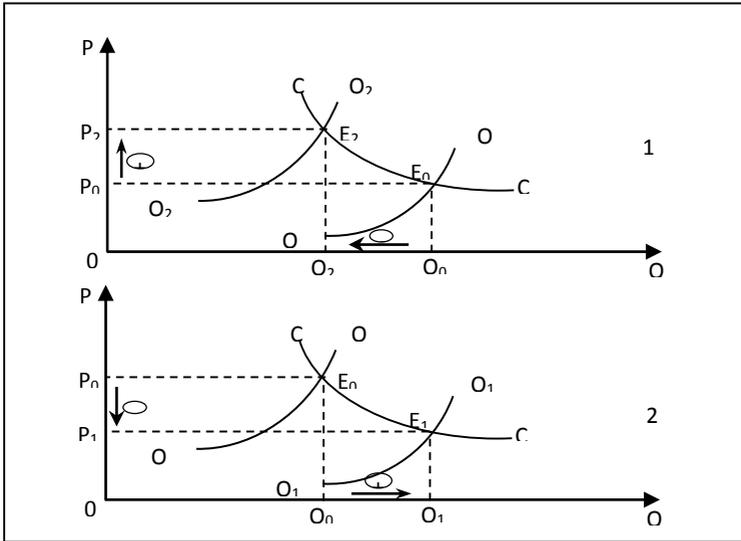


Figure no. 9. Supply-price correlation

In order for the sellers and purchasers' assembly of individual components to lead to economic equilibrium through the mechanism of prices the following conditions must be met. Each consumer must be aware all the time of the assembly of the goods that are supplied to him, namely all the possible utilities in comparison to his time and money. He must know all the techniques and factor combinations from his field and must be able to make such programs so that the highest profit is acquired. Last but not least the exchanges must be free both on the consumer goods market and on the producers' market. On each market the equilibrium price must allow the equality (equalization) between the demanded and the supplied quantities. But these conditions were not met on the real system of market economy. Thus, although the perfect competition market is a theoretical model of analysis, knowing this model is of great theoretical and methodological importance. Studying this model of market helps the understanding the mobility of the demand-supply relation and it makes easier the explanation of price dependency on the law of demand and supply.

Monopoly market is generally defined as that ratio of forces in which the supply of a commodity is ensured by a single seller (producer) , respectively the demand for a certain commodity is expressed by a purchaser (consumer). Monopoly implies seller's domination and monopsony market implies the purchaser's domination. From a certain point of view it is sustained that monopoly exists when an offerer supplies a loan a certain commodity on a certain market. Specialists have reached the conclusion that the absolute domination of a firm and of a producer upon a certain market is only temporary.

The tendency towards total monopoly is limited by the following factors:

➤ *total monopoly can not be sustained and especially maintained* because in the first place domination, through monopoly price fixing, determines the modification of the sizes of market demand for the commodity supplied by the firm in a way contrary to the producer's, meaning its decrease;

➤ *the firms that produce substitute goods are in the second place imaginary competitors of monopoly* because there is no monopoly that can stop the substitution of a commodity with other in consumption;

➤ *no matter how solid the position of a monopolist on the national market would be, such a position can be undermined by the changes that appear on national and international market;*

➤ *a firm's tendency towards total monopoly is often confronted with the reactions of the organized consumers as well as with the anti-monopolist measures taken by the government;*

➤ *the owners, entrepreneurs and managers of some large firms often have some ethical and religious doubts regarding market domination and the establishment of a total monopoly.*

*Monopoly* thus can be defined as that market situation in which a commodity is supplied and sold but it can not be rapidly and widely substituted. In other words monopoly brings to the market o commodity whose demand has a very weak crossed elasticity compared to the price of other goods.

Opposite to the perfect competition marker, on the monopoly market *the firm has the possibility to choose both the price and the quantity of goods that are to be produced and sold.* Thus, the price used by monopolist firms is a fixed requested and controlled price.

Because simple monopoly is the only supplier, *the analysis of price formation is done only at a branch level*. Therefore, the demand for the commodity of a monopolist firm is *equal to the market demand*. This fact is of a major importance. Controlling both supply and *demand* monopoly acts in its selfish interest and in the consumer's disadvantage. In this case *demand elasticity in proportion to the price is imperfect and the normal demand curve has a negative slope*. In this situation, marginal income is lower than the fixed monopoly-selling price. According to demand elasticity, monopoly is chosen (fig. no. 10.).

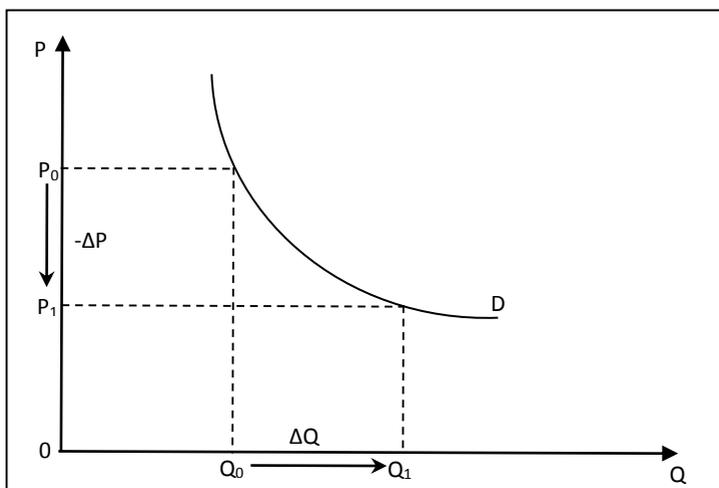


Figure no. 10. Demand-supply interdependency on the monopoly market

Monopoly establishes the price according to the size of the marginal income and to the evolution of marginal costs. As a result, the firm firstly establishes the optimum level of production, a level that ensures either maximum of profit or minimum loss. This decision is taken by monopoly on the basis of two principles:

- *the difference between total incomes should be maximum or the difference between total cost and total income should be minimum;*
- *marginal income should be equal to marginal cost, the latter being at its minimum level, respectively with an increasing tendency.*

The monopolist firm can choose one of the following two possibilities: when price *fixing, usually higher*, the sold quantity is determined by the total demand of the market, only that a too high price sends away some purchasers from the increased price. This will lead to the production decrease; *the establishment of the quantities that are to be produced and soled* but production has as its superior limit market demand and price level.

*On a short run period* the production is optimum in that point where marginal income is equal to the marginal cost on condition that the price is equal or higher than average variable cost.

*On a long run period* the optimization of production implies abiding by the general principles, namely the existence of an equal or higher price than the average total cost.

These situations are valid both in the case of profit maximization and in decrease minimization.

Monopoly price can be explained trough the geometrical graph.

The model of selection mechanism of the selling price and quantity that ensures the maximum profit to the firm has two aspects: in the first one the monopolist solutions are presented in the terms of total incomes and costs.

The curves of these total sizes have different evolutions so that variations of different sizes appear between them.

The distances between total income curve and total costs curve express the variation of the profit size. According to figure no. 11. we can notice that monopoly needs the level of production ( $Q_0$ ) that ensures the largest upright distance between total Income and total Cost .

This maximum distance is represented by the  $EE'$  segment, at the level of production  $Q_0$ , where the tangents to the curves of the total Income and total Cost are parallel. The latter aspect renders the monopolist solutions in terms of average costs and incomes per unit of product.

In the system of the geometrical axis the curves of mean costs and marginal costs as well as those of the mean and marginal

The imperfect competition market-real market-has several forms: duopoly (when on a commodity market two sellers meet many purchasers), duopsony forms (viceversa, two purchasers meet many sellers), oligopoly as the main form of the imperfect competition market, oligopsony etc.

Oligopoly is that market structure (system) where (somewhere) a small number of large firms ensure the largest amount of the supply for certain goods, these ones being required by many purchasers (consumers). The number of the sellers is small enough and the economic power of each of them is strong enough so that the action (measure) performed by each individual firm has a major impact on the general conditions of selling-purchasing on that specific commodity market.

In conclusion it can be said that oligopoly is that market situation in which the producing firms are aware of the mutual interdependency between actions regarding their size and the wages dynamics, the quantity of the supplied products, prices, promoting programs of the newest goods, advertising etc.

By comparison with other types of markets, oligopolist market has the following specific features:

➤ *the small number of firms that dominate the commodity market, thus the high degree of branch economic concentration*, give the dominated field, because oligopoly is an intermediary situation between absolute concentration and the very low degree of this one on pure competition markets. Such a characteristic of oligopolist markets marks all mechanisms. Because the large oligopolist firms have always considered price stability as a fundamental principle, *they do not use dumping policy, the unilateral price cutting in the confrontation with the competitors*. They use other ways to win better positions in the interest zones and namely they use the updating and diversification of the products, the design, the agreements upon the distribution of market, the advertisement etc.;

➤ *the existence of financial, economic and technical restrictions in the way of the entrance of the new goods in the branches and sectors dominated by the oligopolist firms*, the barriers in the way of other firms' entrance in the branch dominated by oligopoly refer to the market economies, knowing the product and defending the right of its production and commercialization, the complexity of the product and the need of its diversification;

➤ *mutual interdependency between oligopolist firms represents another characteristic of this market*, because the decisions of one of the firms depend on what the rival firms decide. As a result, oligopolist firms manifest their openness towards fusion, towards

agreements regarding the used prices, their evolution, large market shares etc. This impulse leads to a larger market share for the new firm and thus to an increased competitiveness of this one.

No matter if the supplied goods are standardized homogenous or differentiated, an oligopolist firm can have one of the following possible attitudes:

- *a co-operant behavior* that leads to agreements that have a cartel nature and the firms cooperate for their mutual advantage. They calculate the costs as if they were a single big economic entity, establish the total quantity that maximizes the profit of oligopoly and share earning accordingly;

- *non-cooperant behavior*, each firm tries to maximize its profit on its own thus a specific market equilibrium being created;

- *the oligopolist firm decides to ignore its ability to influence the price*, because, any price larger than the mean cost eliminates competition on a long run.

The types of oligopoly presented above are presented in figure no. 14. In the different types of oligopoly, supply formation, thus price formation, are achieved in distinctive manners (fig. no. 11.).

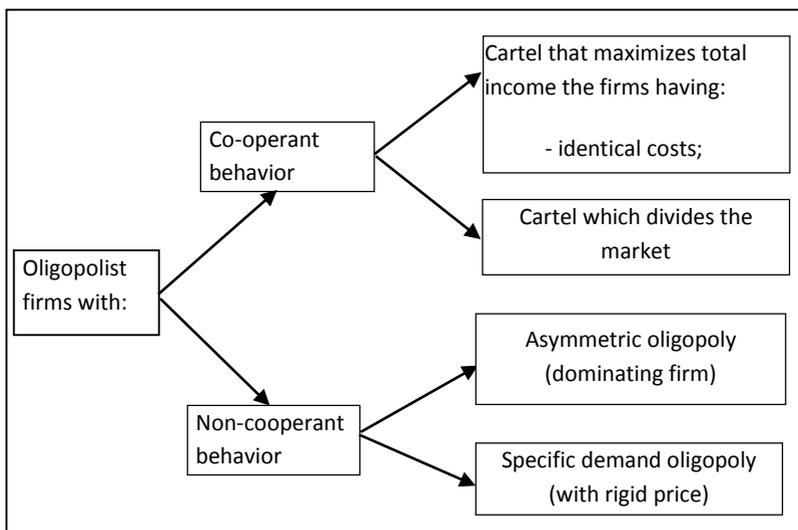


Figure no. 11. The behaviour of a firm on the oligopolist market

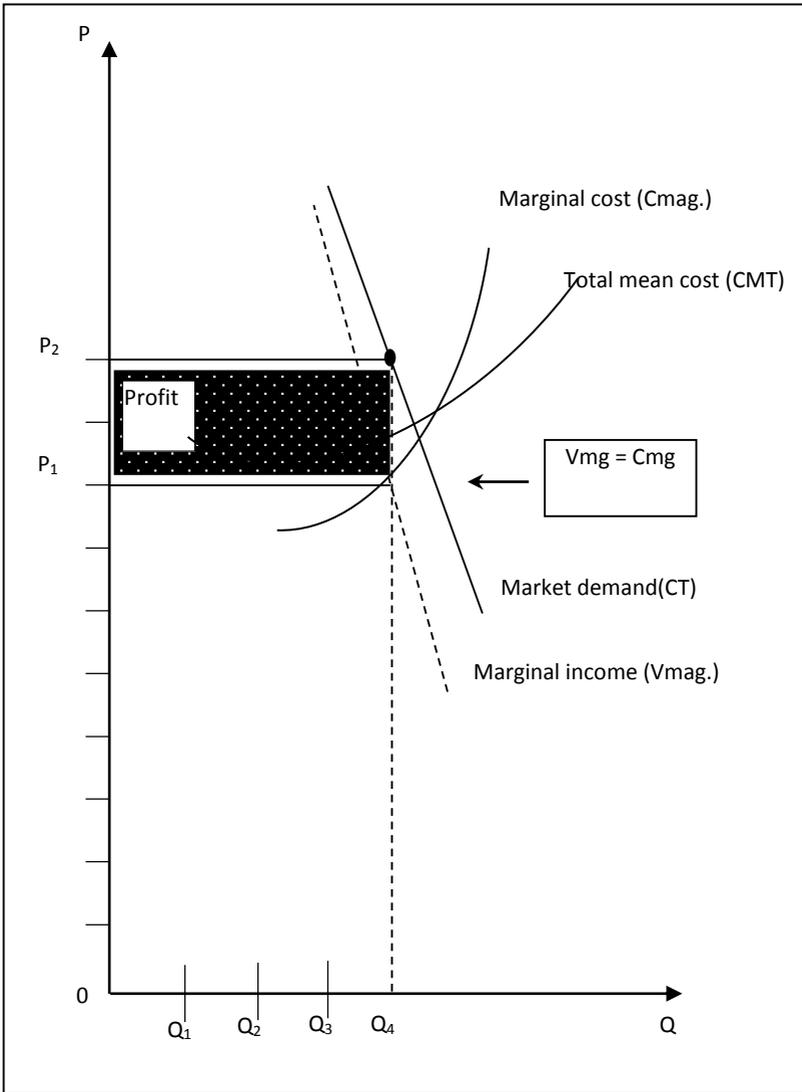


Figure no. 15. The formation of price and profit on the oligopolist market

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# Chapter 11

## Integration process in management science - theoretical review

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### Abstract

Complexity of phenomena found in the social, economic and environmental sphere of modern economic systems constitute one of factors in favor of attempts to apply examination approaches based on the analysis of the *management integration* phenomena in modern theoretical and practical studies concerning management. The aim to this paper is to present chosen approaches to integration process in theory of management science mainly strategic management and system approach.

**Keywords:** management theory, integration, strategic management, system approach

### 1. Classic approach to integration

The evolution of management studies starting with their development in the 19<sup>th</sup> century through domination of various classical schools, behavioral trend, quantitative school of recent decades, head for a systematization of various orientations together with a parallel development of different investigative aspects<sup>56</sup>. While analyzing theoretical achievements in the field of management studies in recent years one can see a certain trend aiming at synthesization of

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<sup>56</sup> Krzyżanowski A, (in: O podstawach zarządzania organizacjami inaczej: paradygmaty, modele, filozofia, metodologia, dylematy, trendy., Wyd. Naukowe PWN, W-wa, 1999) defines three investigative aspects: engineering-technical and economic, psycho sociological, multi-aspect (integrating)

accomplishments of different streams in this domain<sup>57</sup> as well as attempts of global approach (*integrative, integrated approach*). Among orientations aiming at integration of approaches to management one can find an orientation recognized as the oldest universal approach bearing characteristics of integration – *Henri Fayol's*<sup>58</sup> classical theory of organization. Among modern ones one can enumerate the following: systems concept and analysis, contingency approach, strategic management. Another direction of development of modern streams in management studies which are connected with integrating processes constitutes a concept of strategic management. Its creation is parallel to other approaches started in the 70's, its dynamic developed however took place in 80's and 90's. At present it is becoming more and more independent. Strategic management constitutes a way of seeing problems found in management “whose nature is based on creating conditions for organization's operation in situations of crisis, when its existence is in danger”<sup>59</sup>. It thus represents a trend according to which there exists a need for creation of an integrated theory of management. “Strategic management is a conceptual extension of a category of strategic thinking and ways of perceiving all domains of management.”<sup>60</sup>

Referring to achievements of management sciences it can be seen that one of instruments of integration planning and restructuring process implementation constitutes an approach connected with *strategic management*. Analyzing theoretical achievements of strategic management one may conclude that there exists a characteristic sequence: analysis – strategy - implementation<sup>61</sup> as well

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<sup>57</sup> See numerous works in this domain: Griffin, Stoner, Grudzewski, Zbichowski, Mikołajczyk, Martyniak, Wawrzynik et al.

<sup>58</sup> See Stoner, Griffin, Koźmiński et al. H. Fayol systematized management activities into a compact draft. According to him, there exists a need for constructing a compact universal theory on which practices of management can be based. Fayol forged a notion of *management function* as well as *rules of management* presented in his work *Administration industrielle et générale*

<sup>59</sup> Oblój K., Zarządzanie strategiczne, UW, W-wa, 1987

<sup>60</sup> Gliński B., Kuc B., Szczepankowski P., *Zarządzanie strategiczne*, Key Text, W-wa, 1996

<sup>61</sup> See: Krzyżanowski L. *O podstawach kierowania organizacjami inaczej: paradygmaty, modele, filozofia, metodologia, dylematy, trendy.*, Wyd.

as division into three levels: strategic – tactical and operational<sup>62</sup>. The figure below constitutes one of numerous examples of strategic management concepts. It presents specific stages: strategic analysis, strategy planning and finally implementation. A sequence composed of four action blocks can be said to be a classic model of strategic management:

- analysis of external and internal environment;
- strategy formulation (missions, goals, strategies, policies);
- strategy implementation (programs, budgets, procedures);
- evaluation and execution control<sup>63</sup>.

A concept of strategic management accentuates the environmental analysis and adaptation of goals and actions to environmental conditions. *R. Griffin* defines strategic management as a management process aiming at formulation and implementation of strategies favoring a higher level of organization's harmony in relation to its environment<sup>64</sup>.

In the light of Polish and foreign literature review as well as trends in development of management, an integrated approach to management (*integrated management, fr. une gestion intégrée*) can be analyzed in two fields: management processes inside an enterprise<sup>65</sup> and spatial structure system management of a precise territory (local, regional)<sup>66</sup>. In the first case the concept relates to management processes inside an enterprise and relations between an enterprise and its environment<sup>67</sup>. "Integrated management can be treated as a complex concept which embraces linking the management process at all levels of

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Naukowe PWN, W-wa, 1999

<sup>62</sup> literature concerning strategic management is fairly rich, see: R. Griffin, A. Stoner, Polish authors such as M. Romanowska, A. Koźmiński

<sup>63</sup> Gliniski B, Kuc B, Szczepankowski P, *Zarządzanie strategiczne*, Key Text, W-wa 1996

<sup>64</sup> Griffin R. *Podstawy zarządzania organizacjami*, Wyd. Naukowe PWN, W-wa 1998

<sup>65</sup> this notion is dominant in English and Polish literature

<sup>66</sup> this notion on the other hand is dominant in French literature

<sup>67</sup> Lewandowski J., *Zarządzanie jakością*, Wyd. MARCUS, Łódź, 1998

its structure”<sup>68</sup>. Furthermore, situational approach relates integrated management to the notion of contingency of the organization’s environment as well as to the level of organization of enterprise’s structure<sup>69</sup>. Main postulates of *Lawrence and Lorch’s* theory include ensuring a high level of integration of processes in enterprise management in a situation of low as well as high contingency of environment<sup>70</sup>. The authors developed a stream according to which a complex look at the management process is necessary, where the object of study is integration of organizational structures in relation to the environment<sup>71</sup>. The approach concerning integration of processes inside an enterprise is also connected with process orientation where “the subject of integrated management is a process, which is an intentional structure or chain of activities constituting a result of integration and structuralization of activities”<sup>72</sup>. Examples of building a concept of integrated process management constitute theoretical and practical accomplishments in the field of logistics in aspects concerning integration of processes and system analysis.

One can speak of an integrating approach in the context of integration of systems of quality, environment as well as *Occupational Health and Safety* management<sup>73</sup>. The philosophy of integration is based on recognizing issues of environmental protection and OHS issues as equally important aspects in activities of an enterprise. They have to be

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<sup>68</sup> Blaik P., Logistyka, PWE, 2001, p.178

<sup>69</sup> „structural elements can be analyzed as a level of diversification and integration., see: Lawrence P., Lorch J., *Organization and its environment*, Homewood, Richard D. Irwin, 1969

<sup>70</sup> „organization’s effectiveness in a highly contingent environment is connected with a high level of diversification and a high level of integration”, “organization’s effectiveness in a environment characterized by a low level of contingency is connected with a low level of diversification, the level of integration however remains high”, *ibid.*

<sup>71</sup> Other researchers representing this stream: F. Kast, J. Rozenzwaig, *Contingency views of organization and management*, F. Luthaus, T. Stewart *General contingency theory of management*

<sup>72</sup> Blaik P., Logistyka, PWE, 2001, p.99

<sup>73</sup> Building and integrated management system can be assured through introduction of TQM quality system as well as norms ISO 9001, ISO 14000

taken into account as enterprise's mission and system of values<sup>74</sup>. As to practical application, integrated management may also concern issues of project management (*integrated management plan*) embracing integration of planning, budgeting, evaluation and control processes<sup>75</sup>. This practice is frequently connected with management of projects for public institutions<sup>76</sup>. It can be pointed out that integrated management as a global approach to management processes becomes a result of many social and economic processes such as:

- globalization and internationalization;
- high level of dynamics in technological progress;
- availability of producing factors characterized by similar quality and price;
- development of market offering management services<sup>77</sup>.

In the second approach which is present mainly in the Western literature integrated management relates to a complex management of territorial development, which takes into account availability of natural resources<sup>78</sup> (*une gestion de developpement local integree*). Frequently, in French-language literature the very term integrated management relates to a development of agglomerations and urbanized areas (*la gestion integree de l'environnement urbain*)<sup>79</sup>. Multi-contextual character of development management is stressed and the following elements are taken into account: economic, social, technical, cultural, political, environmental.

Development of integrated management is connected with globalization processes which lead to a loss of integrating role of territories. This fact is mirrored by disintegration of social and economic

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<sup>74</sup> Lewandowski J., Zarządzanie jakością. Jakość, ergonomia, bezpieczeństwo pracy, ochrona środowiska, Wyd. Marcus, Łódź, 1998

<sup>75</sup> see: Integrated Management Plan, US dep. of Energy, Strategic management plan, Nevada, 2000

<sup>76</sup> *ibid.*

<sup>77</sup> Nowicka-Skowron M., Integrated management in enterprises and reconversion, Technical-economic aspects of industrial reconversion, Virton 2002

<sup>78</sup> Decoster D-P., L'innovation au changement: principes du developpement local, UVCW, Namur, 2000

<sup>79</sup> *ibid.*

systems. *W. Welfe*<sup>80</sup> confirms a high rank held by integrated approaches to processes of development of national economy. By building supply and demand models as well as by carrying out real evaluation of economic mechanisms *Welfe* concludes that an integrated approach towards investigated phenomena is of crucial importance. This comes from the fact that in national economy all elements of production process are characterized by feedback loop. Thus, an integrated approach towards management becomes indispensable in economy as a whole.

Another reason to consider the subject of integrated management constitute accomplishments of possibly most important event in recent years in development management i.e. *United Nations Conference in Rio de Janeiro* in 1992 – *Agenda 21*. Its achievements next to well known notions such as “sustainable development”, which shapes today’s approach to socio-economic development, constitute in fact an implementation of integrated approach. *Agenda 21* states that “integration must be carried out with three areas bore in mind: ecological, social and economic”. It also promotes “reorganization of planning and management towards integrated management of natural resources and development”<sup>81</sup>.

The review of chosen approaches presented above concerning concepts of integrated management cannot present the totality of the issue. It may however constitute an argument for integrated approach to management of economic systems seen as a multi-contextual process in which the use of theoretical and practical knowledge gained through management theory is fully justified.

## **2. System approach - the concept of integration**

*Cartesius* in his “*Discourse on Method*” states that one of stages towards discovering truth is to “divide each examined phenomenon into as many components as possible required for finding the best solution”<sup>82</sup>. The consequence of the accepted method was

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<sup>80</sup> Welfe W., Średniookresowy ekonometryczny model gospodarki narodowej Polski w warunkach transformacji, Absolwent, Łódź, 1996, pp.26-27

<sup>81</sup> Agenda 21, Chapt. 10, Conception intégrée de la planification et de la gestion, UN

<sup>82</sup> *Cartesius, Discourse on Method* Wyd. Zielona Sowa, Kraków 2002, p.17

derivation of the totality in relation to its components as well as linearity of phenomena and sequence of cognizance implying division of a problem into components and then its “recomposition”. Predominant concept applied in science was to investigate phenomena in eliminating conditions, separating phenomena from their environment. The goal of this approach was to find a “simple” description of the investigated phenomenon, most frequently by using a model or a mathematical formula. It was not earlier than in the 20<sup>th</sup> century that a concept arose according to which complicated phenomena and complex objects cannot be analyzed partially and reduced to simple (partial) chains of cause and effect.

A natural scientist *Ludwig von Bertalanffy* is widely considered as father of a new approach in sciences. According to him, all kinds of phenomena should be investigated as mutually interacting systems not only inside them but also in relation to their environment. Together with an economist *Kenneth Boulding* they founded (1954) a scientific society named *Society for General Systems Theory* (later renamed into *Society for General Systems Research*)<sup>83</sup>. According to those researchers the general goal of systems research is to create theoretical concepts and tools for interdisciplinary research.

Interest in systems research resulted in large part from a development of analysis and interdisciplinary studies started during World War II aiming at finding solutions to military problems. System analysis is an example of coming back to a holistic vision of the world, a concept known already in the Antiquity<sup>84</sup>. At present it has become more visibly present in many research concepts<sup>85</sup>. Particularly one element of reality which is economy requires a holistic approach taking into account its complexity and impossibility to methodologically reduce its phenomena. The system approach based on a postulate of *Society for General Systems Research* is one of the most distinctive features of development of sciences concerned with organization and management

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<sup>83</sup> The System Approach to Societal Problems, eds: S. Stephanou, Danies Spencer Pub. Malibu, 1982

<sup>84</sup> Aristotle and a maxim attributed to him “a whole is more than the sum of its parts”

<sup>85</sup> its sign may be a growth in interdisciplinary research

in the second half of the 20<sup>th</sup> century<sup>86</sup>. The integrative importance of the system approach is based on a postulate of a complex approach towards objects treated as open systems, that is interacting with the environment. Simultaneously, aiming at integration of various concepts through fighting interdisciplinary obstacles as well as using analogies and similarities to construct models<sup>87</sup> can be observed. According to some researches the system approach “will gradually lead to integration of all other approaches in the theory of management”<sup>88</sup>. Management by objectives is considered to be one of practical methods of representative management in case of the system view<sup>89</sup>.

Development of the system theory through analysis of interactions of systems with their environments and a growing role of the environment, influenced a development of another stream in modern management namely situational approach. This trend concentrates on a special approach towards problems of organization and management based on analysis of specific practical cases in relation to a changing dynamics of the environment. This approach stresses and “existence of relations between parts of an organization”<sup>90</sup> and analyzes which of those relations are of primary importance for a specific goal or problem. R. Griffin states that “system and situational approaches may be useful for integrating all previous streams in management”<sup>91</sup>, which have been developed since the neoclassical economic thought appeared in the 19<sup>th</sup> century. Similarly, J. Stoner states that “both approaches may constitute ways to enable integration in the process of development of management studies”<sup>92</sup>. System structure of strategic management is based on a

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<sup>86</sup> A. Koźmiński, W. Piotrowski, Zarządzanie teoria i praktyka, PWN, W-wa, 1998

<sup>87</sup> Pachura P., Elements of the systemic approach in the reconversion process, in: Technical aspects of industrial reconversion, Virton 2002: eds: Nowicka-Skowron M., Lescroart R.

<sup>88</sup> Stoner J., Wankel Ch., Kierowanie, PWE, W-wa, 1992, p.66

<sup>89</sup> A. Koźmiński, W. Piotrowski, Zarządzanie teoria i praktyka, PWN, W-wa, 1998

<sup>90</sup> Krzyżanowski A., O podstawach zarządzania organizacjami inaczej: paradygmaty, modele, filozofia, metodologia, dylematy, trendy., Wyd. Naukowe PWN, W-wa, 1999

<sup>91</sup> Griffin R., Podstawy zarządzania organizacjami, PWE, W-wa, 1998

<sup>92</sup> Stoner J., Wankel Ch., Kierowanie, op.cit

paradigm concerning harmonizing organization's activities with its environment and understanding activities in a context of feedback loop with the environment.

The importance of the system approach is based on a postulate of a complete investigation of objects treated as open systems, i.e. interacting with the environment<sup>93</sup>. Simultaneously there exist a strive to integrate various concepts through fighting interdisciplinary obstacles as well as through use of analogies and similarities to construct models<sup>94</sup>. Certain researches present an opinion that the system approach "will gradually lead to the integration of all other approaches in the theory of management"<sup>95</sup>.

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<sup>93</sup> A. Koźmiński, W. Piotrowski., *Zarządzanie teoria i praktyka*, PWN, W-wa, 1998

<sup>94</sup> Pachura P., Elements of the systemic approach in the reconversion process, in: Technical aspects of industrial reconversion, Virton 2002: eds: Nowicka-Skowron M., W-wa, 1992

<sup>95</sup> Stoner J., Wankel Ch., *Kierowanie*, PWE, W-wa, 1992

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# Chapter 12

## Communication in the Process of Elaborating Strategies on Companies' Development

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### Abstract

The development of any industrial company is based on the existence of a strategy of sustainable development, based on an appropriate communication. A theory of communication has been developed, which has led to the occurrence of a specific form of communication, namely the managerial communication. In essence, communication in the strategic management process leads to preparing some strategies that have the company's diagnosis as starting point, which is the main starting point in the process of preparing any strategy. There are several models regarding the analyses of strategies in the industrial companies' portfolio. In this context, several Romanian industry development strategies have been identified in the transition period, such as: strategy of restructuring, strategy of development, global strategy, etc.

### 1. Introduction

The strategic diagnosis is the first stage in developing the overall diagnostics of an industrial company. This is highly complex, because besides the assessment of the company's own potential, it requires thorough information from the environment where the company operates. Any strategic diagnosis has three components: the strategic segment, analysis of the competitive systems, diagnosis of the industrial company's competitive position. The portfolio of the company's strategies is developed based on some models successfully applied in the analysis of the Romanian industrial companies' strategies during the transition period.

## **2. Companies' diagnosis – starting point in developing industrial companies' strategy**

The analysis of the strategic diagnosis of any company requires:

I. Strategic segmentation – modern technique of strategic management based on knowing the company's competences in a given segment, consisting in a "cutting" of the activities that enable the company to optimally allocate the resources. Such a fragmentation process aims at the enterprise as a whole and identifies the strategic segments of its activity. To define these segments of the strategic field, some specialised papers use synonymous phrases such as "field of strategic activity" (FSA) or "strategic business unit" (SBU).

The process of strategic segmentation starts by individualising the strategic segments, a stage where a number of criteria should be taken into account: the technology, the structure of the costs of activities, type of clientele, satisfied need and purchasing criteria, distribution circuits, company's competences, the market, competition and synergy. Two or several elementary activities having similar characteristics in relation to the criteria taken into account within the analysis are grouped in the same strategic segment.

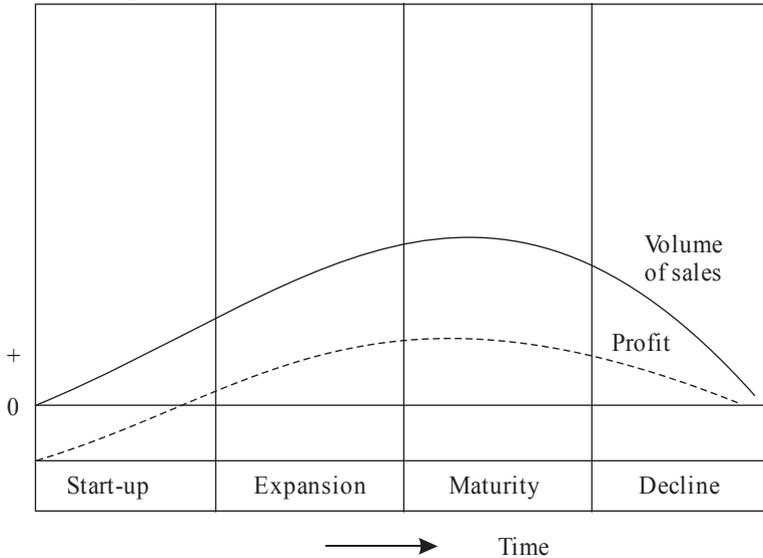
The process of determining the previously outlined success key-factors associated with each elementary activity underlies the segmentation.

The success key-factors mean a set of company's competences able to induce decisive competitive advantages in the future.

The elementary activities with similar success factors shall be aggregated in fields of strategic activity, which certain unique combinations of the success factors are associated to and are subject to some similar strategies.

II. The analysis of the competitive systems – that expands the field of analysis at the level of a company's basic strategic entities (the fields of strategic activity), at the level of industry (in a number of specialised paper, the term of competitive system becomes synonym with that of sector of activity or industry).

Figure 1. The stages of the sector lifecycle and the volume-profit relationship



One of the most useful tools to analyse the competitive systems is the concept of life cycle of the sector of activity, substantiated by analogy with the theory of the product lifecycle.

The stages of the progress of the field of activity are as follows: the launch (start), expansion, maturity itself and decline. This staging takes into account the rhythms of increases or decreases of the turnover and profit (see fig. 1).

The start phase usually unfolds as a consequence of the emergence of some new technologies or the application of some technological innovations. The main strategic orientations recommended in the start phase are: ensuring a high competitive potential (using the innovation as vector), minimising the industrial and commercial risks by promoting some cooperation policies and sub-suppliers, designing the optimal development and organisation of production and marketing, etc.

To ensure the success in a sector of activity in the expansion phase, the strategic concerns of companies must aim at: the financial capacity sufficient to achieve the investments necessary for the high commercial potential (with

emphasis on the advanced distribution networks), decentralised organisation based on the specialisation on a field of activity, etc.

The analysis of the maturity phase allows the identification of the sequence of the following stages: increasing maturity (characterised by developing some activities / products related to the main ones); stable maturity (during which both the growth and the potential to develop the activity become void); decreasing maturity (a stage where the less profitable products are withdrawn and makes room for the substitution products, thus inducing the decline phase).

The strategic recommendations for the companies operating in sectors in the maturity phase mainly take into account reducing the costs, mainly in order to decrease the costs to counteract the profit decline, to extend the cycle by upgrading the portfolio of products, intensifying the service for customers, approaching some market “niches” neglected by designing some differentiation strategies, etc.

The decline phase involves adopting some withdrawing strategies that require the fruition of the flow of liquidities obtained in the sector and the gradual abandonment of the field by disinvestment (“the strategy of slow death”).

Although the rhythm of succession of the four stages varies depending on the action of the specific evolution factors, a typology of the competitive systems can be established, with a high degree of practical applicability. Thus, the office of strategic consultancy, Boston Consulting Group, achieves a classification of the competitive systems based on two criteria: the number of the differentiation sources existing in an activity and the extent of the competitive advantage (see fig. 2).

Figure 2. Types of competitive systems

Multiple	Fragmentation systems	Specialised systems
Differentiation sources	Systems in competitive impasse	Volume systems
Low	Weak	Strong
	Potential competitive advantage	

Four types of competitive systems result from the combination of the two criteria, each type having its own characteristics.

Fragmented systems are characterised by weak mobility barriers, insignificant scale economies and multiple yet modest sources of differentiation. The latter do not allow the companies to consolidate a decisive competitive advantage.

The suggested strategy is to differentiate the product by minimising the investments and improving the profitability.

The systems in competitive impasse are those wherein there is relative balance of forces between a few competitors and the differentiation sources are low.

The competition revolves around prices; the costs are not sensitive to volume and do not allow decisive advantages.

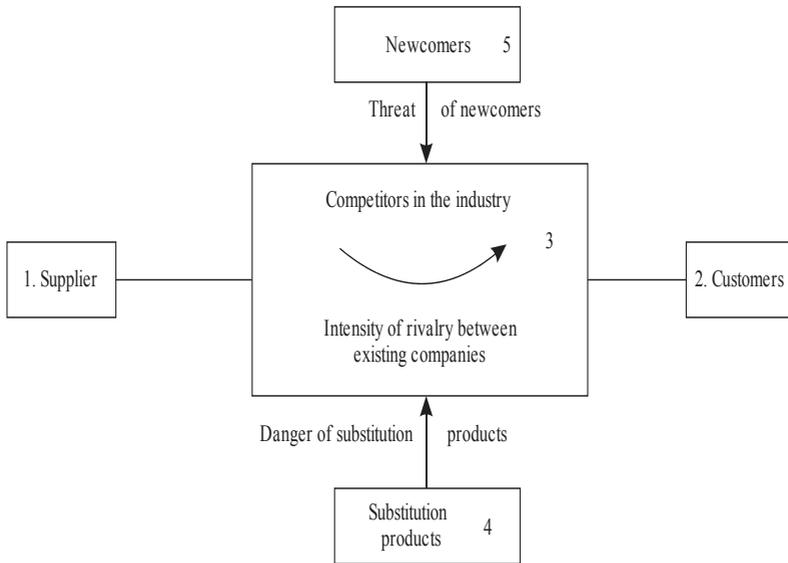
The barriers at the entrance are low, the technology is easily available, but the exit obstacles are severe. In such a competitive system, the company must seek to ensure itself the control of a “market niche” or to develop its own technologies protected against the competition.

Volume systems are those systems wherein the costs are sensitive to volume and it is therefore possible to adjudicate an important competitive advantage related to price.

The recommended strategy consists in increasing the volume in order to allow the exploitation of scale economies and the use of the experience curve effects.

Specialised systems are environments where there are vast differentiation opportunities related to products, which allows the application of a wide range of competitive strategies. A potentially successful strategy is that of the low cost by which it is tried to maintain the position and eliminate the competitors.

Figure 3. The five competitive forces of Porter's model



The structural analysis of the competitive systems has been however substantially extended by the famous American researcher Michael Porter, the author of the well-known “model of the five forces of industrial competition”.

Porter's model provides an analytical framework for diagnosing the competitive system, affirming that the very structure of the activity sector, just like the suppliers and buyers therein have a major influence on the evolution of the sector and potential profit.

The threat of substitution products and of newcomers on the market influences in their turn the appropriate strategies to be adopted. The five forces of the competitive complex are shown in figure 3.

III. Methodologically, the diagnosis of the company's competitive position requires two major ways of analysis:

a) assessing the competitive position of the enterprise depending on its market share, that uses the following system of indicators:

- the global market share of an enterprise ( $P_i$ ), which represents the segment of the total demand satisfied by this on the analysed market and is determined with the relation:

$$P_i = \frac{v_i}{\sum v_i} \cdot 100 \quad (1)$$

where:  $v_i$  – the sales of an enterprise "i";

$\sum v_i$  - total sales of the sector.

- the relative market share ( $P_{ir}$ ) that enables the direct comparison of the competitive potential of two competitive companies and is determined as the ratio between the analysed company's sales ( $v_i$ ) and the turnover achieved by its main opponent ( $v_0$ ):

$$P_{ir} = \frac{v_i}{v_0} \cdot 100 \quad (2)$$

- the specific market share, calculated by relating the company's sales "i" ( $v_i$ ) to the volume of total sales of the served market segment ( $v_i'$ ):

$$P_i = \frac{v_i}{\sum v_i'} \cdot 100 \quad (3)$$

b) assessing the competitive position of the enterprise based on a system of "key-factors of success". Assessing the competitive position requires drafting a list of criteria based on the key-factors of success for a certain field of activity. In economic literature, it is recommended to use the following categories of criteria: the market position, expressed by the global and relative market share and its evolution; company's position in terms of supply, production, storage and sales costs; the company's image and level of penetrating the commercial network; technical and technological competences; profitability and financial power.

Regarding the assessment of the company's competitive position, two methodologies are suggested in literature in order to do

this. A first method uses the assessment grids and involves going through the following steps: to identify the key-factors of success, their hierarchy based on some weighing coefficients and assessing the competitive position based on a weighted average grade. Obviously, using this method involves the determination of an average grade for the main competitors of the analysed company and comparative assessment of the competitive position in relation to these.

Other authors however show that such a methodology would exclude the newcomers within the sector and the substitution products, which generates the strategic myopia. To avoid this, a methodology of absolute assessment is suggested, taking as criterion a profile ideally established based on the environmental and activity analysis. The procedure further implies the following stages: the identification of the key-factors of success of the field of activity and defining the ideal profile based on this; assessing the company's positions and those of the current and potential competitors in relation to this ideal profile; assessing the company's relative competitive position.

The methods to assess the competitive position complete the strategic segmentation of the company's activities and analysis of competitive systems. However, in the process of formulating the strategies, the strategic diagnosis always succeeds the critical analysis of the company's portfolio of activities (also called strategic portfolio).

### 3. MODELS USED TO ANALYSE THE INDUSTRIAL COMPANIES' STRATEGIES PORTFOLIO

The matrices used to analyse the strategic portfolio are those developed by the large American consulting offices: the BCG (Boston Consulting Group) matrix, the ADL (Arthur D Little) matrix, the Mc Kinsey (General Electric) matrix, the product/market evolution matrix (Hofer). The double sizing of the analysis within these matrices allows the use of some matrix-type representations, useful in the process of formulating the strategic restructuring alternatives.

The logics of the Boston Consulting Group (BCG) matrix is based on the dynamics of the lifecycle of the field of activity (the market growth rate) and on the effect of the experience curve (quantified by the relative position occupied by the market).

The financial interpretation of the BCG matrix uses the market growth as an indicator of the cash demand, while the relative market share reflects the profitability and capacity to generate cash-flows. The relative market position is established by comparison with the main competitor, being expressed in relative terms:

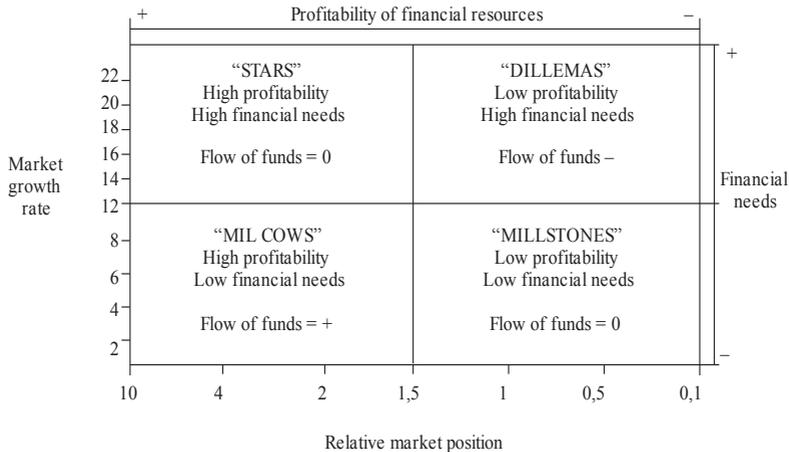
$$\text{Relative market position} = \frac{\text{Sales of the reference company}}{\text{Sales of the main competitor}}$$

The market growth rate for two consecutive periods of time (t and t - 1) is calculated by using the following formula:

$$\text{Market growth rate} = \frac{\text{Sales}(t) - \text{Sales}(t - 1)}{\text{Sales}(t - 1)}$$

The matrix representation of BCG is done with some circles the area of which is proportional to the amount of sales or with the capital related to different activities, the centre of the circle having as coordinates the relative market position (for Ox) and the market growth rate (for Oy). The graphical representation of the BCG matrix was done in figure 4.

Figure 4. Portfolio BCG matrix with the allegoric names of the four dials



The four dials place the activities with the following generic names:

1) "The stars" are activities (companies) with a solid position. They however require a significant influx of financial resources to support the competitive position, which involves the large needs for capital that can be mainly provided by self-funding.

2) "The milk cows" are the activities (companies) with a significant market share in a field with a modest or declining growth rate. They are very profitable activities, the companies that has them efficiently exploiting the competitive cost advantages. "The milk cows" release significant financial flows that must be reinvested into the "dilemma" activities and partially in the "star" activities.

3) The "dilemmas" have a low market segment in industrial sectors characterised by rapid growths. Supporting these activities requires a high volume of financial resources for investments that return low incomes (the profitability is weak due to the relatively high costs).

4) The "millstones" are activities with low development potential. Their profitability is low (sometimes even negative), the company being unfavourably placed on the curve of the experience in relation to the main competitor. Among these activities with minimal interest for the company, those subject to restriction or elimination will be selected.

Obviously, the future strategic orientations of the enterprises depend on the composition of the portfolio of activities (preferably the presence of some activities in all four dials of the matrix).

Although the BCG matrix is intuitive and instructive for the formulation of the strategies to restructure the company's activities, there is a number of criticisms about its use. Most of these related to the simplistic view of the nature of coordinates (the "market growth rate" and respectively the "market share" are only two of the factors involved in the attractiveness of the industries and level of competitiveness), the low field of use (restricted to the volume activities), ignoring some qualitative aspects involved in assessing the attractiveness of the activities (the technology, service, image, etc.).

The Arthur D. Little (ADL) matrix has been elaborated by the Strategic Consulting Office Arthur D. Little which suggests a 4x5 matrix based on a finer qualitative assessment both of the enterprise's

competitive position in a certain field of activity, and of the industry's attractiveness or of that field.

The competitive position quantifies the relative power (in relation to competitors) of the enterprise through a complex of determinants for success. They concern fields such as: production, personnel, organisation, commercial and financial activity, etc. that must be identified in a first stage, and then assessed in terms of weight.

Depending on the degree level of mastering these key-factors of success, the company may be placed in one of the following competitive positions: dominant, held by enterprises able to control its competitors' behaviour and formulate strategic alternatives independent of their actions; strong, targeting companies that may design deliberate concepts without showing special concerns to the competitors' reaction; favourable, characteristic to the companies which, although they have outstanding strategic advantages, they accept a limitation of the freedom of action imposed by the leader; unfavourable, held by companies the performances of which are sufficient to justify the continuation of the activity, but which have average chances to maintain their position in the long run due to the low number of key-factors of success held; marginal, specific to the enterprises with low performances, which resist in the short run due to the main competitors' tolerance.

The attractiveness of the industry is diagnosed by relating to its level of maturity (by using the concept of industry lifecycle) based on the following qualitative elements (ignored by the BCG matrix): the range of traded products, distribution of the market share between competitors, stability of the market segments and customers, the technology, entrance barriers, etc. The ADL strategic analysis picture uses the maturity of the sector on the abscissa and the competitive position on the ordinate.

Within the model matrix, each dial represents a distinct entity in terms of the maturity-competitive position couple. They can be assessed financially, at the same time also taking into account the related level of risk.

The strategic orientations suggested by the ADL matrix have a higher level of generality and fall in areas with relatively vague contours compared to the BCG matrix.

Natural development implies a strategy of draining all resources to the activities where the company has a solid competitive position, as well as to those in the start stage. Selective development aims at a differentiated investment strategy to improve the profitability of some activities with average competitive position. The abandonment aims at activities with marginal competitive position or new activities that are however affected by a too high risk level.

Although the ADL matrix allows the performance of a detailed strategic analysis (by dealing with 20 distinct position), it presents disadvantages inherent to the complexity of any multidimensional analysis.

The Mc Kinsey (General Electric) matrix is of 3x3 type, developed within the General Electric company, with the support of the consulting company, Mc Kinsey. This matrix is built based on two strategic variables and namely the competitive position (the abscissa) and industrial attractiveness (the ordinate).

For each analysed activity, the coordinates of placement within the dials of the GE matrix will be calculated (based on scores). Thus, to determine the competitive position, the following stages will be covered successively: listing the key-factors of success for the analysed industry and assigning weights depending on the contribution to the potential success, providing the scores for each factor in the particular situation of each activity of the organisation and respectively the calculation of the total score as amount of the products between the scores assigned and weights of each factor. The total score will be the coordinate on axis Ox.

Assessing the industrial attractiveness is more nuanced compared to the previous matrices. It takes into account the intrinsic value of an activity for the company, the possibilities to apply the barriers at the entrance into the sector, the control of a critic key-factor, the synergy between activities, etc.

To determine the industry attractiveness, the same procedure is used as in the case of competitive position. The total score will be the coordinate placed on the axis Ox.

The strategic orientation specific to the Mc Kinsey matrix are shown in figure 5.

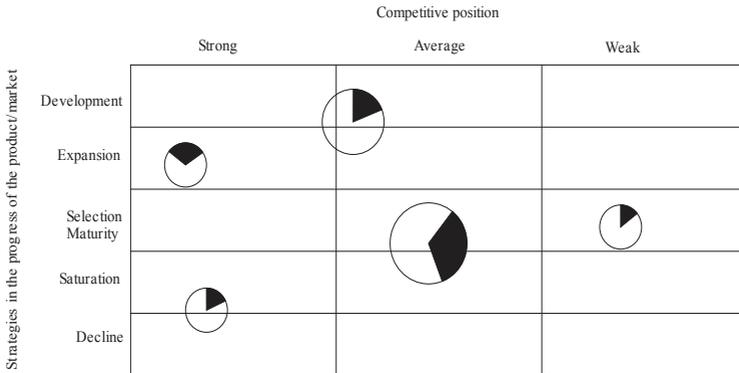
Figure 5. The strategies of Mc Kinsey's matrix

		INDUSTRY ATTRACTIVENESS		
		High	Average	Low
COMPETITIVE POSITION	Strong	Making investments to maintain the leadership position	Selective development Maintaining the position	Profitability Clearing the financial flow and reinvesting in other activities
	Average	Selective development Improving the position	Prudent profitability	Selective withdrawal
	Weak	Doubling the stake or abandonment	Progressive and selective withdrawal	Partial liquidation (Disinvestment) Abandonment

The matrix of the product/market evolution has been discovered by the American Charles Hofer, who created a 3x5 type matrix, adapted to the strategic analysis of the portfolios of products or activities which, in terms of the meaning of the axes, it is very close to the Arthur D. Little matrix.

The competitive position of the activity is shown on the Ox axis of the activity, and the evolution product/market is shown on the Oy axis.

Figure 6. Hofer's matrix



The second variable is shown as a sequence of phases corresponding to the well-known lifecycle of the product/activity: development, expansion, maturity and decline.

Marking the position of the coordinates of a product or an activity on a graph is also done in the case of previous matrices – by means of some circles with the radius proportional to the market dimension, the centre of the circle being on the point shown by the two coordinates.

The graphical representation of any strategic portfolio in the Hofer matrix is done in figure 6.

The strategic prescriptions to be analysed in the process of formulating the strategy according to Hofer's matrix are very similar to those of the BCG matrix. Thus, in the case of a solid competitive position within a growing sector, the product/activity can be treated as a "star". If the activity or the product has reached the maturity stage, the strategies adopted are those of neutral type, specific to the "milk cows". If the competitive position is weak or average and the sector of activity is in the decline stage, a strategy specific to the "millstones" will be formulated (maintaining – in certain conditions or restriction). Finally, the strategic recommendations to deal with the "dilemmas" (selective development, consolidation of the positions on crenels or the abandonment) will be applied to the products / activities with modest competitive positions at the expansion stage or at the selection stage.

The conclusion required after studying these matrix models to formulate the strategies is that a company's success is conditioned by its capacity to correctly define its field of activity and the product-market couples that enable it to have a solid competitive position, as well as the optimal capitalisation of its own competences.

Among the most famous disadvantages of these models, the following are also quoted: the high level of subjectivity of the assessments that cannot be removed by any scaling method with scientific claims, suggesting some generic strategies often not adapted to some real situations, the impossibility to compare the advantages of having an activity with its management costs, neglecting the synergies of various activities, the impossibility of adaptation to market structure with imperfect competition, etc.

Some of these limits are however counteracted by advantages such as: stimulating the development of strategic options in conjunction with the environmental analysis, the possibility to separately deal with the different activities or products by setting some specific objectives and appropriately assigning the resources, identifying and guiding the financial flows necessary and available for different activities, facilitating the apprehension and formulation of strategic options within the company by using the suggestive graphical representations, etc.

Finally, it should be noted that the success of practically applying these matrix models at the stage of formulating the global restructuring strategies depends on the quality and veracity of the information based on which scaling the strategic variables is done subsequently. Thus, it is necessary to nationally collect and process a set of information about the market and different industries.

#### 4. Case study - development of Romanian industrial companies' strategies during the transition period

The evolution of Romanian economy generally after 1989 is dominated by the trend of an increasingly acute decline. In this situation, an issue required with special acuity is that of assessing the extent to which the processes to reform the economy in general and enterprises in particular have had an impact on the level of performances achieved and managerial orientations adopted during the transitional stage. The analyses performed consequently focused on two planes – that of the industry as a whole and its branches and that of enterprises.

Thus, after 1989, the economic results achieved at the level of the whole industry were inappropriate, amplifying the crisis phenomena manifested since the '80's. The industry continued to have a dominant role in the evolution of Romanian economy, its share in GDP representing about 45% (a much higher value compared to that registered in developed countries), which amplified the recession phenomena on the economy as a whole. Currently, the influence of a complex of negative factors is felt within the Romanian industry: the high level of energy-intensiveness-material-intensiveness and of concentration/integration of production, which increases the inflexibility and vulnerability of enterprises; the existence of some

abundant production capacities in relation to the structure of the demand; low level of labour productivity; existence of some enterprises lacking viability, as well as a significant number of companies that have a revival potential.

After 1989, the decreasing trend of industrial physical production that characterised the '80's decade has amplified. Thus, as the statistical data emphasise, for a number of final physical products that had a high importance for the economy and provided higher recovery of the raw materials, the production level declined in significant proportions.

Generally, it is considered that the evolution of machine manufacturing industry during the transition period falls within the general context of the decline manifested on the industry as a whole. The branch of the machine manufacturing branch is characterised by complex and rigid productive structures that generally have large dimensions, and the manufacturing processes performed therein have the characteristics of the serial production and unique types. The production cycles of the enterprises in the branch are generally long (sometimes even reaching 3-4 years), and the level of integration varies considerably according to the field of activity (on the total branch, the cooperation is about 30% of the activity volume).

The production of this industrial branch is generally intended for manufacturing the capital goods or industrial consumption, thus contributing directly to the development of other branches of national economy. The machine manufacturing industry is a relatively important consumer of electric power (about 75% of the power used throughout the industry), gas (about 4.7% of the total consumption of the industry) and raw matter and materials from the Romania and import.

The main groups of products whose weight throughout the machine manufacturing branch evolves decreasingly during the transition period are: the power equipment, mining equipment, machine-tools and bearings.

There are fields of activity showing an attractiveness level above the average in the machine manufacturing branch, such as: manufacturing power machines, manufacturing the machines for the food industry, manufacturing the bearings, gears and overall components. The high level of stocks of finished products in the branch is also noted, which should be correlated with the inertial

orientation of some enterprises to produce on stock, without having the marketing ensured.

The statistical data highlight the domination of oligopoly structures in the case of most branches of the industry at the transition stage, the weight of the first 10 enterprises in the turnover being of over 70% in the industries of wood, cellulose, paper, oil processing, of equipment, broadcasting and communication devices, road vehicles and between 50% and 70% for metallurgy and electric machineries and devices. A comparison with the level of production concentration in France leads to the conclusion that it is higher in our country for some industries that are globally less concentrated (metal constructions and metal products, precision medical appliances and tools; machines and equipment) and lower for some industries showing a higher level of concentration in developed countries (equipment, radio, television and telecommunication appliances).

It is therefore required to observe that although the number of enterprises (particularly of those of small sizes) increased during the transition stage in the machine manufacturing branch, both in the public and private sectors, the operation of the competitive market structures is hindered by dominant positions still held by some large public enterprises. Such a situation is driven by the inexistence of an appropriate legislative framework regarding the regulation of monopolies, combating the abuse of dominant position, diminishing the scope of autonomous administrations, bankruptcy, etc.

The main causes that led to the sharp decline of the production of these enterprises after 1990 were: consistent reduction of the demand on the domestic and external market (following the cessation of investments and crash of CMEA system), the emergence and perpetuation of the economic and financial blockages and de-capitalisation of economic agents, the boom of prices for raw matter, materials, power and devaluation of the national currency in relation to the foreign ones, etc.

The kickback of the economic activity in the machine manufacturing industry after 1989 imposed the restriction of some production capacities.

The period prior to 1989, a period of dominance of the hyper-centralised economic and political system was marked by substantial differentiations in the scope of managerial systems in relation to the

management methods, concepts and practices specific to the countries with market economy. The constraints exercised by the external environment of the enterprises – with determinant influence on the specific managerial orientations – refer in summary to: the use of plans as major management tools, concentration of managerial attributions on the operative management of the production processes (by limiting the responsibilities of designing the strategies of future development), the drastic decrease of the responsibilities of the management bodies in relation to the financial situation of the enterprises and their profitability.

The sudden removal of these constraints that isolated the microeconomic management from the problem of anticipating the future changes placed the Romanian enterprises on the coordinates of an environment characterised by an unprecedented level of turbulence. Its main characteristics were: the structural economical crisis, the extent of legislative and organisational changes, liberalisation of prices and manifestation of inflation, crisis of the forms of property, major changes in the system of economic levers, liberalisation of labour relations and shifts in the employees' mentality, increase of the role of commercial banks and de-capitalisation of some enterprises, etc.

In order to emphasise the ways in which the enterprises adjusted their activity in accordance with the changes of the external environment, the analyses performed were based on selecting some groups of products or sub-sectors within the machine constructions, which has enabled the detachment of some significant aspects related to managerial strategies adopted by economic agents operating within that industry.

Thus, under the conditions specific to the transition, the management systems of enterprises in the branch of machine constructions reacted differently, by developing some various strategies. The typological analysis of the companies' strategies taking into account the criterion of suitability to the rhythm of changes and market requirements allows the delimitation of three large categories of strategies, namely: offensive strategies (in the case of which the companies enter new markets and develop new activities/products likely to lead to a considerable increase of usual performances achieved); defensive strategies (aimed at maintaining the control on

the market segments gained during a previous stage and consolidating past achievements) and interstitial strategies (that are based on interlocking of the objectives of the strategy to develop some activities / products and conquering new markets with those of the objectives of the strategy of restriction of some activities and abandonment of some market segments in order to maximise the adaptability of the enterprise to changes).

From this perspective, the strategies adopted by the enterprises in the machine constructions at the early stage of the transition to the market economy were classified as survival strategies that were the appanage of a true management of crises. They were placed at the limit of the concept of defensive strategy, because their options have not been focused on achieving some radical and necessary changes within the companies, but on avoiding the bankruptcy and the excessive increase of the level of indebtedness (even if the “zero-profit” set for a period of a few year was challenged by a number of specialists).

The main categories of survival strategies adopted during the transition period took into account the following options:

a) "Step by step" withdrawal, in the operationalisation of which the following actions were imposed: gradual reduction of the activity over a period of a few years, by eliminating the unprofitable products; permanently reducing the staff; limiting the investments to those with rapid amortisation and practicing a severe regime of saving;

b) Valorisation of unused patrimony, which has been imposed by the drastic reduction of the demand and decrease of the level of industrial capacities use. Such a strategy (which is extremely defensive) has attracted an activation of the incomes achieved by enterprises which ensure the short-term survival based on the efficient management of the following categories of the patrimony: the active patrimony, currently used to perform the productive activities that respond to beneficiaries' firm orders; “preserved” patrimony, consisting of the productive spaces and structures for which there is no demand currently, but for which actual opportunities of re-launching the production are foreseen (which would justify the costs induced by temporary preservation); the available patrimony, the value of which has been recovered by disinvestment or lease of assets or by associations with private or foreign entrepreneurs;

c) Extension of the profile vertically, which formed the strategic reaction to the phenomenon of a more rapid accumulation of profits at the trading stage compared to that of production. This has materialised in the extension of the profile of activity to the end of the productive cycle, by directly trading the products and services achieved. A more viable solution classified in the same category of the profile extension – vertical integration – has been accessible particularly to some enterprises that performed the assembly of some final industrial products.

The main characteristic of the strategies adopted by most of economic agents in the early stage of the transition was their exclusive focus on the objectives of discovering some reasonable solutions to consolidate own funds on a limited scope of time, and not on those of in-depth restructuring of the deficient fields of activity according to the new requirements and constraints of the market.

After the short-term survival of the enterprises was ensured, there was the possibility of passing the managerial systems from the stage of reaction to threats to that of anticipation of changes. Managerial strategies specific to the advanced transition stage were established, specific to the advanced stage of transition classified into a particular category, namely that of the strategies adapted to a continuously changing external environment. These managerial strategies are of an obviously more offensive feature compared to the survival ones, comprising the characteristics of the interstitial strategies that aim not only to overcome the difficulties of the present, but particularly the confrontation with the environmental predictable changes on a scope noticeably dilated in time;

d) Partial change of the activity profile. The mandatory reaction to the crisis of the market segments where the machine manufacturing enterprises operated prior to 1989 was the partial change of the manufacturing profile. The enterprises that have largely kept the initial specialisation have been forced to render their offer more flexible, diversifying the provided products and services in order to adapt them to the particular requirements of some new market segments.

Even certain cases of adopting a new manufacturing profile have also been registered, related to other markets, but their number has been reduced and were not likely to change the character of the

competitive structure of the markets where the entrance was done (the case of the market of machines and equipment for the food industry, the machines for metallurgical, oil and construction materials industry, where enterprises that initially manufactured steam, turbo generators and hydro-aggregates);

e) Managerial decentralisation. This was required as a need since the first years of the transition, because most of the enterprises with over 1,000 employees (very numerous in the machine manufacturing branch). At branch level, such a strategy must be correlated with increasing the number of small and medium-size enterprises, favoured much more by the new economical context. In principle, managerial decentralisation was based on two major options: rendering the organisation structure flexible for a better adaptation to change (costs and profits centres organising and establishing a central module with a “general staff” structure); secession of some “industrial giants” in several trading companies. The last option must however be carefully studied, particularly where there are intense relationships of cooperation that could endanger the efficiency of independent operation;

f) Disinvestment and organised disengagement. By the objectives suggested, such a strategy seeks to restructure the enterprise in-depth, by abandoning the unprofitable activities / products (and such an orientation should not endanger the activities performed), as well as reducing the level of costs in order to restore or increase the profitability of the remaining activities.

As a particularly positive fact, the evolution of managerial thinking in the field is indicated, which has allowed the reconsideration of the importance for promoting the offensive strategy at all costs and focused on the elaboration of some planning models for the interstitial strategies.

These models integrate the disinvestment plan as an essential component of development plan, providing it with an equal importance even to that of the diversification plan.

The conclusion required is that, although they have an obvious interstitial character, the adaptation strategies can be assessed as vectors of the ultra-radical change of Romanian enterprises, able to lead to the achievement of the restructuring and privatisation objectives imposed by the requirements of the market economy.

The analyses performed however emphasised that such strategies have been efficiently applied in the machine manufacturing enterprises during the transition stage only by a relatively small segment of competent managers.

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# **Chapter 13**

## **Glottodrama or learning a foreign language through drama**

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### **1. Introduction**

Teachers', researchers' and individuals' pedagogical experience has highlighted the difficulties and pendencies in teaching a foreign language in our time. The efforts are greater and more problems appear especially in the first stage of learning. New, interactive and efficient methods must be created in order to increase amenity, attention, communicative performance, bringing up social connections, relations and empathy. Glottodrama is one of these new methods. It was created in Italy within a European project. It has spread in many European countries and beyond. Taking into account the student's status in front of society, this method is based on drama or theatrical scenery. The primary inspiration appeared observing the status of the students as "characters" because they have to invest with new linguistic parts and different normative social models. Because of emotion, tension and embarrassment, those who learn a foreign language tend to play a part or to act in the respective foreign language. Glottodrama offers a more natural way to express, real living linguistic contexts and the acquisition of the foreign language becomes a pleasant, useful and more authentic access to another linguistic and emotional Self. This method is also used in Romania and especially in one of the most important cultural and educational cities, Iasi, at EuroEd Foundation, "Gr. T. Popa" University of Medicine and Pharmacy and "George Enescu" University of Arts.

### **2. Glottodrama**

Any language establishes a linguistic game. The communicating activity follows contextual rules. This special kind of game is also a "metalinguistic" one. The learning target language, as long as we use a direct method, is also a tool to learn the language and to speak that language. This statement entails a very important

implication. Since the goal of the game is not to communicate, but rather to learn to communicate, most of the communication in the classroom is not directed to any goal other than speaking the language itself. This function often becomes predominant and gets hold of almost the whole communication within the group-class. Moreover, the teacher's protagonism increases when communication becomes meta-communication on grammar topics. This accounts for the phenomenon, highlighted by Mario Rinvoluceri (Rinvoluceri, 2008), according to whom the average European teacher covers almost 70% of class speaking whereas to students is left just a remaining 30%. The goals of glottodrama aim at diminishing the use of language in a metalinguistic function, and directing it towards the achievement of more genuine communicative purposes. It is also a very flexible method which may be appropriate for any age-level or learning-level or to any train of events.

Any linguistic act enters in a certain situation context within one of the domains of social life (range of action or area of interest). Choosing the domains where learners have to be prepared to operate is a determinant for the choice of teaching and evaluation situations, goals, tasks, topics, materials, and activities. The reader should bear in mind how a choice of directly relevant domains effects motivation, and consider the advantages these could bear in the future. Children, for example, can be more motivated if they focus on their incidental interests, which however could result in little preparation for communicating in the future, in an adult environment. In adult instruction, the interests of the employers, who sponsor the courses and require focusing on the professional domain, could clash with the students' motivation, since they may be particularly interested in developing interpersonal relationships. The number of possible domains is undetermined, since every range of action and area of interest might build up a domain, to which a certain user or a certain teaching course refers. The Common European Framework for Languages (CEFR) identifies, for the general purposes of language learning and teaching, four vast domains:

- The personal domain, where the individual lives as a private subject, is focused on domestic life with family and friends, and is involved in individual practices, like reading for pleasure, keeping a personal diary, devoting himself to a particular interest or hobby, etc.

- The public domain, where the individual acts as a member of society or of some organization, and is involved in various kinds of transactions with different purposes.
- The professional or occupational domain, where the individual is involved in his job or profession.
- The educational domain, where the individual is involved in organized learning activities, mainly (but not exclusively) in an instructional institution. Linguistic competence, in time, becomes communicative competence as long as, following a circular process, the learner enlarges the range of the domains in which he uses the language, from the personal domain to the socially wider ones, improving his abilities of interaction with other individuals in the community, and engaging himself in achieving more specific purposes. Thus, communicative competence takes the shape of a progressive synthesis of both social and cultural experience which overcomes the conceptual borders of knowing the linguistic code.

The interest on situational usage of a language and the situational meaning makes obvious the preoccupation with pragmatic aspect. In this sense, Grice's distinctions and definitions must be recalled (Grice, 1957). Having as starting point Grice's contribution, Parisi has stated: "to understand the real purpose of a sentence, which can be different from what the words show, the listener relies mainly on the tone of voice (...) nevertheless, once again it is the context that helps to understand, in this and other cases (...). The context, that is the knowledge of the situation in which the sentence has been expressed, is used by the listener not only to find out the real purpose of a sentence (...) but also to find out further purposes that the sentence might have, in addition to the purpose communicated by the words (...) the comprehension of further purposes of sentences or super purposes is a fundamental aspect of the linguistic communication; understanding the immediate purposes of why the sentences are spoken, that is their literal meaning, is like staying at the surface of the exchange that actually takes place between two people talking" (Parisi, 1981). Of course, the teaching activity in glottodrama implies more nonverbal semantic markers. The classic teaching methods ignored all nonverbal aspects and focused on the rules, vocabulary and formal conversation. During the glottodrama courses, the drama teacher stages a real-life everyday situation while the second teacher

briefly presents the words and explains the basic rules. This activity takes place in the grammar corner away from the life-scenes. All the bedevils and emotions of the beginners disappear when they see two teachers involving themselves in acting and wearing new linguistic costumes which are adequate for other cultural contexts. This is true both for children and for adults.

From 1971, Paivio developed a dual coding theory (Language and Mental Imagery) that bases the cognitive process analysis on two devices, Image System and Verbal System, which are independent but interconnected and that elaborate information in different ways (Paivio, 1971). The first one would put together the specific components of different sensory modality (visual, auditory, tactile, olfactory, gustatory and kinaesthetic) into integrated units, the *imagens*, whereas the second would deal with the modality of the different linguistic information (phonetic and graphic), re-codifying them into auditory-motor form, the *logogens*, that is in the form into which, for example, we listen and perceive our inner dialogue when we talk to ourselves. Also the recording in the information memory would work in the same way, therefore it would be based on a double track.

#### **Individual with left emisphere dominance**

- He is more inclined to communicate verbally
- He has a rich and varied lexical repertory
- He formally recognizes the phonetic discrimination
- He has a limited control over prosodic elements of the language
- He hardly recognizes details in the incomplete figures
- He has more ability to decode a verbal input
- He has more ability to memorize abstract grammatical notions
- He prefers logic tasks

#### **Individual with right hemisphere dominance**

- He is less inclined to speak correctly and he is inclined to use bodily communication (gesture, facial expressions, etc.)
- He has a poor lexical repertory
- He find difficult to discriminate verbal sound
- He has a high control over prosodic elements

- He easily manages to complete a figure not completed in its details
- He has more ability to decode a visual input
- He has more ability to memorize concepts rather than grammatical structures
- He prefers intuitive tasks

The independence of the two systems implies that the two channels can work alternatively and simultaneously and in parallel as well, but not necessarily one neglecting what is happening to the other. In this way we can imagine a scene without necessarily describing it verbally, talk about something without experiencing any mental image, or we can do both, for example, when we verbally describe a familiar scene that we remember. These common experiences should represent the best evidence of the two systems' independence. But at the same time the fact that the information can easily move from one system to the other means that they anticipate also a connection form. This means that we can operate transformations or symbolic translations from one system to the other. The Image System is conceived by Paivio as an analogic system and of the same type would be the relationship between its representational units and the objects or the actual events perceived. On the other hand, the Verbal System works with discrete digital units that have an arbitrary relationship with the referred objects. Moreover, there would be a qualitative difference also in the way the information units are organized into complex units of higher level between the two systems. The Image System organizes them in a "synchronic" and "spatial" way, so that, for example, the different components of a scene are all available in the memory at the same time. An important implication of this organization is that it makes possible a high level of articulation and integration of multiple component based information. For example, the mnemonic representation of any domestic space is familiar to us, and it includes a huge number of information that is available in the same way. In other words, if asked, we can equally answer correctly regarding the position of the objects. We cannot utter all this information at the same time because this is a limit of our utterance system for verbal messages but they are available all the same in a synchronic way.

On the other hand, the verbal information is sequentially organized into higher level structures. And this is a consequence of the characteristics of the auditory and phonatory systems used in the reception and production of the spoken language. The linguistic units sequentially unfold over time and the theory claims that even the system that deals more directly with the “word” is specialized in some way in the sequential elaboration. The theory also assumes that both systems can transform the symbolic information and when this happens the modifications follow the structural characteristics of the two systems. So the Image System, from the visual point of view, is capable of transformations in the spatial aspects as size, form and direction, color, movement and ability to manipulate objects with “the mind’s eye”. The Verbal System, on the other hand, enables us to operate transformations over a sequential axis. In this way both systems are dynamic, able to transform the information even if in different ways. Both the *logogens* and the *imagens* would be organized in associative chains and the knowledge would consist in the operations with which we elaborate complex “molecules” of higher level formed by the two systems.

Glottodrama wants to challenge first of all a psycholinguistic and intercultural critical point found in different methodological solutions at more advanced learning levels as well, that is to say the difficult psychological switch from the perception of the foreign language as *other’s language*, peculiar feature of an extraneous community of native speakers, to the perception of the acquired language or foreign language as *my own language*, an element of my personal communicative resources to be employed even in strongly emotionally colored interactions, when it is necessary to free the linguistic creativity. This concept intends to put into practice a political-cultural principle established by the Common European Framework for Languages, according to which a real multilingualism can only be realized if the language learning process transfers the whole personality of the student into the new language and not only some aspects of it limited to particular domains of use. If this process is not completed, the possibility of a successful social interaction and personal autonomy are narrowed.

The goal is reached if the development of the linguistic competence is related to social context expansion of the use to such an

extent to cover the whole range of the communicative domains in which the learner participates. Otherwise the learner's personality will always be mutilated when using the second language and his freedom of social interaction could suffer. It is obvious that the learner/student develops a greater pragmatic competence due to this method. Understanding, speaking, reading and writing in a foreign language are developed in a very harmonic and balanced way. The intercultural commitment is stronger and the clear usage of the second contextual meaning of the words is ensured by these theatrical fictitious settings. During the classes these theatrical side is provided by a drama-teacher or a student from the University of Art. It is also very interesting to mention the best results obtained due to choices of poetic texts not very difficult to understand, but with a powerful and commanding musical and metaphysical effect and impact upon the learners, teachers and audience. It also stimulates creativity, emotions, perceptivity for all the human actors involved.

### 3. Conclusions

The theatrical catharsis proves its benefic and efficient function even in pedagogy. The classical methodology has become a pleasant, revolutionary and ludic interface between a foreign language and culture and the native language. This modifying method changes the cultural perspective and the behavior of the learners, teachers and audience. Art relieves emotional tensions and cut loose the power of expression and linguistic creativity.

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## **Chapter 14**

### **Media-encouraged gossiping – A dead of modern communication?**

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Modern civilization, characterized through high levels of complexity (Enăchescu et al., 2011) can be described as informational and communicational-based. The rapid development of communication technologies in the last half of the century interconnected both people and organizations in a way that has led researchers to talk about new communicational technologies and sciences (Mucchielli, 1999). Generally speaking, mass communications capture the hearts of the wider national public, influencing their thoughts and behavior, given that human beings are actually seen as communicational beings (Fejes, 1984; Vlăduțescu, 2013), but societies have changed so much recently that even the communicational system itself can be questioned; Bennett and Iyengar (2008) ask if we can talk about mass-media communication anymore in an increasingly fragmented society, in which people move towards nano-media communications, showing interest in micro-blogging news with low or no interest for the wider society, but, often, with high interest for particular segments of audience. As a matter of fact, we are witnessing a new paradigm in the way communication occurs: the mainstream communication is now doubled by a communication well targeted to specific audiences, made either by public organizations or by individuals themselves.

In the case of television, for example, mass communication is being replaced by a programming targeted to specific viewership segments (Webster, 2005). Hence, the mass audiences of once are now replaced by fragmented audiences. Nevertheless, although split into smaller communities grouped by interests, it is either mass-media or nano-media that serve as the channels through which information is sent to the public. Therefore, Schifirneț (2009) contradicts the view of Bennett and Iyengar (2008), claiming that modern societies are still strongly influenced by mass-media communications. Mass

communication, the author claims, is both the cause and the outcome of modernity. The emergence of new technologies has diverted mass audiences into small communities of interest, with less customers but, often, higher share of passion distributed around a topic. Such communities are also called communication networks.

Communication networks can be described as interconnected groups of information senders and receivers, who are collectively targeted by communication and who make decisions based on the same approach (Rogers, Kincaid, 1981). As such, a particularity of communication networks is information dissemination: the audience receives information and then discusses it as peers in the group. In this respect, dedicated communication channels have emerged. They stand out not only through the narrow focus on a particular topic, but also through what can be called “co-creation” of communication. One of the particularities of such communication networks is that they encourage close relationships between members and, hence, are prone to high levels of interaction. In this case, communication acts as an integrative factor (Bykova, 2013): people are brought together and encouraged to change information amongst themselves on a topic they have a genuine interest in. Given these circumstances, Hedetniemi et al. (1988) find out that communication networks are strongly related to gossiping. Hence, it is interesting to observe that the emergence of modern technologies that have enabled the widespreading of communication has led to a rise of gossiping in modern society.

Gossiping can be described as an act of communication where each individual possesses a unique piece of information which he then further communicates to the others. Similarly, Pelc (1996) regards gossiping as information which is initially held by a „source” - the one person of the network who first gets access to that particular information. Next, the piece of information has to be communicated to the „receivers”, the other nodes of the network. However, gossiping does not resume only to this task, but involves a wider social encounter: gossiping means putting the pieces head to head in order to let the network gain understanding of the bigger picture. Pelc claims that not only one, but more members of the network, if not all of them, hold information that has to be communicated to the other nodes. Therefore, two of the particularities of gossiping in communication networks are large-scaling and dependability: members depend on

gossiping received from their peers in order to be able to create a picture of the whole (Tang et al., 2005).

Mass-media induced gossiping has been encouraged by the mixing of the public and private spheres. It is a given of modernity that mass-media tries to transform private lives in public subjects of discussion; both celebrity and ordinary people become subject to the curiosity of media and its wish to draw higher audiences (Landert, Jucker, 2011). In many cultures, such media portrayals of private or public figures are the main source of information and main catalyst of gossiping in communicational networks (Ramasubramanian, Murphy, 2014). This could also lead to the incarnation of populist behavior in societies (Drămnescu, 2014). The infusion of mass-media communications into the private lives has led to a questioning of the role of media: is mass-media a facilitator of communication, or does it rather force particular communications between the members of networks? Adversaries may even talk about „media-driven” communities or societies (Mazzonleni, Schulz, 1999), in which media tries to dictate the perceptions and choices of the individuals. It comes as no surprise that mass-mediated gossip is nowadays used as a tool of persuasion (Hafez, 2009). Influencing people to gossip serves as a model to social control. As mass-media has a high potential to influence the human psyche, its ideas are easily received and adopted by the members of the audience. Therefore, it is often not difficult for institutions, and even states, to succeed in brainwashing people through encouraging them to gossip around a pre-launched topic. Once encouraged to discuss on that topic, people concentrate their powers on that issue and pay less attention to their own thoughts and behaviors. Therefore, Engle Merry (1997) believes gossip has the power to control behavior of individuals.

The more media communications develop, the more prone they are to gossiping. According to Pelc (1996), the growth in size of communication networks increases their vulnerability towards failure, and, consequently, encourages gossiping. Growth in this case can be measured by different values: number of broadcasters, running time, or number of transmissions. Not surprisingly, all three components have enlarged over the past couple of decades, which means that more, varied information is now communicated to the public. As the public cannot cope with the huge amount of information being set,

individuals will only pay attention to particular pieces of information which arrive at them based on preferences.

Hereof, a change can also be seen in the production of communication aimed at the public. No longer are communications internally controlled, but the participation of customers in what can be called „co-created” communications, or what Bacile et al. (2014) call „consumer-contributed media”, is encouraged. Gossiping, which is a form of such „consumer-contributed media”, plays an active role in the creation of communication. Organizations – either media organizations, business organizations, or of other types – communicate to their customers through none else than the customers themselves. By gossiping, the audience actually creates information which is then shared with the others with the help of media communication channels, either mass-media or social networks. Regarding the latter ones, the rapid developments in IT&C witnessed recently have resulted in the increased access to internet and in the digitalization of communications. With the help of convenient software, customers are encouraged to gossip. In the online space, gossiping is all about chatting with others around a topic that has been previously launched over the media, and, from here on, to develop new pieces of gossip/information. Hence, gossiping can be described as the creation of content that can be communicated over the world wide web.

Modern society will probably witness a raise in gossiping, as people are continuously directed towards websites where they can enhance their communication (Vlăduțescu, Ciupercă, 2013). Television and radio shows encourage their viewers to access dedicated internet pages where they can chat even after the show has ended. Similarly, news websites have been turned into real forums, where users can comment on posts, not to mention the impact such comments and shares have had in social media. Therefore, media-gossiping may probably become a central piece of media-communications in the next years.

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# **Chapter 15**

## **Teaching - communication barriers. Analysis and solutions**

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**Abstract:** The entire educational process is mediated communication and conditioning. Communication is specified according to level, content and final. For a sustained and efficient educational system, it is necessary that the message to be transmitted and perceived in optimal conditions, thus eliminating any barrier. However, there are always communication barriers, more so in educational communication, given the specific diversity of the educational system, its dynamics in relation to social change and labor market requirements. In this article, we did a theoretical analysis of the barriers to communication have advanced teaching and potential solutions.

**Keywords:** communication, education, communication barriers, performance, innovation

### **1. Introduction**

General theory of communication states that any communication is to displace information from one element to another, when it comes to the same system, or a system to another when it comes to different systems. The first was concerned with the modern theory of communication was N. Wiener (1948), which established its general terms or factors (transmitter, receiver, transmission channel, etc.).

Verbal communication is the most studied form of communication. It is human specific, has orally or in writing and, according to it, using visual or auditory canal. The information is encoded and transmitted by word and everything that you by appearance phonetic, lexical, morphological. Hearing is the maximum receptions: the person not only hears what he was told but thinks on this. In developing a culture of communication, so persuasive speech, verbal aggression and size are prerequisite respected by the teacher.

Persuasive speech is defined as the art of addressing someone with conviction. Persuasive language, is by itself, the expression of care and respect for the dialogue partner. Also important is to diminish aggression; it is what is opposed to trying to manage our own irritation. In the state of irritation every replica can generate conflicts. Therefore, we must be careful of conflict lines like: warning, counsel, referring to a debt, questioning motives for understanding behavior, calm denial, giving up to discuss the issue, offensive nicknames.

## **2. Barriers in pedagogic communication**

Pedagogic communication is a complex transfer information between two entities that assume roles simultaneously or sequentially transmitter and receiver, meaning the content desirable in the context of the educational process. Communication involves teaching a feedback type interaction on both explicit explanations and those adjacent intentional or formed during communication. The notion of communication implies a certain reciprocity, is more general and comprehensive than information, this communication is only one aspect. Communication involves a circular process that falls within a certain temporality that takes into account that in turn a shape.

Differentiation communicative skills of language forms the criterion used is based on some natural availability that an individual may have to operate with ease in a register or another in the act of communication. Actually some people more easily express themselves orally, in writing and some others have a very good intuition to explore visual communication situation. The availability can be developed using native tools of communication sciences obtained. Teaching communication by its feature of instrumentality, achievement involves the inverse. Retro action is the main way that allows adaptation interlocutors, one another, the situation and the objective pursued. Acting as any system structure, communication is based on the principle that involves balancing and efficient reverse action structures adaptive dimension is obvious. Differentiation and delineation of forms of self is determined by the sign of action, connection, output, and input-output transformations introduced by the nature of the system status. Thus, we distinguish self-regulation based on feedback and self-regulation based on feed-before. In the first case, the correct information is provided by the results (effects)

real, immediate action (behavior); in the second case, this information is extracted from the results anticipated mounted (action plan run on ideal possible outcome is recorded, it evaluates the information obtained is used either to confirm the action, or to correct them).

For the communication to be effective it is necessary to take into account all the factors involved. Communication barriers can arise from both the transmitter and receiver and the environment, the context. There are a number of obstacles that can lead to disruption or alteration causes the message.

Communication Teaching is a complex transfer of information between two entities that assume roles simultaneously or sequentially transmitter and receiver, meaning the content desirable in the context of the educational process.

Barriers in communication occurs when the receiver receives the message communicated or not misinterpret the meaning that the sender wanted to give him. The purpose of communication is to study the causes that cause these phenomena. Barriers can be found in any communication system, and therefore it's fair to say that the message is never sent message reception. Ideally, everything is delivered to and received, but this practice is impossible because everything in intentions transmitter receiver lies in expectations, everyone having their own reference frame (and limited) and the meanings of the communicating that differ from individual to individual.

Barrier means anything, phenomenon or condition which reduces the efficiency and reliability of message transmission.

Barriers in communication can be determined by: defective mental / physical participants; different cultural models; previous experience different or contrary; strategies and different roles; prejudices; attitudes; false perceptions; distrust, lack of credibility; negativity in attitudes and behavior; emotional charge of the message; inadequate form of transmission; wrong time for communication; insufficient range of communication; features of the environment.

Educational communication process as part of the communication process itself, encounters the same obstacles that may arise and change, disrupt or block any communication process.

According to some authors, the most common barriers to communication are:

- uncertainty over the content of message - present mainly in oral communication, but also in the media;
- handling - truncated communication of messages, hidden meanings;
- assumptions residual and false assumptions that may lead to the perception of different meanings intended by the sender. The reality is perceived differently by each individual.
- Incompatibility views belonging to source and receiver - is because choosing a wrong message or an improper receptor;
- Camouflage - communication intentionally ambiguous to lead to a misinterpretation of the message;
- Interference - events related to the nature of the environment or the presence of other stronger sources and may disrupt the attention of the receiver;
- Lack of communication channels;
- The target becomes the source of the same message - the same message receiver becomes transmitter, but another receiver, there is a distortion of the message;

In the specific educational communication relationship are other barriers. For them Communicator - source at the receiver can produce a loss of meaning in relation to the initial attitude.

Loss of educational communication process is due to several differences between the transmitter and receiver: the difference system of knowledge, differences in role, emotional state, motivation, social status, personality traits.

These differences, if not taken into account by the teacher, and they can turn into barriers that can lead to serious disruption of the educational communication. The most common barriers are likely objective, personal and psychosociological.

Among the barriers to such objective phenomena are observed in relation to fatigue overflow student or because transmission of a message is too long, too redundant, which is lost at the receiver, in this case when it comes to student. Also in this category we also understand the message difference that occurs at the two poles (educator - educated), which may be influenced by culture and experience both communication partners.

Personal characteristics give the opportunity of a psychological view of both teacher and student.

Caregivers in relation to communication with the student with the skills, habits, verbal or nonverbal his tics and even disposal of the moment. These elements give the note to strictly personal communication. Binomial relationship communication education suffers if the teacher presents negative personality traits, which can sometimes lead to blocking of the communication act. Stubbornness, negativism, rigidity are items that, if found in the personality of the teacher, the learner induces message.

In terms of psychosocial role requires and it takes two actors communication - educator and recipient of the educational process - it can transform the communication barrier. Because the exchange of roles is continuous, so the teacher and the student, distortion may occur in the communication, if developed roles they are not compatible. Transmitter too uptight behavior can lead to conflict situations and develop defensive behavior of the receiver (student), which can turn into indiscipline.

These barriers are added others such as: noise, stress, invasion of personal space, language, etc.

Teaching skills, ability-centered pedagogical activity is reflected in the style of communication with students. The style consists of all general and specific action procedures allowing optimal use of the qualities and abilities of the person, as they compensate for the drawbacks.

In it combines content and formal characteristics - personality dynamic staff, both influencing the pedagogical communication.

Barriers in communication occurs when the receiver receives the message communicated or not misinterpret the meaning that the sender wanted to give him. The purpose of communication is to study the causes that cause these phenomena. Barriers can Figas any communication system and therefore it's fair to say that the message is never transmisnu message reception.

For effective communication must comply with a number of rules such as:

- Use messages to the person I focus on what feels transmitter and party behavior, preventing defensive communication relations. The communication process is complete, it can communicate emotions and describe behaviors without making evaluations and personal attacks;

- To be spontaneous in expressing personal opinions, not to impose our views. Handling is also a form of communication but a message of non acceptance and confidence in the decisions made.

- To listen carefully for active listening is a way to listen and respond, leading to improved mutual understanding and overcoming barriers to communication. Empathic communication contains messages of understanding, compassion, and affection for the party.

- To avoid stereotypes and prejudices as leading to negative opinions about others, are the causes that lead to discrimination and even violence.

- To use messages that help in finding alternative party, new possibilities to solve a situation. Sometimes the advice is perceived by the other person as an insult to his intelligence as a lack of confidence in his ability to solve the problem.

- Do not criticize the party. Criticism does not necessarily change the other person.

- To avoid threats and punishments. Insisting on a sentence to solve a problem or situation, it will generate negative feelings;

- Not be moralize because it causes feelings of anxiety, resentment and blocks stimulates sincere expression of the other person;

- Take into account the factors sentimental, to try to convince the logical argument without leading to frustration, not blocking communication;

- Do not we show superiority because it causes a poor relationship communication. Equality means unconditional acceptance and respect for each person, regardless of their culture or training;

- To use paraphrasing but not very often, it is a method that aims to clarify the message, communicate more effectively.

- To give the opportunity to explore alternatives using brainstorming, reflective listening, discussing possible outcomes of choosing one of the alternatives, etc..

- Diversion tactic to use when you want to change the conversation from the other person's concerns to their concerns;

- To read body language, focusing attention on key factors: facial expressions, tone, body posture and gestures.

In conclusion we can accept existing barriers in communication teaching as an integrated phenomenon educational process, their presence always represent a challenge for specialists in the field but the same type as an element defining each dynamic system, which is in continuous development. That is why we consider absolutely necessary preoccupations on teaching communication because the domain practitioners, teachers must manage delicate situations to lead the work done to the purpose proposed. Communication skills have become a primary concern today and studies in this area are proving a real utility.

### 3. Conclusions

In this paper we reported the phenomenon of communication barriers but also because this debate ramen open communication is a permanent process and the variety of contents will generate new and meet new barriers which need to come up with solutions.

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## HIGHLIGHTS

Our thesis is that communication has several sources. Some may be considered as main sources or constitutive sources from which communication springs, and others may be considered as secondary or complementary sources of communication. We can thus acknowledge eight main sources of communication: rhetoric, persuasion, psychology, sociology, anthropology, semiotics, linguistics and political science. Rhetoric is the first and oldest discipline which studied certain communication phenomena; rhetoric has outlined a proto-object of communication. Sociology is the most powerful source of communication methodology: sociology has supplied most of the theories and methods that have led to the discipline of communication growing autonomously. We assert that secondary sources of communication are: philosophy, ethics, pragmatics, mathematics, cybernetics and ecology.

### **Florentin Smarandache & Ștefan Vlăduțescu**

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Our thesis is that communication has several sources. Some may be considered as main sources or constitutive sources from which communication springs, and others may be considered as secondary or complementary sources of communication. We can thus acknowledge eight main sources of communication: rhetoric, persuasion, psychology, sociology, anthropology, semiotics, linguistics and political science. Rhetoric is the first and oldest discipline which studied certain communication phenomena; rhetoric has outlined a proto-object of communication. Sociology is the most powerful source of communication methodology: sociology has supplied most of the theories and methods that have led to the discipline of communication growing autonomously. We assert that secondary sources of communication are: philosophy, ethics, pragmatics, mathematics, cybernetics and ecology.

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**ISBN 978-606-11-4226-2**



**ISBN 9781599739847**

