

Business Administration and Business Economics

**The Evolution of Turkish-EU Relations
and an Evaluation of its Future**

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Abstract: Turkey's relations with EU (EEC, EC) is analyzed, not from a perspective of chronological listing of events, but from the perspective of determining the changes over time in opinions of major groups and political parties about the full membership of Turkey into the EU. In Turkey, until 1980s, center-right groups and political parties were generally in favor of developing the Turkish-EEC relations, while center-left, as well as radical left and radical right were against it. In the 1990s and 2000s, center-left groups and political parties changed their perspective and also worked effectively for the development of Turkish-EU relations. During the earlier decades of associate membership, generally the EEC (except Greece) was more open to Turkey's full membership into the EEC. However, the full membership was seen to be dependent on time due to concerns about the relative economic backwardness of Turkey. But since 1990s and 2000s, as the EU both enlarged and also deepened, opposition in the EU to Turkey's full membership increased, mainly due to criticisms about the lack of human rights and democracy in Turkey besides economic problems. Over time, the center-right groups and political parties in the EU became skeptical about Turkey's full membership because they believe that Turkey, a Muslim country, has a different, non-European mentality (religion and culture) and hence, would not fit into the EU. The EU's center-left, as well as Greens and Liberals, however, think that as long as Turkey would meet the political and economic criteria of the EU she would be accepted as a full EU member, irrespective of her mentality. In Turkey, on the other hand, many intellectuals believe that the EU was and still is not fair and objective towards Turkey in the Cyprus issue, as well as in the PKK terror, and also in the 1915 Armenian problem. Thus, the willingness in Turkey to join the EU as a full member has decreased, as well, and as a result, Turkey slacked her efforts at reform and instead strengthened her economic and political ties with Muslim countries. Therefore, even though almost half a century has passed since the 1963 Ankara Agreement, which established Turkey's associate membership open to full membership into the EEC, Turkey's full membership into the EU looks more difficult than ever and pushed further into the far future, if not lost completely.

Keywords: EEC; EU; full membership; associate membership; customs union

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1. Introduction

In the half century that passed since 1959, when Turkey applied to the EEC, the opinions and views of many political parties, important social and political groups both within the EEC countries and in Turkey have changed radically. The EU today as comprised of 27 member countries, and especially some of the major driving forces within the EU consider Turkey's membership as still a very long process, well past the year 2014 as was originally anticipated. In fact, there is a sizable probability that Turkey may never become a full member, as N. Sarkozy, present president of France, is fond of declaring at every opportunity.

There are many references, which analyze Turkey's relations with the EU in a chronological and systematic fashion (e.g. Karluk 2007) or Turkey's relations with the West in general, that is, both with the EU and the USA (e.g. Kramer 2000). However, the aim of this study is not so much a chronological survey and analysis of events concerning Turkish-EU relations, but rather a survey of the views of major political parties, social and political groups both in the EU and in Turkey about Turkey's full membership and the changes in their views over time. This analysis also leads to a conclusion about the future of Turkey's EU membership.

2. The Beginning of Relations: 1959-1980

2.1 Views in Turkey Concerning EEC Membership

Turkey, following Greece, applied to the EEC in 1959 when Democrat Party (Demokrat Parti: DP), a center-right party, was in power and Adnan Menderes was PM. But due to the military intervention in 1960 the negotiations were stalled (Hiç 1972, Hiç 2008, Karluk 2007). After returning to democracy two years later, the negotiations were restarted and Ankara Treaty was signed in 1963 to become effective in 1964, giving Turkey associate membership status and opening the possibility of full membership. This was parallel to the associate membership status given to Greece – except that later developments proved that Greece was the “privileged” associate member and Turkey the “unprivileged”.

It is most informative to note the government in power in Turkey in September 1963, when Ankara Treaty was signed. İsmet İnönü, chairman of Republican People's Party (Cumhuriyet Halk Partisi: CHP) was the PM of a coalition government, which included New Turkey Party (Yeni Türkiye Partisi: YTP), Republican Peasants Nation Party (Cumhuriyetçi Köylü Millet Partisi: CKMP) and

some independent MPs who had resigned from Justice Party (Adalet Partisi: AP) led by Süleyman Demirel. The coalition partners YTP and CKMP, as well as AP, the party in opposition which eventually proved as the true successor of DP, were all center-right and in favor of Turkey's relations with the EEC. CHP in 1963 had not yet endorsed center-left philosophy. In 1966, however, İnönü, in view of the seemingly widespread leftist philosophy among university students, young people, intellectuals and bureaucrats, and also influenced by leftist Bülent Ecevit, then young general secretary of CHP, declared that CHP would own the principle of left-of-center. He was also careful to defy Marxist socialism. In 1972 İnönü was outvoted by Ecevit for chairmanship of CHP (YKY 1998: Vol. II). Thus, center-left CHP, in actual practice, became radical left and assumed a definitely negativistic attitude towards Turkish-EEC relations. This was witnessed even earlier in 1969 when Demirel and AP was in power, İnönü was then chairman of CHP, the main opposition party: On that year the 5-year preparatory period with the EEC, which was actually lengthened to 9 years due to military intervention, had ended and Demirel did not want to use the option to prolong it for another six years but rather enter the transition period such that obligations were assigned to both Turkey and the EEC. The decision to enter the transition period was taken on Dec. 9, 1968 by the Associate Membership Council and the Annexed Protocol, which was drawn and accepted on Nov. 23, 1970, was to become effective de jure on Jan. 1, 1973; but its economic rules began to be implemented by beginning of 1971. According to the Protocol, for Turkey the obligation was basically to gradually lower the customs taxes on EEC industrial imports and to comply with the Common Customs Tariffs for third party countries within two lists, one within 12 years the rest within 22 years. The EEC would immediately drop down to zero customs taxes on manufacturing imports from Turkey. Furthermore aid from the European Investment Bank was also assigned (Karluk 2007). Those in Turkey skeptical about Turkish-EEC relations, however, pointed out that Turkey's manufacturing exports to the EEC did not amount to much. Thus, contrary to Demirel's decision, CHP and İnönü insisted on using the option of prolonging the preparatory period which assigned no obligations to Turkey. CHP and İnönü had already endorsed left-of-center in 1966, earlier than 1969 (Hiç 1972, Hiç 2008, Karluk 2007).

After oil price rises by OPEC in 1973, Turkey's balance of payments started showing strains. Therefore, in 1976 when First National Front Government led by Demirel was in power, he felt obliged to stop complying with customs obligations

for two years. But when CHP was in power in 1978 and Ecevit was the PM, he froze Turkey's obligations for five years (Karluk 2007, Hiç 2008). His real intention at the time, however, was likely to freeze Turkey's relations with the EEC for good. All this took place when, in 1975, following the ousting of the military junta and reentering democracy, Greece had applied for full membership and was accepted by the EEC in 1978 with the weight of political factors rather than economic. Greece became a full member in 1981 (Karluk 2007, Ülger 2005, Hiç 2008).

Ecevit at the time had developed an interesting slogan concerning the EEC (Common Market, which has a double meaning in Turkish as "partner's market"): We are the "market", and they (the EEC) are the "partners", implying "exploiters". Evidently, this much negativistic attitude towards the EEC by center-left CHP led by Ecevit did not quite conform with İnönü's decision in 1963 to sign the Ankara Treaty; neither was it "center-left" but rather, "radical left".

In general, the center-right political parties were always in favor of developing Turkish-EEC (EU) relations. They were also in favor of Turkish-USA relations, in favor of NATO, encouragement of private enterprise and flow of Direct Private Investments (DPIs). The center-left CHP, on the other hand, was not only negativistic towards the EEC but until 1980s also against the USA, against encouragement of the private sector and DPI flow, and they were intensively étatiste. Thus, although CHP and Ecevit claimed they were center-left like many bureaucrats and intellectuals, in fact, at the time, they adhered more to the ideology of radical left.

The views of radical religious right National Salvation Party (Milli Selamet Partisi: MSP) led by Necmettin Erbakan were similar: MSP was staunchly anti EEC, anti USA, anti big business in İstanbul but pro religious, smaller entrepreneurs and manufacturers in Anatolia, and also definitely anti DPI flows. When Hayrettin Erkmen, the Foreign Minister of the AP minority government, backed by MSP, MHP (Milliyetçi Hareket Partisi: Nationalist Action Party) and DP (Demokrat Parti: Democratic Party) from outside, started preparing to apply for membership to the EEC, MSP immediately threatened to side with CHP, throw the proposition off and hence throw the minority government of AP out. Upon this threat in early September 1980 Demirel sacked his minister of foreign affairs and dropped the idea of applying for EEC membership (YKY 1998, Hiç 2008).

Nationalist Action Party (Milliyetçi Hareket Partisi: MHP) led by Alparslan Türkeş was radically nationalistic right. They too were against the EEC, the USA and DPIs; but during both the First and the Second National Front governments as well as the minority AP government led by Demirel, they sided with Demirel's views as a balance against MSP.

All throughout, big business in İstanbul, represented by TÜSİAD (Turkish Industrialists and Businessman's Association) and also TOBB (Union of Chambers of Industry, Commerce and Stock Exchanges) in Ankara, representing mostly the Anatolian entrepreneurs were all in favor of developing Turkish-EEC relations; so were the organization of small businesses and tradesmen and also the Union of Chambers of Agriculture. All of the above preferred center-right economic policies and approaches instead of the negativistic attitude towards the EEC, USA, DPIs; they were also against CHP's preferred economic regime of intensive étatism.

TÜRKİŞ, the confederation of labor unions representing the majority of workers was also in favor of center-right views. DISK, a confederation of leftist unions who had been actively involved in many actions of radical leftist youth and other leftist organizations, was in general also pro EEC. The majority of university youth, a significant number of high level bureaucrats and intellectuals were, in contrast, radical left and anti EEC.

It is interesting that although the majority of the Turkish population and power centers were center-right and in favor of developing Turkish-EEC relations, Ecevit, was, however, popular as a sincere and honest person while many bureaucrats, people in power and most of the intellectuals were leftist and leftism looked promising for future. Therefore, Ecevit could come to power twice during this period and thwart Turkish-EEC relations, particularly in 1978.

The period of left versus right came to an end on September 12, 1980, when there was a military intervention on account of increased terrorist activities and the unwillingness of both CHP and AP to cooperate in order to solve the issue by democratic means.

2.2. Views in the EEC on Turkey's Membership

To answer the question how the EEC countries viewed Turkey's membership prospects in the period 1959-1980, the political conditions of Europe as well as the economic and political conditions of Turkey at the time should be briefly

recapitulated. When the Rome Treaty was signed by 6 nations (Belgium, France, Germany, Italy, Luxembourg and the Netherlands) in 1957 establishing the EEC, though embodying political and economic ambitions, was, in actual achievement, not much beyond a customs union. It faced competition and rivalry from EFTA (European Free Trade Area) although customs union was definitely a much more intensive economic integration compared to free trade area. But no one could be sure of its great success at the time EEC was established. At the time, the number of democratic countries in Europe was limited. Spain and Portugal were both under military dictatorship. Balkan and East European countries were all under the dominance of USSR and it seemed there would be no end to this domination. So Turkey as a democratic country did carry a positive political weight for EEC.

However, when viewed from the perspective of the EEC countries, Turkey also presented some serious problems: The main problem was economic, in the sense that she was very poor compared to the EEC countries. Its per capita GNP was far below that of EEC. Turkey also implemented basically a closed-economy, import-substitute industrialization model with excessive interventionism and protectionism (Hiç 1979, Okyar and Aktan 1976). Furthermore, Turkey had a very large population. This raised fears of a rush by Turkish workers seeking work in the EEC when free movement of workers is granted. Foremost Germany, but all EEC countries which had already received immigrant Turkish workers, were not quite happy with them because Turkish workers (the first generation) resisted to adapt to German or EEC lifestyle and generally failed to learn the language of the host country. Therefore, even though the EU on the whole looked positively on Turkey's application for associate membership following Greece, it took precautions in the Ankara Treaty signed in 1963 and the Annexed Protocol signed in 1973 to allow time to Turkey to progress economically. This involved first starting with a 5-year preparatory period; the option of prolonging it for 6 years before passing on to the transition period of reciprocal obligations and targeting customs union in 12-22 years. The EEC waived later the date that allowed free movement for Turkish workers, which had initially been set at 1986.

United Kingdom, a founding member of EFTA had applied to the EEC for membership but was negatively received by Charles de Gaulle of France. Finally, however, United Kingdom became a member in 1972. Similarly, Ireland and Denmark also former EFTA members, joined the EEC in 1972. Norway had also been accepted by the EEC but since public referendum held in Norway was negative, Norway ceased to pursue membership. But the process showed that by

1980 EEC had already become strong, 3 members were added to EEC in 1972 and with Greece becoming full member by 1981 the number of members had gone up to 10 (Karluk 2007, Ülger 2005).

2.3. The Cyprus Problem

In the early 1970s, Cypriot Greek guerrillas under Sampson had started slaughtering Turkish Cypriots, while Greece demanded annexation of the island to Greece contrary to London and Zürich agreements. Similar killings of Turkish Cypriots by Greek Cypriot guerrillas and Makarios' unwillingness to comply with the Zürich agreement had been encountered in 1963 also. It had given rise to rioting of Greek shops in İstanbul in 1964. Upon the steps taken by İnönü, then PM, U.S. president L. Johnson had warned Turkey not to engage in a military action in Cyprus (YKY 1998: Vol. II).

In 1974, during a short-lived coalition of CHP with National Salvation Party (Milli Selamet Partisi: MSP) led by PM Ecevit, Chairman by that time of CHP, first sought a political solution or else a joint military action by the three guarantor countries, Turkey, Greece and U.K. Since his attempts were of no avail, he felt compelled to implement a military intervention by Turkey alone, thereby securing the lives of Turkish Cypriots in Northern Cyprus. In retaliation to Turkey's military action, however, the USA imposed a military embargo on Turkey (YKY 1998: Vol. II). Later Greece overthrew the military junta, applied for full membership in 1975 and was accepted as a full member in 1976 to become effective in 1981. Greece was accepted as member because of political reasons in spite of her relative backwardness (Karluk 2007, Ülger 2005, Hiç 2008). Thus, Turkish-EEC relations received a serious setback due to the Cyprus issue and the "unjustified" acceptance of Greece to the EEC.

3. Revival of Relations: 1983-1999

It is interesting to note that during 1980s and 1990s all the major political parties in Turkey, both center-right and center-left, were in favor of developing Turkey's relations with the EEC (later EC, EU). And they all took effective steps to promote this relationship. There also were political parties, both radical religious right and radical nationalist right, not quite at ease with this development, but their effectiveness was limited.

3.1. Reviving Relations with the EU after 1980 Military Intervention

The military administration got a new Constitution accepted by referendum in 1982 and subsequently allowed general parliamentary elections in 1983 but under tight controls and veto power concerning MP candidates. Turgut Özal and Motherland Party (Anavatan Partisi: ANAP) won those elections. The first task Özal found before him was removing the unilateral ban on complying with customs obligations Turkey had to undertake per conditions of the Annexed Protocol that had been imposed by CHP and Ecevit in 1978. The second was restarting political relations with the EEC.

Özal tried to change economic regime away from interventionism and protectionism and to move towards the market economy. This involved import liberalization, dramatic reductions in customs taxes on imports which were at prohibitive levels and had given rise to black-markets and contraband imports, removing or reducing high export subsidies, shifting to market determination of the exchange rate instead of daily adjustments by the Central Bank. The change in economic regime towards market economy was compatible for Özal's government to restart with a unilateral decision to comply with Turkey's customs obligations (Karluk 2007, Hiç 2008). Özal also introduced a privatization program for State Economic Enterprises (SEEs). He encouraged DPIs more thoroughly, allowing them to enter all fields, including agriculture, finance etc., and also allowing them to hold the controlling share in the firm they bought or established. He disallowed SEEs to go into super-structural fields, but only to infra-structural, while private capital was also allowed into infra-structural as well as super-structural (Hiç 2008). Özal's policies were, in fact, further development of the 24 January 1980 economic stabilization program backed by IMF, undertaken by Demirel's minority government period. It had been successfully managed by Özal during that period. The program was continued after the September 12, 1980 Military Intervention by Bülent Ulusu government in which Özal served as minister responsible for the economy.

But as against these positive steps Özal let inflation to rise out of proportions to be able to finance and to complete the needed social and productive infra-structure. All of the above sounds sensible enough except for major social or political drawbacks that became widespread during Özal era: The first was increased corruption, including nepotism. The second was the rise in religiosity, strengthening of the tarikats (religious sects) and strengthening of "Islamic Green" industrial and financial capital. These mistakes were not corrected but compounded

by political parties that came to power after Özal. This includes corruption during DYP and ANAP governments and corruption and religiosity during the RP-DYP coalition and the AKP government. Still, Özal's attempts in the economy formed the first fundamental step of making Turkey's economic regime and its structure compatible with the EEC.

The second task Özal had to undertake, that is, to remove the ban on political relations, proved more difficult. The EEC at the time, in particular, Liberals, Social Democrats but also Conservatives and Christian Democrats in the European Parliament all considered that democratic and human rights conditions in Turkey were insufficient to remove the ban and they looked for moves in the direction of improving democracy and human rights. But it was not quite within Özal's power to improve democracy due to the opposition of the military and president Kenan Evren. Özal thought of removing the 5-year ban on former political party leaders which included Demirel (former AP and present DYP: True Path Party: Doğru Yol Partisi), Ecevit (former CHP and later DSP: Democratic Left Party: Demokratik Sol Parti), Türkeş (MHP: Nationalist Action Party: Milliyetçi Hareket Partisi), Erbakan (MSP and later RP: Prosperity Party: Refah Partisi). Instead of doing so simply by passing a law to that effect in the parliament, he argued that the bans had been imposed by public referendum (as addendum to the 1982 Constitution) hence he should call for a referendum on September 6, 1987 to remove them. But during the campaign for the referendum he campaigned intensively against a "yes" vote. The result, however, was that the referendum was accepted by a thin majority and the bans were thus removed (YKY 1998: Vol. II, Hiç 2008).

It should be stressed here that Özal came from the religiously oriented MSP which was staunchly anti EEC, but he had a center-right philosophy in economic regime and in international relations. For instance, though he was a "radical reformer" concerning economic regime, his reforms were all center-right. Thus he was in favor of moving to market economy, outward orientation of the economy, encouragement of private enterprise and of DPIs and privatization. Similarly in international relations he was in favor of developing Turkish-EEC relations and took significant steps in that direction. He was also pro NATO and pro USA.

Similar to ANAP, DYP was also center-right and hence in favor of developing Turkish-EEC relations and upheld an economic program similar in principle to that of ANAP. DYP began to be chaired by Demirel after the ban was removed in 1987.

3.2. Turkey's Application for Full Membership

Since Özal had practically nothing important in his power to improve democracy, he thought of a novel idea to open up political relations. On April 14, 1987 he applied to the EEC for full membership directly based on the Rome Treaty which recognizes such an application as the natural right of any European country under the democratic system. Contrary to fears in Turkey, the EEC decided to discuss this application. The EEC replied in 1989 that since they had entered a new era of establishing a Single Market they did not consider taking any new members (read to mean Turkey) before this step was concluded. The Single European Act that established the Single Market was devised in 1985, enacted in 1986, and became effective in 1987, the delay due to a lawsuit brought by Ireland (Karluk 2007). But by 1986 EEC had already accepted both Spain and Portugal, which had both just shed their dictatorship. The EEC's decision to accept them as full members was again more politically motivated than economic, especially for the case of poorer Portugal. The political aim was to keep both countries from falling back to dictatorship again. Both Spain and Portugal fared exceptionally well in terms of economic progress after they became EEC members.

The EEC rejected Turkey's bid for full membership based on the Rome Treaty. The Commission advised on December 18, 1989 that political relations with Turkey could be restarted based, in principle, on the Ankara Treaty and associate membership. Even this advice was not put into effect because a report on Turkey (Matutes Report) pointed out that it could not be applied until the aims of the Single Act (Single Market) is reached by 1993. It was merely noted that Turkey was "qualified" to become a member (Karluk 2007). Özal himself was well aware of the difficulties involved in becoming a full member, which he expressed in terms used by an old Turkish minstrel: "We are on a long thin path..."

3.3. Center-Left Parties Involved in Developing Turkish-EEC Relations

What was pleasantly surprising was that unlike in 1960s and 1970s when the so-called center-left CHP was influenced by radical left and hence was anti EEC, anti USA, anti private investments and DPI flows and preferred an intensively étatiste economic regime, the major center-left parties during 1980s and 1990s, both SHP and DSP, although both had CHP roots, were genuinely center-left and not radical left. Hence they were in favor of developing Turkish-EEC relations and were also in favor of NATO, USA, private sector, DPI flows and market economy. Both SHP

and DSP played important roles in developing Turkish-EEC relations during 1980s and 1990s.

Social Democrat People's Party (Sosyal Demokrat Halkçı Parti: SHP) was formed in 1985 by the merging of two center-left parties Social Democrat Party (Sosyal Demokrat Parti: SODEP) and People's Party (Halkçı Parti: HP). Erdal İnönü, former chairman of SODEP was elected chairman of SHP. In principle, SODEP stressed democratization, individual freedoms and equality. It aimed at correcting distortions created by the market economy, not reverting from market economy and maintained only that some strategic sectors should remain under government production. It was however, in favor of NATO, and later effectively acted in favor of Turkish-EEC relations.

Democratic Left Party (Demokratik Sol Parti: DSP), another major center-left party that played an important role in the 1980s and 1990s was established late in 1985 following SODEP. It was under de facto Ecevit's leadership but since he had the political ban, Raĥan Ecevit, Bülent Ecevit's wife had become the chairwoman. Ecevit was brought to chairmanship in 1987 after the political ban was removed by public referendum. It is interesting that Bülent Ecevit in the 1980s and 1990s had entirely shed the radical left influences of 1960s and 1970s of being anti NATO, USA, EEC, private enterprise and DPIs and had become a genuine center-left similar to SODEP. And DSP too played an important role in 1990s in improving and developing Turkish-EEC relations – a very far cry from his 1978 decision and slogan.

3.4. Customs Union with the EU

A coalition was formed in 1991 between DYP led by Demirel which came out first in the elections, and SHP led by Erdal İnönü which came out third. This coalition was in stark contrast with the adversary attitude between AP led by Demirel and CHP led by Ecevit during the 1970s. After Özal died in April 1993, Demirel was elected president in May 1993, leaving the leadership of DYP and PM position to Tansu Çiller. DYP-SHP coalition government continued but İnönü resigned and Murat Karayalçın was elected chairman of SHP and minister of foreign affairs of the coalition government (YKY 1998: Vol. III). DYP-SHP coalition achieved a major milestone in Turkish-EU relations. In March 1995 meeting of the Membership Council, decision 1/95 was taken that Turkey would enter and

complete the customs union, despite opposition to the decision in the EU coming from Greek MEPs.

Thus, the transition period ended and Turkey entered the last phase of integration with the EU (YKY 1998: Vol. III). Even though according to the Ankara Treaty entry into the customs union is automatic following the transition period, the 1/95 decision did not include a definitive date for full membership of Turkey. Instead, it was underlined that Turkey and Turkish Cypriots should solve the Cyprus problem. However, if the EU genuinely wanted to see Turkey as a full member it could have chosen to give a date for full membership. From this perspective the 1/95 decision to enter customs union may not be evaluated as a big political success for Turkey. It was, however, definitely a remarkable progress. No doubt Özal's strivings to comply with customs obligations had laid the ground for the 1995 decision of customs union to begin by 1996. Another important factor was the support lent by SHP as coalition partner, a center-left party helping out for progress in Turkish-EU relations, not likely to have taken place in the 1970s.

In the 1995 elections RP led by Erbakan came out as first, ANAP second and DYP third, both with some loss, followed by DSP while CHP of Deniz Baykal just barely surpassed the 10% limit. After a brief try at an ANAP-DYP coalition which failed, Çiller of DYP forged a coalition with Erbakan of RP in June 1996, to avoid a parliamentary investigation about her illegal economic gains during her office as minister responsible for economics, and later as PM. Erbakan became the PM and DYP was a passive follower (YKY 1998: Vol. III). Çiller's coalition with blatantly anti EU RP and Erbakan displeased the EU and Çiller lost much prestige among EU circles as well as within Turkey. After customs union was attained an interesting development took place. Turkey's balance of payments started to show increasing trade deficit, most of the increase in the deficit being witnessed in Turkey's trade with the EU. This prompted many, mostly anti EU bureaucrats and economists to argue that customs union was the major cause of Turkey's balance of payments problems. The real reason, however, was not customs union, but wrong economic policies pursued thus far by the previous Turkish governments (for an analysis: Turkey Europe Foundation, 2001).

This also underlines an important defect on the part of center-right parties, DYP under Çiller and ANAP under Yılmaz. The voters started regarding them as very corrupt, which signaled the demise of center-right in the following years. The center-left political parties had all become genuinely left-of-center rather than de facto radical left and hence worked positively to improve Turkish-EU relations.

Moreover, both İnönü of SHP and Ecevit of DSP were popular with the voters. This last qualification may not be made, however, for Baykal who was definitely an effective political player but seemed to lack mass appeal among voters, the way, for instance, Ecevit enjoyed.

3.5. The Shift in Views in the EEC (EU) on Turkey's Membership

At the beginning of 1980s, members of European Parliament from different groups were all unanimous in evaluating that democracy and human rights in Turkey were insufficient and needed improvements. The major problems raised were torture in jails, minority rights, extensive role of the military, limitations on democracy and human rights, and persistence on capital punishment. The latter point was made before Abdullah Öcalan was captured but later became an issue concerned with him. The criticisms coming from Christian Democrats and Conservatives at the time were more tolerant while Social Democrats, Socialists and Liberals were more strict with respect to the need for Turkey to improve on the above questions. Generally Communists, excepting Italian communists, were even more strictly against Turkey's entry. Greeks were all dead-set against Turkey, vetoing any improvement in Turkish-EEC relations including financial aid. But the interesting point was that the question of Turkey's membership was not taken in early 1980s as Turkey having a different religion, hence a different culture not compatible with the European. Obviously with Greece, the major question was Cyprus, an issue owned by all the rest of EEC. But other major issues with Greeks also loomed behind, such as the Aegean airspace, continental shelf and the arming by Greece of Aegean islands.

The major overall worries about Turkey in early 1980s were the very low per capita GNP of Turkey, a large population and possibility of mass immigration of Turkish workers to EEC. Germany, in particular, expressed dissatisfaction because Turkish workers had showed little interest to get involved with the German way of living (for a more objective analysis of Turkish immigrants in the EEC, see: Şen 2007).

Over the years, towards late 1980s to 1990s, however, there occurred fundamental changes in the views of different MEP groups and EU countries. The views particularly of Christian Democrats turned negative on grounds Turkey was a Muslim country, hence had a different culture compared to the European. In contrast, Social Democrats and Greens disregarded the difference of religion and

maintained that so long as Turkey could attain Copenhagen political criteria, then she should be eligible for full membership like any other European nation.

It is notable that much of the progress in Turkish-EU relations were achieved during late 1980s and 1990s mostly because of the firm stand of Social Democrats and Greens on the EU side and center-left parties in Turkey working sincerely in achieving progress in human rights and democracy in compliance with Copenhagen political criteria that finally Turkey had to be accepted as a candidate member in 1999. Some events and changes in the government in Turkey may also have aggravated the negative views of Christian Democrats. To wit, in June 1996 Çiller of DYP entered a coalition with RP making Erbakan PM and leaving all the reins to him. RP and Erbakan were blatantly anti EU and in favor of developing ties with Middle Eastern and North African Muslim countries. He tried to establish political links with these countries but was turned off by them, proving these countries are less reliable as allies of Turkey compared to the European.

It was during the years of RP coalition governments that negativistic attitude towards Turkey grew stronger. In the Agenda 2000 prepared in the Luxembourg summit on June 16, 1997, countries including Estonia, Letonia, Litvania, Poland, Hungary, Czech Republic, Slovenia, Slovakia, Malta and Cyprus (Cypriot Greek Administration) were all declared candidate members. Turkey, though carrying customs union with EU, was mentioned only as a country capable or eligible to become a member. Shortly before the Luxembourg summit the Christian Democrats had met in Bonn and had stressed that Turkey as a Muslim country had a different culture and should not be counted as European.

Mesut Yılmaz, PM of ANAP-DPT-DSP coalition government reacted bitterly. It was advised in the Luxembourg summit that Turkey participate in the European Conference to be held on March 3, 1998; he refused to take part in it. For Cyprus, Turkey underlined the two-zone confederation solution per London and Zürich agreements. In the following Cardiff meeting, France and United Kingdom maintained a softer attitude towards Turkey as against Germany and Greece which continued to maintain their rigid negative attitude. Hence, there did not occur any fundamental change in the Cardiff summit; Ankara treaty which maintains full membership as the final aim was underlined.

4. Turkey as a Candidate for full Membership: 1999-2009

4.1. Obtaining the Status of Candidate for Full Membership

DSP led by Ecevit had come out as the first party in the April 1999 general elections, followed by MHP and FP (Virtue Party: Fazilet Partisi) established as a follow-up of RP after the latter was closed down. ANAP and DYP could just enter the parliament, while CHP under Baykal's leadership could not because of the 10% limit. The coalition government was led by DSP with Ecevit as PM; its partners were radical nationalist MHP led by Türkeş and center-right ANAP led by Yılmaz. Despite wide philosophical differences between the parties the coalition worked in relative harmony.

The coalition immediately found its hands full with a serious earthquake in August 1999 to which Greece sent a helping team. Turkey reciprocated the gesture to Greece when Greece had a similar earthquake. This incident triggered bonding of people and governments of Turkey and Greece. Moreover, Turkey held a successful European Security and Cooperation meeting in İstanbul in November 1999. Furthermore, serious economic and external debt payments necessitated a stand-by agreement with IMF drawn late 1999; the eruption of an economic crisis in February 2001 which required a complete overhaul of the stabilization program based upon new suggestions of the IMF. The stabilization program was implemented rigorously, thus strengthening the Turkish banking sector as well as the economy in general (Yeni Türkiye Araştırma Merkezi, 2001). In the meanwhile Abdullah Öcalan had been caught abroad in February 1999, brought to court and prisoned. Despite all these difficulties and work involved, the coalition, prompted by DSP and Ecevit and backed by ANAP and Yılmaz, found time to accomplish or otherwise promise political reforms to become a candidate member to EU.

In the spring of 1999 the military member of the State Security Courts were removed, thus the jury comprised only of civilian judges. In October 2001 the coalition changed about 34 articles in the Constitution to comply with the Copenhagen political criteria and human rights. Changes were also effected in the Penal Code and the Law on Fighting Terrorism. Education, broadcasting and publication in Kurdish were permitted. In August 2002 the coalition abolished capital punishment, saving Öcalan whose verdict had been capital punishment. However, MHP objected this move and preferred capital punishment to apply to Öcalan and then abolish it. All this sincere endeavor to improve Turkish-EU

relations by DSP and Ecevit 1999-2002, was a far cry compared to Ecevit's absolute negativism towards the EEC in 1978 and before.

Content with the reforms and, in particular, with the attitudes and promises made in comparison to the attitudes of the previous RP-DYP coalition government of 1996-97, Turkey was declared a candidate member in the EU Helsinki summit in December 1999 despite an atmosphere of growing skepticism in general about Turkey's membership. Thus, the process of writing progress reports on the part of EU, reciprocated by Turkey's National Programs was started aiming, in effect, to start political reforms in Turkey to comply with Copenhagen political criteria (Karluk 2007, Hiç 2008).

4.2. Starting Full Membership Negotiations

By 2002, Ecevit developed a serious illness and decline leave the PM job, not even temporarily. This and the differences of opinion and frictions between MHP and pro EU ANAP led the coalition to a breaking point and a call for early elections. Devlet Bahçeli of MHP particularly insisted on early elections despite objections made by Ecevit that it was not an appropriate time for holding early elections. The economy had not fully recovered from the 2001 crisis which was followed by IMF stand-by prescriptions; more time was needed for the Turkish economy to recover the lost ground.

The result of the November 2002 election was that all the coalition parties, DSP of Ecevit, MHP of Bahçeli and ANAP of Yılmaz got less than 10% of the votes and failed to enter the parliament (for an in-depth analysis of 2002 election results, see Hiç, 2008). The Justice and Development Party (Adalet ve Kalkınma Partisi: AKP) led by Recep Tayyip Erdoğan, former mayor of İstanbul, obtained power single-handedly. AKP members had been in Erbakan's RP (Prosperity Party: Refah Partisi) but they had resigned from RP to pursue a different course, in favor of EU, USA, NATO, private enterprise and DPIs, in short, center-right economic and international politics. CHP of Baykal, center-left with much less vote-getting abilities compared to Ecevit when he was healthy, entered the parliament as the sole opposition.

In economic policy, AKP pursued what was sensible and continued rigorously with the IMF recommended reforms. In Turkish-EU relations AKP made what seemed a pleasant surprise, continuing with political reforms to comply with Copenhagen

political criteria. For instance, in July 2003, individual freedoms of thought and expression were further expanded. The composition of National Security Council (Milli Güvenlik Kurulu: MGK) was changed, giving a greater majority to the civilian members, that is, ministers involved and the President and the PM as opposed to military members. In May 2004, further changes were made in the Constitution including prohibition of capital punishment. The military member of YÖK (Higher Educational Council supervising and coordinating the universities and institutions of higher learning) was removed. Again, in 2004 State Security Courts that looked over cases of terrorism were dissolved and their functions were transferred to the regular courts of the Ministry of Justice. AKP also engineered a courageous stand concerning Cyprus and encouraged a “yes” vote for the Annan unification plan in the April 2004 referendum. At the time, Rauf Denktaş had left and Mehmet Ali Talat had become the president of the Turkish Cypriot side, who was more open to compromises. Still, the Cypriot Greek side voted “no” and still went ahead to become a full member of EU.

In view of all these efforts made by AKP that were very fundamental, Turkey was taken up in the December 17, 2004 Brussels summit and a date was given as October 3, 2005 to start full membership negotiations. The decision was taken following heated discussions, breaks in the discussions, and USA's support in Turkey's favor. It was, however, stressed that Turkey could not be considered to become a full member before 2014. France (led by president J. Chirac at the time) further noted that they would take up Turkey's membership to public referendum before accepting her as a member. When asked about this point, J. Chirac replied that according to the new constitution prepared for the EU, all future members would be subject to such a referendum (Karluk 2007). CHP and Baykal were skeptical, denouncing decision as not bringing equal treatment to Turkey compared to all other previous candidate member states. Starting negotiations for full membership necessitated a great positive effort to comply with both economic and political criteria (Dikkaya 2006).

4.3. Slowing Progress

Immediately after the Helsinki summit was completed, the political reforms per negotiations with the EU started to slow down. The AKP government failed to make changes in the article 301 of the Penal Code. In addition, Turkey refused to open her ports and airfields to Cyprus (Cypriot Greek Administration), though the

latter had become a regular EU member. Therefore, some of the chapters, in fact, the more crucial chapters, were suspended by November 2006. These suspended chapters included free movement of goods, transportation, customs union, agriculture, etc. (Karluk 2007). To ease tensions in December 2008 two chapters were re-opened (one concerned with free movement of capital) that raised the total of chapters negotiated to 10 out of a total of 33. Since the term of President Ahmet Necdet Sezer was to end by November 2007, AKP decided to propose as presidential candidate Abdullah Gül (one of the three notables of AKP, along with Erdoğan and Bülent Arınç) whose wife wears a turban. Consequently, joint-chiefs-of-staff issued an e-mail that opposed election of a president who would encourage religiosity. General Yaşar Büyükanıt, Chief of Staff, also declared in a press conference that they wanted a president committed to laicism not only in words but in essence as well.

This led to early elections in July 2007 and AKP and Erdoğan were re-elected with a landslide victory. After these elections, AKP government chose to become more assertive on religious matters. For instance, instead of continuing with political reforms including changing article 301 of the Penal Code as advised by the EU, AKP tried hard to get students wearing a turban to the universities but so tangled the problem that the issue finally went to the Constitutional Court. AKP also took the issue of changing the Constitution. The implicit perspective in their effort, however, was not so much compliance with Copenhagen criteria but more to please their religious backers and to loosen the principle of laicism in the Constitution.

As the AKP government slackened reforms, it strived successfully to strengthen Turkey's political and economic ties with Middle Eastern and North African Muslim countries, including Iraq, Syria, Iran, Libya, Lebanon and even Sudan, while taking an openly antagonistic attitude towards Israel on account of the Gaza affair. Therefore many journals in Europe and the USA published articles that asked the question whether Turkey was moving away from the EU and the West towards the East. Some stated that this was because of the negative attitude the EU had displayed towards Turkey, while some asked whether this was Neo-Ottomanism, this time with the accent on strengthening bilateral economic as well as political ties. Both Gül, president of Turkey, and Erdoğan, PM, stated that it was merely an economic rapprochement and that these ties could not provide a viable alternative to EU membership.

Interestingly, even though AKP government continued with the slackened attitude towards the EU and the required reforms, it had to turn again to closer cooperation

with the EU when the Chief Prosecutor of the Supreme Court of Justice filed a case in the Constitutional Court for shutting down AKP on account of its antilaicist activities. AKP calling the EU for help to denounce the case filed against them and advise that political parties – that do not apply brute force – should not be shut down. And, in return, it started the long neglected task of changing article 301 of the Penal Code. The EU representatives defending AKP and stressing that AKP should not be shut down, in turn, made several grave mistakes of their own. First of all, they showed disrespect to the Turkish judiciary. Moreover, they forgot to realize that the Turkish Constitution stipulated shutting down of political parties that are either ethnic or antilaicist. They furthermore forgot that they had not opposed previous occurrences such as religiously oriented RP, Kurdish origin DEP, DEHAP but raised their voices only when AKP was the subject. Finally, they showed little interest in the Turkish history and Atatürk's establishment of the laicist Republic, the fight Atatürk had to make with the revolting groups who defended the religious state, hence the historical and also presently relevant base for the article in the Constitution about shutting down political parties that are anti laicist.

4.4. Developments on the EU Side

The 2009 general elections in Germany brought to power a coalition of CDU-CSU with Free Democrat Party which maintains a more ambivalent attitude towards Turkey compared to the previous coalition partner SPD. Thus, Merkel and particularly Sarkozy continued with a negative attitude towards Turkey's membership. The progress report on Turkey issued by the EU in mid-October 2009 seems to be written with a softer attitude towards Turkey. The report criticized press freedom in Turkey on account of an undue tax penalty on a media group which was in opposition. It praised, however, the efforts of AKP government for its efforts to solve the Kurdish question, and hence wipe out PKK terror. The Turkish-Armenian protocol also got praises. Similarly, the Ergenekon case was encouraged on the belief that it would prevent any intrusion or intervention of the Turkish military into politics, thus strengthening democracy. The report also argued that to enhance freedom of thought and speech, the law that prevents insulting Ataturk, the founder of the new Turkish Republic, by making it a crime, should be waived.

The report shows that the EU seems unable to grasp an objective picture in each case it praises. This includes the mishandling of the Kurdish question, difficulties

of carrying through the Turkish-Armenian protocol, the irregularities and disguised undemocratic and unlawful practices and aims in the Ergenekon case, and dangers involved about releasing criticisms to be aired against Ataturk. Thus, in fact, the report on the whole misinformed and misdirected and worked to the unnecessary advantage of AKP rather than of Turkey. In December 2009 the EU leaders went one step further and decided to review the question of Turkey's opening her ports and airports to (Greek) Cyprus, not immediately but one year later; another instance of softer attitude towards Turkey.

5. Factors that Work against Turkey's Full Membership

5.1. Factors in the EU that Work against Turkey's Full Membership

Despite the fact that Turkey's full membership negotiations continue, albeit with a diminished number of chapters, there are very many adverse factors both in the EU and in Turkey that work against Turkey's full membership, making it a remote rather than a long term possibility.

On the surface, the most important reason for the negative attitude of EU towards Turkey is the Cyprus issue. In fact, the number of chapters negotiated was drastically reduced in November 2006 not only because Turkey slowed down her reform efforts but mainly because she refused to open her ports and airports to Cypriot Greeks, the latter as a regular EU member. In response, Turkey argued that Cypriot Greeks do not represent the whole of the island, and because the EU did not keep its promise of opening relations with Northern Cyprus. Even the aid scheduled for Northern Cyprus was vetoed by the Greek Cypriots (Kramer, SWP, May 2005 and September 2005).

Thus, there is no doubt that Cyprus question emanated a negative attitude in the EU against Turkey and impedes Turkey's full membership. But there are many other important factors working negatively in the EU against Turkey's full membership.

Since September 11, 2001, Islamic terror and radical, anti West interpretation of Islam, questions raised by Muslim immigrants in Europe all contributed to an antipathy and fear felt towards Islam. During the same time period, with AKP, Turkey seems to have become a "mildly" or "moderately" Islamic country. Although many US and Western experts and politicians see "mild" Islam of AKP as a bulwark against radical Islam, luring the latter also to the mild Islamic zone, there are also many experts who think the opposite, that the mild Islam will breed

more rigid and fanatical Islam over time, which would definitely be anti laicist and anti West, hence incompatible with EU membership. Such a fear is, in fact, much more widespread among laicist Turkish intellectuals who know much more about the issue at hand and Turkey's conditions.

Again just at about the same time, Christianity has started to carry a greater weight within Europe. To wit, Christian Democrats are mostly of the opinion that Turkey as a Muslim country has a different culture not compatible with "*Europeanness*". It is doubtful whether the efforts of the new pope in bringing the two religions together and the papal visit to Turkey in November 2006 would be of much help in bringing about a genuine agreement and reconciliation which could act as a hedge against radical – and untrue – interpretations of Islam. On November 2008, the Pope declared, however, a dialogue between different religions is impossible; one could only talk about dialogue between cultures.

Turkey has a very large population. Turkey's population is nearly equal to the total population of the last 10 mainly Balkan and East European countries that were accepted as full members. Such a large country, would require large sums of regional development funds and would have a big say in the EU organs. Also, most of the EU countries, particularly Germany is fearful of a flow of Turks seeking work in the EU, and they had unpleasant experiences with Turkish immigrant workers already in the EU. Turkey also has its hands full with PKK terror there is always a possibility it may become a religious state or else a military intervention could take place; it is also situated in an adverse geography near Iraq and the Middle East which boils with problems.

Generally, center-right parties in the EU are against Turkey's EU membership. New French president N. Sarkozy declares at every occasion that Turkey should never be made a member. As for Merkel of Germany, though as a Christian Democrat she is against Turkey's full membership, she has declared she would be bound with the previous EU decisions and treaties made with Turkey and would pursue the negotiation process that is supposed to eventually make Turkey a full member. In contrast, Greens and Social Democrats generally are less interested in cultural differences supposed to arise from different religions and they stress that so long as Turkey complies with Copenhagen criteria of democracy and human rights, she should deserve to be a full member.

Many important EU personalities warn that the EU should take a positive attitude towards Turkey's full membership. The list includes G. Verheugen (formerly

responsible for the enlargement of the EU), Marti Ahtisaari (Nobel prize winning president of Finland and chairman of the independent committee on Turkey), Carl Bildt (Swedish minister of foreign affairs who headed the EU), Olli Rehn (in charge of EU enlargement), Y. Papandreu (recently elected PM of Greece) and Gordon Brown (PM of United Kingdom). However, the fact remains that following the acceptance of the Lisbon Treaty, Herman von Rumpuy, former Belgian PM, was selected as the first president of EU. This selection maneuvered by Sarkozy and Merkel would likely ensure the influence of the latter two on EU's future decisions. Country-wise, generally Greece, Germany, France, Austria and to some extent Denmark are against Turkey's full membership. Greece and the Cyprus question had been most effective in stalling progress in Turkish-EU relations right from the beginning. Under a center-left government, Greece has changed her attitude on grounds it would be beneficial to get Turkey in, but later under center-right Karamanlis, Greece reverted back to her negative stand, again on the excuse of Cyprus.

USA has for a long time supported Turkey's EU membership from outside and had been effective in bringing about concrete progress. But some politicians and intellectuals in France dislike Turkey's political ties with the USA as working against France if she becomes an EU member.

5.2. Factors in Turkey that Work against Turkey's Full Membership

There also are factors in Turkey that impede progress towards full membership and make it a remote possibility. Many Turkish observers believe that the most important factor is AKP itself. This may run counter to conventional (European) wisdom because for a long time AKP showed, on the whole, a positive attitude towards EU membership and much work was done leading to getting a date from the EU to start full membership negotiations. AKP was most intensively active particularly in the initial years they came to power and up to 2004, the year they got the negotiations date and then slackened starting in 2006. Some called it "reform fatigue" and thought it would be temporary. Had the case for closure of AKP not been opened in the Constitutional Court, AKP would possibly have been content with the slackened pace. To wit, after the Constitutional Court decided not to close AKP but condemn it to monetary penalty because its activities threatened laicism, AKP slackened its pace of reforms again. Thus many observers think that AKP adhered to the EU membership aim in the initial years mainly to give proof

that they are different from their own roots, the RP and are center-right. In addition, they may have thought many of the reforms to become an EU member would work to decrease the presence and influence of the military in all matters of government, which a basically religious party would definitely prefer. They would want to be immune from military interventions concerning upholding of laicism. This means that they may have thought that EU membership and freedoms could also mean freedoms for religious activities and for those wearing the turban. However, the role of the military was reduced over time and that there was not much help about the turban from the EU, they naturally slowed down their progress concerning political reforms.

As a second alternative, let us suppose that AKP is sincere in its cause to make Turkey a full member of EU. Many US and EU experts believe that AKP is only “mildly” Islamic which is compatible with democracy and EU membership. They may not be aware that AKP is, in fact, more than “mildly” Islamic. Furthermore, there has been a notable increase in religiosity since AKP came to power and generally this kind of milieu would encourage the more rigid, the more fanatical (and wrong) interpretations of Islam and the latter could eventually grasp power away from the “milder”. In such a case, again any long run relations with the West, including EU membership will definitely be finished. Unfortunately, other major political parties in the parliament, CHP and MHP do not contribute much for progress in Turkish-EU relations. Taking CHP under Baykal’s lead, it was mostly negativistic and critical when AKP was taking concrete steps and had not made any concrete move them to improve EU relations. They are also mostly negativistic and hence vague with regard to their economic regime, economic program and international relations. This was in contrast to both former SHP led by İnönü and DSP led by Ecevit during the 1990s. The two center-left parties had genuinely accomplished much work for progress in Turkish-EU relations.

MHP, on the other hand, as a radical nationalist party is not in favor of EU membership while the center-right parties, DYP and ANAP both pro EU are down the drain and it is doubtful how they would be able to accomplish a comeback and thus be effective. Therefore, although in principle over 50% of the population approves of EU membership political parties lack the necessary strength to carry out the necessary reforms to bring about EU membership.

5.3. Perceived Double Standards of EU

Further problems and suspicions have also arisen with respect to the attitude of the EU, double standards it uses on some of the major issues facing Turkey concerned with full membership. Historically, the EU always preferred a Christian European country over Turkey for full membership. Greece, Spain and particularly Portugal were all made a member on political rather than economic grounds. After USSR collapsed in 1999, the EU, gave priority to make the former East-block states full members, again based on political rather than economic considerations, keeping Turkey waiting. If Greece removes her objection on Macedonia, Macedonia will have priority over Turkey. If Russia loosens her grip on Ukraine, then Ukraine will be made full member before Turkey for political reasons. Unlike other countries, for Turkey the political problems are always causes for rejecting or delaying, not expediting her full membership.

The primary issue in which the majority of Turkish intellectuals feel EU did not behave evenly is the Cyprus issue. The leaning on the Greek side is such that one thinks the EU bureaucrats or politicians think that Turkey simply invaded the island without any reason at all, and so all the burden falls on Turkey and Turkish Cypriots to solve the Cyprus question by accepting whatever Greek government and Greek Cypriots want. So much so that some experts on the Cyprus question and Turkish-EU relations (e.g. Manisalı 2001) concluded that EU would never accept Turkey as full member and is interested in Turkey mainly in getting what Greece and Cypriot Greeks want concerning Cyprus.

It is true that formerly Turkish Cypriots been too rigid. But taking the referendum on the Annan plan held in April 2004, just before Greek Cypriot Administration was made a full member; Turkey and Turkish Cypriots showed a remarkable flexibility. Turkish Cypriots said “yes” and Greek Cypriots said “no” in the referendum for the Annan plan, but the latter were soon rewarded by full membership. Thus they became a full member while avoiding the Annan plan aimed at unification as a broader aim.

Many EU experts (e.g. Kramer, SWP, Comments no.1 May 2005 and no.18 September 2005) similarly note that the most obvious reason Greek Cypriots rejected the Annan Plan was that they, unlike their Turkish neighbors, were under no particular pressure to find a solution for Cyprus. Back in December 1999 the Helsinki European Council had dropped its precondition that the conflict had to resolve before accession. Greek Cypriots having rejected the Annan Plan, EU

turned to Turkey and Turkish Cypriots and told them the Cyprus issue should be solved in order for Turkey to become a member. This is in effect telling Turkish Cypriots to accept everything that Greek Cypriots dictate, disregarding London and Zürich agreements. EU had the power to solve the Cyprus issue simply by behaving even-handedly, and not dropping the condition that Cyprus will not be made a member until the question is solved. Still another issue in which EU did not show enough understanding was the PKK question. They were never careful enough to stop illegal activities, collecting black money by PKK men within Europe. Neither did they extradite the convicted terrorists to Turkey.

Granted a multi-sided approach involving military, economic and political is needed to solve the Kurdish problem, the EU authorities, thinking Turkish authorities over-rely on the military, over-advise the political solution, mostly with little knowledge about the problem and little wisdom about the effects of their advice. In general, many of the EU authorities know too little about Turkish political history for any wise interpretation of any of the problems faced by Turkey. The new Turkish Republic and the European countries had entirely different historical conditions. But, reforms of Copenhagen and Maastricht political and human rights criteria can best be achieved with full knowledge about Turkish history. In this respect the road-map and the red lines are as important for the eventual accomplishment of a satisfactory solution. For instance, semi-autonomy for South-Eastern Turkey could lead to disunity, hence a red-line for the Turkish government. But such a demand from separatist Kurds, was not a requirement for fulfilling the criterion of minority rights. Note here that officially Turkish government does not consider Kurds as “minority”, minority is being interpreted as included in Lausanne Treaty, namely Greeks, Israelis and Armenians.

Still one more problem in the background but definitely affecting the attitude of EU authorities towards Turkey (or Turks) is the so called “Armenian Genocide” in 1915 during the Ottoman Empire. EP has accepted that genocide has occurred (as if expert European historians have studied all the documents in both sides objectively and drawn up an objective conclusion) but noted that it would not affect Turkey’s future accession. The genocide verdict not only lacks definitive proof but it also overlooks what has happened “before” the forced deportation of Armenians (for the analysis in Turkey with documents available in the archives on the 1915 deportation of Armenians, see: Gürün 1991, Uras 1998, Elekdağ 2001, Halacoğlu 2001). It is just like the Cyprus issue, as if Turkey invaded Cyprus with no reason at all. And similarly for the 1915 “tragedy” as if Ottoman state deported Armenians

in Eastern Anatolia in 1915 with no reason or fault on the part of Armenian, at all. The West also fails to remember that they had encouraged Armenians to rise for freedom, so Armenians had started killing Turks first while Turkey had to fight with Russia in north-east. They had destroyed mosques, killed people and wiped out entire villages.

France has also accepted the 1915 Ottoman “tragedy” as “genocide”. But when the question of Algeria came up they refused to accept it as genocide and stated history should best be left to historians, not to politicians. Vatican has also officially accepted 1915 tragedy as “Armenian Genocide” – with the aim as they state, to prevent further genocides. The EU countries went even one step further and try to encourage other groups to argue that Turkey had committed genocide on them also. This includes Kurds and the Dersim (Tunceli) rebellions during the Ottoman Empire as well as the earlier years of the new Republic.

6. Conclusion

In summary, many critical factors emerged over the years both in Turkey and the EU that affect Turkish-EU relations and prospective full membership adversely. Meanwhile, the articles that continue to be negotiated are all trivial; many important articles that have a greater bearing on integration and full membership are dropped from the negotiations list. The 2008 global financial crisis and global recession came at a time of seriously weakened Turkish-EU relations. The global financial crisis and recession would likely take at least two years and in the meanwhile no warming in Turkish-EU relations should be expected.

Therefore, there is, in all, not much ground to be optimistic about the future of Turkish-EU relations. On the EU side, there are such obstacles as Sarkozy and Merkel and other member countries' negativistic attitude about Turkey's membership, and a growing fear of Islam, hence of Turkey. On the Turkish side, there are difficulties of reaching a solution in Cyprus, real questions with regard to carrying through the Kurdish solution, difficulties in real advances in Turkish-Armenian relations, and the perception of EU using double standards against Turkey over and over again.

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Strategic Brand Management in Hospitality Sector: How to Manage Co-branding in Hotels and Restaurants

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Abstract: Companies in the hospitality sector (hotels, restaurants etc.) aim to distinguish their brand image and differentiate their product or service among the competitors by adopting particular brand strategies since identifying a target customer base and understanding their needs and preferences are of primary significance for hospitality firms. The achievement of a distinguished designation necessitates utilizing research based and strategic branding techniques and suggestions. One major branding strategy particularly for international firms is co-branding. Nevertheless, there are scarce studies which examine the role of strategic co-brand management in the hospitality sector. This review paper aims to critically discuss the current position of strategic co-branding in the hospitality sector and possible problems involved in this issue. Recommendations for future research on co-branding of hospitality firms within the strategic management paradigm are provided. Furthermore, managers in the hospitality sector are given suggestions for enhancing strategic management of co-branding in hospitality and particularly in destination firms.

Keywords: Co-branding; brand management; hospitality; hotels and restaurants; strategic applications

Jel Classification: L80; L84; M16

1. Introduction

In recent years, many hospitality, hotel and restaurant firms have realized the strategic importance of co-branding (Lee & Reinhold, 2008). Particularly, some hotels face with diminished marginal profit from F & B. International hotels have started to utilize co-branding applications and strategies, such as making alliance with a prominent restaurant chain, to decrease these problems. Strategic management of branding in the hospitality sector is very critical, given that firms in the hospitality sector are involved in a competitive tourism market and hence deals with strong rivals (Walsh, 2002).

Companies in the hospitality sector (hotels, restaurants, etc.) prioritize research-based branding to a specific customer target group in order to consolidate an

outstanding corporate identity and service quality (Morgan, Pritchard & Pride, 2004). They aim to distinguish their brand image and differentiate their product or service among the competitors by adopting particular brand strategies since identifying a target customer base and understanding their needs and preferences are of primary significance for hospitality firms.

Customers of hospitality firms usually give importance to image, quality and prestige of the services or products in their decision making processes. The achievement of a distinguished designation necessitates utilizing research based and strategic branding techniques and suggestions. One major branding strategy particularly for international firms is co-branding (Knowles, Diamantis & El-Mourhabi, 2004). Nevertheless, there are scarce studies which examine the role of strategic co-brand management in the hospitality sector. This review paper aims to critically discuss the current position of strategic co-branding in the hospitality sector and possible problems involved in this issue. Recommendations for future research on co-branding of hospitality firms within the strategic management paradigm are provided. Furthermore, managers in the hospitality sector are given suggestions for enhancing strategic management of co-branding in hospitality and particularly in destination firms.

2. Branding and Co-branding in the Hospitality Sector

2.1. What is Branding and Co-branding?

The conceptualization of the term “brand” is not uniform and several definitions of brand have been suggested in the literature. According to Mellerowicz (1998), brand is “a landmark of a given product which symbolizes its consistent quality, size and amount” (Kotler & Keller, 2006). In marketplace, a product or service is usually identified by one of its properties or qualities. Customers choose to buy a service or product depending on a distinctive quality or property of it (Panda, 2006). Brands can be regarded as functional tools to create and consolidate an image, to diminish risks in a competitive market environment and to make efficient use of information dissemination in the hospitality industry (Riesenbeck & Perrey, 2009). Thus, firms in the hospitality sector can realize their current position in the market place and generate new potentials by identifying their customers’ view of and impression about their firms, and by analyzing the branding process in which they become identified with an image.

Branding can provide security to the hospitality firms. Hospitality firms can enhance decision making processes in favor of their brands by eliminating the risk of adverse decisions. Besides, in tourism and hospitality industry, how information and image conveyed to potential customers and how customers perceive the tourism and hospitality firms' services can be directly affected by brand images (Riesenbeck & Perrey, 2009). With branding, hospitality firms can inform customers about their services and products in an efficient way.

Branding, as the symbol of a firm's image and quality, has an informational function in that through branding, a firm introduces its services and promotes its quality in the eyes of the customers. This informational role facilitates customers' sense of security for a company since a brand familiarizes customers with the characteristics of a service/product, assures a predictable pattern of service and level of quality and provides plain information about the brand. Therefore, branding functions as a reference point which ensures security of a familiar brand image and comforts customers through reducing feelings of uncertainty and ambiguity in the contemporary world of business and travel.

Branding has been demonstrated to be directly related to customer loyalty (Olsen, West & Ching-Ying Tse, 1998). The symbol of a product or service quality and the representation of its standards and value are conveyed through brands. Hence, brands provide information to customers on the properties of a product or service, which are designed to match with the customers' demands. It also aids customers to become less ambivalent about selecting a given product type or service since brands facilitate differentiation of specific products/services in the marketplace.

One study investigated competitive methods of the multinational hotel firms in the tourism industry between 1985 and 1994 (Olsen & Zhao, 1997). This was a comprehensive research that utilized content analysis of articles and reports published in the hospitality industry. Results indicated that one of the major competitive methods was branding. Branding method was found to be utilized by the association of a hotel firm's product with a special offer, service or product. By branding, hotel firms aimed to provide new services to the tourist and hotel customers. An updated version of this study demonstrated that between 1994 and 1996 hotel firms utilized brand positioning method for gaining competitive advantage (Olsen & Zhao, 1997). Hotel firms seemed to clarify brand identity of products or services and differentiate one product or service of a given brand both from competing alternatives and from firms' other products or services.

According to classical brand theory, one strategy for gaining competitive advantage is forming a sole grand brand that has large customer recognition and market share (Muller, 2005). Pizza Hut and Kentucky Fried Chicken utilize this strategy – they stand on their own by their brand image, and provide products and services in the competitive market environment. Nevertheless, strategic shift in the hospitality sector especially in the last 20 years paves the way for brand alliances – that is co-branding - among hospitality firms.

Hospitality firms can utilize several branding strategies for establishing powerful brand equity (Knowles, Diamantis & El-Mourhabi, 2004). Brand equity involves assumption and beliefs of consumers about a given hotel or restaurant brand (brand image) as well as their emotional bond and preference of a given brand (brand loyalty). A well-known branding strategy for enhancing brand equity is co-branding.

Co-branding involves strategic alliance of at least two firms (Knowles, Diamantis & El-Mourhabi, 2004). It is differentiation of a product or service image by using at least two different brand images¹. Co-branding is usually defined as “a form of cooperation between two or more brands with significant customer recognition, in which all the participants' brand names are retained” (Blackett & Boad, 2000), (see, Table 1). Joint venture co-branding involves such definition (Kotler & Keller, 2006). One example of joint venture co-branding is Sony-Ericsson mobile phones. In some conditions, co-branding might involve a combination of two or more brands to form a new product or service with a new brand identity (Park, June & Shocker, 1996). Or, one brand utilizes a branded ingredient as a marketing strategy (Norris, 1992). Intel-inside is one example of such ingredient co-branding.

2.2. Common Examples of Co-branding

The early examples of co-branding are observed in the USA in early 1930's, such as Bergen's restaurants and hotels. The hotel and restaurant industry consulted to co-branding when faced with unprofitable sales and poor management of sales (Boone, 1997). Today many chain hotels and restaurants strategically utilize co-branding with the aim of enhancing distribution of products or services to customers as well as increasing the scope of customers to achieve profitability (Boone, 1997).

Marriott Hotels is one of the examples which form a highly recognized restaurant chain after co-branding with Pizza Hut. Another widely known example is that Sheraton co-brands with Starbucks' coffee, France baked goods and Robert Mondavi Wines. Similarly, Carlson Country Inn co-brands with Country Kitchen, Italianni's, TGI Friday's; Choice Hotel co-brands with Pizza Hut, The Garden Place, Nestle Toll House Café, Coca Cola; Hilton, with Benihana. Related brand alliances are formed between Holiday Inn and Little Cessar's Pizza, Red Lobster, Elephant and Castle, Good Eats' Grill. In co-branding, usually two firms collaborate on the public image of their brands. For instance, in order to handle decreasing profit margins from hospitality services, Marriott and Hyatt collaborated by co-branding in hotel industry (Oh & Pizzam, 2008).

2.3. The Mechanism of Co-branding

Branding and co-branding involve the basic learning principles of human beings, such as classical conditioning (Panda, 2006). In classical conditioning, one associates a neutral stimulus (that does not induce a biological response in the person) with a stimulus that stimulates a natural response in the person. After successive associations of the latter stimulus with a neutral one, the person starts to give a similar natural response to the neutral stimulus in the absence of the natural stimulus. For instance, during child development, the word "lemon" is successively associated with the image, taste and smell of lemon. We tasted lemon and heard the word lemon many times. For many people, the word lemon starts to induce the source taste of lemon – a natural response to lemon – even though they do not actually taste it. Hence, the image and word lemon acquire the power of inducing a similar natural response to an actual stimulus (lemon's taste itself).

This principle applies to formation of branding and co-branding: we learn to associate a quality of a product with its brand name. After successive associations, the personal experience or observed experience with that product or service (through advertising or observation of others' behaviors) is associated with the brand name or image (which is a neutral stimulus). If the personal experience of the product or service is positive, people develop a favorable attitude toward the brand name or image, or vice versa.

In the case of co-branding, another neutral stimulus (a brand image of a company) is associated with another brand image, on which people have already formed a certain attitude. Through this mechanism, a new meaning or quality can be

attributable to the product or service by the advertiser or image maker. In other words, through co-branding, the psychological impact of a service of product in the eyes of customers is managed and enhanced.

3. Strategic Use of Co-branding in Brand Management for International Hotels and Restaurants

Strategic management is defined as the “art and science of formulating, implementing, and evaluating, cross-functional decisions that enable an organization to achieve its objectives” (Oh & Pizzam, 2008). In general, strategic management involves several steps: at the initial step, the goals and aims of the company are defined (Interbrand, 2008). At the second stage, managers should analyze the strengths and weaknesses of the firm, and possible threats from the marketplace. At the third stage, the company is localized in accordance with its internal and external conditions. Then, organization-wide, department-based and worker-based strategies are respectively developed. Sources of the company are distributed in accord to these developed strategies. At later stages, company should revise its vision, aim and scope as well as leadership style in line with recent organizational strategies. Even the organizational culture might be changed in congruence with these strategies. Continuous monitoring and regular improvement of these strategies provide dynamic management at a company (Park, June & Shocker, 1996).

According to British brand consulting group (Interbrand, 2008), the ranking of top 100 global hotel and restaurant brands in 2008 is as following: McDonald’s with 31,049 dollar brand value (8th), KFC with 5,582 dollar (64th), Pizza Hut with 4,097 dollar (81th), Starbucks 3,879 dollar (85th) and Marriott 3,502 (96th). Former three restaurant brands were still in the ranking in 2005, Marriott hotel entered the list in 2008. These ranks are very surprising in the sense that despite many hotel firms are known to be prominent across countries, none of them have brand value larger than 2.7 billion dollar (Oh & Pizzam, 2008). These data indicated that although hotel firms and many restaurant firms utilize different branding strategies, they need to adopt different strategies for branding, such as co-branding.

4. Benefits of Co-branding Management

There are several managerial, economical and marketing advantages of co-branding in the hospitality sector. One of them is the creation of a powerful brand image for customers (Panda, 2006), which enhances the competitive advantage of the firm via maintenance of the brand image and distinguishes quality of the product or service from others in the marketplace. Hence, consumers can easily recognize a brand through co-branding strategies.

Co-branding is achieved through collaboration of two firms and alliances. Alliance provides opportunity to share costs of operations, branding and marketing (Muller, 2005). Production costs, marketing based costs, investment costs along with risk of competition in the marketplace can be diminished. Besides, with the help of co-branding, hospitality firms can launch business in new markets without any cost of the new brand (Kippenberger, 2000). One study reported that 10 % increase in the profit of Best Western is attributable to co-branding with Country Kitchen restaurant (Walkup, 1995). Similarly, another study showed that co-branding has provided substantial short term financial advantage to the hotel and restaurant firms (Boone, 1997) (see, Table 1).

Table 1. Financial Advantage of Co-branding to Hotel and Restaurants

Financial variables (on average)	
Investment on branding	1,290,000 dollars
Hotel average daily rate increase	13 %
Hotel occupancy increase	6 %
Hotel net income increase	3.4 %
Restaurant revenue increase	57 %
Difference in annual revenue between branded concept in hotel and system unit average	-27 %
Increase in restaurant net profit after replacement with branded concept	220 %

Source (adapted from)

In co-branding, firms aim to increase their brand value in the eyes of customers. Customers' attitudes toward each brand, their reaction to co-branding of two firms and their attitudinal change after co-branding are critical for the competitive success of the firm (Simonin & Ruth, 1998). It was found that consumers usually give importance to co-brands and become loyal to specific firms due to their perception of co-branded products or services as having high quality (Norris, 1992).

One study examined the customers' post-purchase behaviors (i.e. brand loyalty, purchase patterns, frequency of visits, and expenditure per person) in a family restaurant that utilized co-branding (Lee & Reinhold, 2008). Researchers found that particularly customer loyalty is significantly higher in co-branded family restaurants, compared to non-co-branded ones. Moreover, co-branding gives hotels and restaurant managers the opportunity to utilize expertise of the other brands (Muller, 2005) and hence increase the strategic use of branding.

Co-branding influences how a company or a service/product is perceived and evaluated by customers. Through co-branding, hospitality firms can have the chance to appeal to a diversified customer base, enhance their communicative strengths and enlarge their target customer group since brands of the allied firms have already been recognized by a particular group of customers. When two companies co-brand, their target customer groups merge and get acquainted with another and previously unrecognized brand name which is associated with their regular choices. Hence, co-branding facilitates customers' feelings of security for both brands, facilitates decision making and may secure a broadened customer target group.

One study investigated the strategic benefits of co-branding for hotel and restaurant firms from a managerial perspective (Boone, 1997). According to reports of 12 hotel managers, co-branding with restaurants is beneficial, because;

1. Co-branding leads customers to prefer hotels due to perceived low risk, increased recognition of the hotels' brand with the aid of branded restaurants,
2. Co-branded restaurants have branding and operational expertise, which can be utilized by these managers (such as training, consistency etc.),
3. Co-branding with restaurants provides a flow of customers within the hotel setting
4. The total expenses of the hotel decrease and total profits increase,

5. Restaurants' marketing strategies and outcomes positively influence brand recognition and image of the hotel,
6. Co-branded hotels and restaurants share daily operational problems especially on food and beverages,
7. Co-branded hotels offer wider food and beverage options to its customers (Muller, 2005).

It has been reported that managers of restaurant viewed co-branding as advantageous (Boone, 1997), because;

1. Co-branding provides opportunity to distribute restaurants on strategically good locations,
2. Managers can get benefits from the flow of hotel customers

Despite its advantages, co-branding strategies do not directly lead to success in the market (Panda, 2006). A hospitality firm needs to accompany empirical research findings to obtain successful brand-brand associations. Several authors state that co-branding is related to customers' motivations and characteristics, characteristics of collaborating partners as well as customers' perception of the brand collaboration of two firms (Muller, 2005). It has been argued that customers' view on the brand alliance is important, because it has an impact on how they evaluate the value of the brand of products/services (Muller, 2005), their satisfaction and motivation to repurchase the same products/services. It has been mentioned that particularly in hotel and restaurant industry, customers have a direct experience with the brand of a hotel or restaurant and confront with the outcomes of co-branding of hotels and restaurants by frequent exposure to information on brand image and identity (Ashton, 2008).

5. Problems in Co-branding Management

There are some problems involved in co-branding management. For hotel managers, these problems are (Boone, 1997);

1. Scantiness of the available space and strictness in image of the setting/offered menus
2. Decline in food and beverage services of the hotel's itself
3. Long and costly worker training programs,

4. Operational conflicts between hotel managers and restaurant managers.

From restaurant managers' perspective, problems of co-branding between hotels and restaurants were reported as following:

1. Limited investment of hotels on branding
2. Inadequate/unsatisfactory spaces or sites for restaurants within the hotel environment
3. Hotel managers' lack of understanding and experience on the hotel restaurant concept and operations.

Co-branding strategies and strategic management of co-branding is essential, because two collaborator firms have their own core values and thus brand values (Motion, Leitch & Brodie, 2003). Collaborator firms might have problems during co-branding due to different corporate core values (Motion, Leitch & Brodie, 2003) or differences in managerial perspectives of hotels and restaurants. Another major problem involved in branding of hospitality firms is effective communication of brand qualities and characteristics to the targeted consumers (Higley, 2001). One hotel or restaurant might determine its brand identity (that is, brands' derivative meanings and characteristics and what information the brand conveys by its product or service) (Nykiel, 1989). However, it might not communicate the brand identity in an effective way to the customers. Moreover, a brand awareness of a hotel or restaurant might not be adequate. In other words, customers might not be aware of the presence of a brand. Hence, although brand identity is solidly presented, customer may not be aware of the presence of a brand, they may not know much about the hidden message of the brand. These problems could be overcome through aggressive advertising and media. Brand identity and image of a service or product could be conveyed via media, which increases the brand awareness and differentiation of a product or service from others in the hospitality market.

6. Strategic Applications for Co-branding in International Hotels and Restaurants

There are mainly four strategic applications of co-branding, reaching in, reaching out, reaching up and reaching beyond (Leuthesser, Kohli & Suri, 2003). Basing on whether target market is newly developed or existing market, and whether two

brands are necessary for product functioning or not co-branding companies can utilize one of these strategies. A hotel or restaurant company can use reaching up strategy, when partner's brand image (not product quality) adds to the co-brand image. Reaching out strategy is implemented if co-brand has benefits for product itself, such as entering new market and not for brand qualities. Hence once target market is new, reaching out strategy for co-branding can be utilized. When co-brand can contribute company's brand image as well as entering new market, reaching beyond strategy can be implemented (Leuthesser, Kohli & Suri, 2003). The last co-branding strategy is reaching in. Ingredient co-branding is one example of this strategy. This strategy is used when company wants to enhance core benefits of its product.

Despite aggressive advertising and media, brand image of a service or product can become similar to other brands in the long term (Panda, 2006). Hence, the long term maintenance of a brand is required. This can be achieved through strategic brand management. With respect to strategic brand management, three strategies should be aimed for long term brand value and brand image maintenance. These are;

- branding for a product/service by emphasizing its distinct qualities;
- differentiation of the brand's position from other brands' in the marketplace;
- continuous evaluation of the strategic position of the brand in the marketplace.

Moreover, hospitality firms can utilize information technologies to strategically manage co-branding (Kotler & Keller, 2006). For example, with the help of internet, hotels or restaurants can reach customers that match with the targeted ideal customers. The characteristics and profiling of customers can be searched via internet and specific databases. These target groups can be informed about new offers or opportunities. Another example is monitoring the changing needs of customers through targeted promotions (Oliva, 2001).

Moreover, frequent visitors can also be contacted via internet and databases. They can be reached in their special dates or given special offers in accordance with their previous preferences. In this way, hospitality firms can enhance customer loyalty and branding at the same time. Besides, via internet and online services, hospitality firms can advertise their services and products and enhance their brand image for a longer duration of time, compared to advertisements appearing on newspapers, TV

or radio. By online advertisement, the brand image and brand identity can be clearly and correctly conveyed to customers (McCasland, 2003).

7. Suggestions and Conclusion

Co-branding is a good strategy for effective marketing and particularly establishment of customer loyalty in hotel and restaurant sector (Lee & Reinhold, 2008). However, co-branding gives way to diminishing returns per customers, which results in marginal profit reductions. Hence, co-branding should not be utilized for long term quality maintenance. In order to handle these challenges, managers of hospitality firms need to adopt strategies for successful co-branding. Strategic thinking in co-branding also allows the transfer of co-brand image and message from firms to customers (Balmer, 2001). In this way, the co-brand can be more easily differentiated from other brands. Moreover, with strategic management of co-branding, customers' commitment and loyalty to the brands are enhanced.

For strategic co-branding management, hotel managers should (Boone, 1997);

- perceive restaurant co-branding as a partner, rather than a guest in the hotel
- join hotel managers to strategic decision making processes about hotel's important issues, such as spatial settings of restaurant, common training programs, operational synchronistic,
- invest on the brand image, co-branded identity and brand quality (such as, quality product, efficient procurement and delivery system)

Hotel managers can also utilize the help of consultants for co-branding with a restaurant.

Restaurant managers can accomplish following strategies for successful co-branding management (Boone, 1997);

- Flexible operations and branding of a restaurant should go hand in hand with hotel's operations and standards, such as spatial arrangements, training, timing of operations,
- Co-branding with hotels which overlap with the brand concept of the restaurants should be emphasized for enhanced recognition and clear message to customers about the brand identity of the restaurant.
- Benefits of co-branding, such as free benefits (e.g., complementary food or drinks with co-brand), discount benefit (e.g. discount on prices), intangible

benefits (e.g. online newsletters), gifts, samples etc. should be enhanced, which could further support the customer loyalty to the restaurant's brand (Lee & Reinhold, 2008)

- Thoughts and evaluations of customers on co-branding activities in restaurants should be recognized and taken into account (Lee & Reinhold, 2008)

Further empirical investigation of branding in hotel and restaurant management is needed. There are several research questions that can be targeted in future studies (Oh & Pizzam, 2008);

- Strategies for how and at what frequency to measure brand equity of hotel and restaurant firms,
- Perceptions and beliefs of brand managers about strategic brand alliances,
- The attitudes of international customers on co-branding of hotel and restaurant firms and how they effect their purchase behavior, satisfaction and brand loyalty,
- The saturation level of customers to the hotel and restaurant brands and the measurement of this level.

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Economic and Financial Studies on the Public Pension System in Romania at Local and Global Level

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Abstract: The National pension system, in the light of major economic and financial transactions that take place today, can be challenging, through the difficulties that they create and the solutions that they offer. This paper is a comprehensive study on the public pension system in Romania facing the current global crisis, based on local case studies in an attempt to identify the main gaps and to propose viable solutions. The obtained results are based on multifactorial analysis at local level, by personal processing of relevant data, the evolving activity collected from a county pension facility that meets the characteristics of the retirement pension system nationwide.

Keywords: public pension system; employment; social security; social security budget, pension reform

Jel Classification: G23; J68

Part I

1. General Considerations on the Public Pension System in Romania at Global Level

The public pension system is of paramount importance for any society, particularly through the impact that has on people's lives and on the economic environment by the great number of people involved (contributors and beneficiaries), by the size of expenditures. The public pension system has an important part of the budget expenditures around the world where there is still active. The world population has aged, the active population is declining, the unemployment rate has increased dramatically worldwide in the context of financial economic crisis and its effects are found in massive retirements as the "solution" to the crisis. Worldwide, 212 million registered to be unemployed in 2010, with 34 million more than in 2009.¹ The share of population aged over 65 years (possible beneficiary of the state pension system) increased from 11% in 1990 to 15% in 2009. On the other hand, the share of population aged under 14 years (the population which in the coming decades will contribute to the pension system), decreased from 24% in 1990 to only 15% in 2009.²

The Romanian pension system has come a long way from the first forms of sickness and old age insurance that exists since the 1800s, the directions being set by legislation passed in various stages of evolution of the society. Since 1990 there is a legislative ferment in this area in the excess of giving people rights that they did not have before. The consequences have resulted in the continuous increase in the number of persons included in the public pension system, simultaneously increased other socially assisted categories and the situation has worsened, being sustained by internal factors and financial and economic developments worldwide.

But the reform was delayed until 1 April 2001, the date on which entered into force Law no. 19/2000. The law introduces a series of positive news in the Romanian social, but also other things that have led to the increase of number of pensioners and thus public spending, where it can be highlighted the introduction of new categories of pension, in addition to the classical ones, and established the early retirement and partial early retirement, which can be requested and granted up to five years before reaching normal retirement age, as provided by law (Table 1).

¹ <http://www.euractiv.ro/uniunea-europeana>

² <http://www.wall-street.ro>

Table 1. Social insurance rights under the law that reformed the public pension system in Romania

Type of benefit	Coverage Source
Pension	Entirely from the state social insurance budget
- Old-age pension	
- Early retirement	
- Partial early retirement	
- Disability pension	
- Survivor's pension	
Other social security rights	
- Allowance for temporary incapacity for work caused by common illnesses or accidents outside work, occupational diseases and accidents at work	Co-financing from the state social insurance budget and employer.
- Benefits for illness prevention and recovery work capacity	Entirely from the state social insurance budget
- Maternity allowance	
- Allowance for child care or care for sick children	
- Death grant	

Source: Law 19/2000 on the date it was adopted

Another novelty in this respect focuses on providing potential contribution period of disability pensioners, calculated as the difference between complete period of contribution and the period covered by the concerned person until disability, and this is actually a credit of the invalid, given by the system until the period that he would have achieved, if he had not been ill. Besides the parameters already familiar from the old legislation (the level of contributions, retirement ages, periods

of contribution), the new pension formula¹ reveals a new defining parameter, the point of retirement. The value of it is determined by the state social insurance budget law, but the way to fund it has undergone many changes, which indicates an inconsistency in the implementation, having an effect upon parametric reform impact of the public system on the state social insurance.

The parametric reform was completed, with great delay, with a structural reform of public pension system by introducing mandatorily the privately managed pension. This system, called Pillar II, which became operational in 2008, has some special features: the amount paid from the contribution rate is accumulated in individual accounts and capitalizes on the financial market; the supervising attributions of private pension funds are delegated to the Commission for the Supervision of Private Pension System, under the control of the Romanian Parliament; the State delegates the private sector with management tasks of this pillar, but retain the regulatory functions.

Another step in the structural reform of the pension system was the introduction of the pillar III, voluntary private pension system, which became operational since May 2007, an optional pension designed for the contributions of those who adhere to the fund.

The public pension system in Romania currently works on the principle of distribution / compensation between generations ("pay as you go") is governed by Law no. 19/2000, with numerous amendments and completions. The number of pensioners rises according to the records from August 2010, at 5,497,800 of people, of which 4,770,813 have state pension insurance.² The total of employees in Romania is estimated to be about 4 million, in a country of a little over 21 million inhabitants, out of which 10.2 million adults and 5 million youth and children, 6 million elders over 50 years.

Budget deficit for 2010 state pensions could reach 3% of GDP, with chances of increasing in time, given the existing demographic, social, economic non-correlation at national and global level.

¹ It consists of adding the annual points resulted from reporting the wages for each year to the average wage income from that year – it is taken into account the entire contribution period; the sum of the annual points is divided to the complete period of contribution.

² <http://www.cnpas.org>

2. The Analysis of the Public Pension System Based on Indicators - a Case Study Braila County Pension Facility

The Braila County is part of the economic development region of the South-Eastern Romania, with a population representing about 13% of the total population. According to the existing data in 2005, the active population (of age) in the Southeast Region was 43.7% - 45.5%, but it was slightly below the national average - and the region's employed population was 36.1%, in Braila was 34%, also below the national average, 38.8%.¹

These features of the south-east area, as well as the evolution in the local economy are reflected in the values changes of some indicators of the public pension system in the Braila County.

2.1. The Analysis of the Number of Policyholders, in Developments and Correlations having Impact on the Public Pension System

The evolution of the number of employees rated from the statements presented by employers, as the evolution of the number of policyholders of the contribution by the state social insurance budget is not favourable between the years 2001 - 2010 (Table 2). In the period 2001-2005 it can be observed a continuous increase of the number of employees receiving benefits from the public system, while it is decreasing the number of active employees, which may lead to the assumption, in fact largely confirmed later, that the temporary incapacity to work was a "refuge" of those who have received notice to postpone the entry into unemployment. In the same period it is observed, an overall increase of the beneficiaries in the case of optional insurance policy, insurance contract, along with an increase in the number of policyholders in this category. One explanation is the fact that many people ensured for the purpose of receiving some benefits from the public system, especially parental leave for childcare for up to two years. An insurance of at least six months before the birth was sufficient to obtain the right to paid leave for two years. Since 2006, for temporary disability leave are not paid from the public funds, so for these periods it should be granted the state social insurance contribution at the level of the minimum wage. Therefore, in 2006, they pass among the contributors to the public system, but with a limited basis for calculating the contribution to the value of the minimum wage. Also, policyholders do not

¹ Site-ul OIR POSDRU SUD-EST, <http://www.fsesudest.ro/Prez-Reg-SE.pdf>

benefit from this contract, and the parental leave children for childcare for up to two years are no longer paid by state social insurance budget, so that persons identified in this category are no longer part of the beneficiaries of the public system.

Table 2. The Evolution of the number of policyholders who were registered in CJP Braila during 2001 – 2010 (persons)

Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1. Annual average number of nominal employees that make the statements, including:	99280	94936	89242	82284	78439	76339	75698	75888	72265	69959
2. Annual average number of employees insured beneficiaries of pension benefits payable	2838	3386	3700	4004	4295	-	-	-	-	-
3. Average number of unemployed to be paid CAS	11770	9312	5466	6111	3607	2966	1842	1335	3947	6917
4. Average number of employees are laid off	-	-	-	-	-	-	-	-	443	485
5. Average number of employees for which is due the state social insurance contribution	84672	82238	80076	72169	70537	73373	73856	74553	67875	62557
6. Average number of insured individual insurance statement, of which	1298	1399	1502	1454	1444	1365	1395	1461	1490	1532
7. Average number of insured individual insurance statement of paid benefits from the pension system	27	30	34	45	59	-	-	-	-	-
8. Average number of insured individual with insurance contract	74	303	419	583	932	1076	1542	2365	3221	3865

9. Average number of insured individual with insurance contract, beneficiaries of paid services from the pension system	1	26	94	87	153	-	-	-	-	-
10. Average number of insured beneficiaries of paid services from the pension system	2866	3442	3828	4136	4507	-	-	-	-	-
11. Average number of policyholders who owes the state social insurance contribution (1+6+8-4-10)	97786	93196	87335	80185	76308	78780	78635	79714	76533	74871
12. Average annual number of employers rated from the statements	3280	3364	3826	4512	4918	5050	5447	5828	5733	5374

Table 3. Evolution of registration with the Trade Register

Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
Number of existing registration in the Register of Trade	12434	13690	15571	17623	20115	21616	23250	25305	27238	27482
from the PF and AF	1177	1810	2739	3652	4931	5387	5850	6699	7872	8032
Number radiation, liquidation, dissolution existing in the Trade Register	3013	4992	5203	3512	1461	3183	3855	4506	5733	5906

Source: National Trade Register Office Statistics *) for 2010, data from February

Table 4. Braïla county's working population between 2001 - 2010 (persons)

Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
The county's population, of which:	385066	375898	374318	371749	370428	367661	365628	363979	360191	:
-0-14 years	64554	60709	57757	54913	52304	51469	50516	:	:	:
-15-59 years	242368	236733	238239	239002	240372	238589	237619	:	:	:
-60 years and over	78144	78456	78322	77834	77752	77603	77493	:	:	:
Employed civilian of the County	129700	127700	124200	121800	126100	127900	132200	:	:	:
The average number of unemployed	20600	19067	11794	11993	9480	7914	5984	5351	8649	12173
The number of insured active people in the evidence of CJP Braïla	109753	102850	94409	88833	82832	80454	78899	77929	78043	81854

Source: Regional Statistics Braïla, CEA Braïla 2010 data are from the month of April, “ ” signifies lack of data

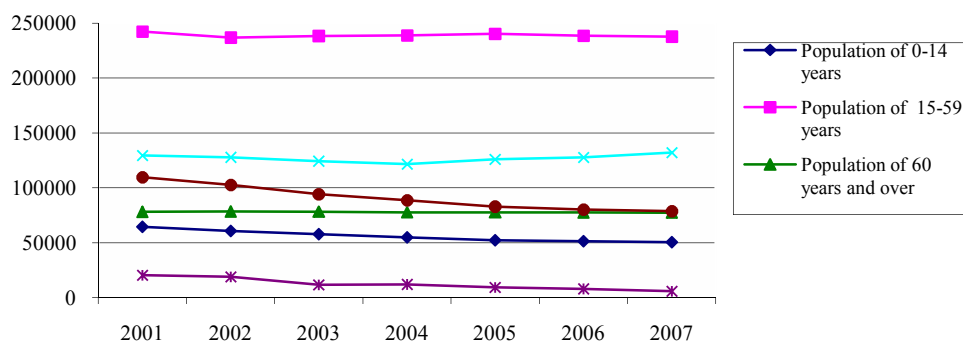


Figure 1. The evolution of the population of Braïla County

Table 5. The situation on the average number of policyholders in relation to the ages of policyholders who were registered in CJP Braila (persons)

Indicator	Ani									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
Average number of statements of policyholders under the age of 35 years including	47901	45285	38750	33929	31055	27789	26608	25646	23492	21553
Average number of statements of policyholders aged between 35 and 45 years inclusive	25934	23426	23585	22554	22068	22054	21920	22206	21893	22119
Average number of statements of policyholders aged between 45 and 60 years inclusive	24354	25196	25739	24588	24048	25153	25657	26313	25219	24671
Average number of statements of policyholders aged over 60 years	1091	1028	1169	1213	1267	1344	1513	1723	1661	1616
Average number of insured persons with insurance declaration under the age of 35 years including	326	358	382	348	340	273	265	286	293	273
Average number of insured persons with insurance declaration aged between 35 and 45 years inclusive	466	447	473	465	454	435	461	477	496	541
Average number of	496	581	638	635	643	647	652	678	677	689

insured persons with insurance declaration aged between 45 and 60 years inclusive										
Average number of insured persons with insurance contract under the age of 35 years including	10	13	9	6	7	10	17	20	24	29
Average number of policyholders with the statement of assurance over 60 years	23	157	190	233	399	354	479	698	893	965
Average number of policyholders with the insurance contract between the ages of 35 and 45 years including	17	53	98	152	275	373	524	828	1136	1397
Average number of policyholders with the insurance contract between the ages of 45 and 60 years inclusive	32	88	124	193	252	344	535	824	1152	1422
Average number of insured persons with insurance contract over 60 years of age	2	5	7	5	5	6	4	14	39	80

Source: Statistical data C.J.P. Braila's own data processing

* For 2010, the average was done on the first four months of the year.

Analyzing the number of insured employees, it has been steadily decreasing, even if the active population, in its structure, increased slightly in 2006, 2007; during these years there has been registered at national level the highest growth since 2001, and the number of unemployed decreased (Table 4 and Figure 1). This may be the result of the orientation of active people to freelance work as physical entity or in family associations, without respecting the obligation of being ensured, to the unpaid work in households or to “illegal” work.

In table 5 we observe that the decrease in the number of insured employees occurred due to the massive lowering of employees under the age of 35 years. There is a slight decrease of workers aged between 35 and 45 and slight increases among employees aged over 45 years. The same tendencies, in terms of age groups, are maintained in the cases for the insured with declaration. Only in cases where the contract of insurance policyholders may be observed increases in all age groups. This may be due to the fact that many people approaching retirement age complete their necessary period for registration to a pension.

The number of insured persons with insurance statement has not registered variations in the analyzed period. Comparing with the existing registration data from the Trade Register (Table 3), note that, except for the years 2001 and 2002, the number of insured persons with insurance declaration remains far behind the number of registrations from individuals and family associations at the Trade Register, which are the main possible individual policyholders according to the law.

As regards the taxation base, in the county, we see that, in the case of employees, between average income and gross average salary is in ascending during the analysed period (table 7 and figure 2). The assured income of individual policyholders, on average, slightly exceeded by one third of the gross average salary used to substantiate the state social insurance budget. Corroborating on this modest tax base, the ratio of the number of employees and beneficiaries of state social insurance budget, locally, which had a downward tendency during the analysed period (table 11), explains the evolution of the local budgetary execution as presented in table 14 and figure 5.

The degree of coverage of state social insurance system in the Braila County, obtained by comparing the average annual number of policyholders who were registered C.J.P. Braila, at the level of average number of persons employed at the county level, within the available data (table 6), decreased continuously from 2001

to 2007 and, given the national decline of employment, it lowered the average number of insured persons; this downward tendency continued until 2010.

Table 6. Coverage of state social insurance system in the Braila County

Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average number of policyholders under the surveillance (people)	100652	96638	91163	84321	80815	78780	78635	79714	76533	74871
Employed civilian population of the county (persons)	129700	127700	124200	121800	126100	127900	132200	:	:	:
Coverage (%)	77,6	75,7	73,4	69,2	64,0	61,6	59,5	:	:	:

Source: Regional Statistics Braila, C.J.P. Braila own calculations, " " signifies lack of data

Table 7. The evolution of the average annual income of the insured people in the evidence provided C.J.P. Braila, compared to gross average expected by the state social insurance budget law

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Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average insured annual income of employees from nominal statements	304	372	482	501	590	743	914	1177	1257	1245
Average insured income of employees with insurance declaration	153	196	248	281	342	387	464	553	611	585
Average insured income of employees with the insurance contract	156	343	286	227	263	293	342	374	383	374
Gross average wage	415	558	696	768	921	1077	1270	1550	1693	1836

Source: CJP's own statistical data Braila

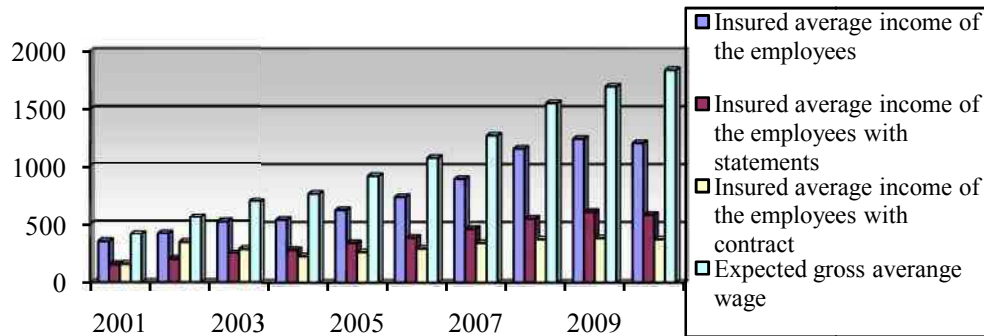


Figure 2. The evolution of insured average income of policyholders within the C.J.P. Brăila

2.2. Quantitative and Qualitative Analysis of Major Beneficiaries of State Social Insurance Budget

The main beneficiaries of state social security budget are the pensioners (table 10 and figure 4). In the past 10 years, the number of state social insurance pensioners increased by 6295. Of this growth on the entire period, 2890 represents the increase of the number of recipients of disability pensions, standing out here the existing tendency at national level. This is explained by the "refugee" found in the disability retirement by those who no longer find a place in the labour market in most cases; this is basically an early retirement. The number of pensioners of early retirement increased seven times in 2001 - 2010, and those with partial early retirement pension by 5.4 times, amounting 2058 people. Thus, approximately 79% of the total increase in the number of pensioners is the early retirement under one form or another. After analyzing the data we observed the influence of the economic environment, whereas in the most prolific years, 2007, 2008, in terms of economic, national and regional levels, the number of pensioners encounters a slight decrease, from the retired senior categories of incomplete or early retirement. As an influence of the economic area where it is assigned the Braila County, we found that the average pension at the level of the county is less than the one at the level of the country (tables 8, 9 and figure 3).

Comparing the average number of policyholders that owe the contribution of social insurance to the number of beneficiaries of the system, we observe an overall worsening of its values, which, in addition to modest tax base, is a weakness in

terms of local system-level sustainability (table 11). The report also improved considerably in 2005, when former pensions from social insurance system of the farmers have entered in the budget of the state.

The analysis of the average retirement age, both men and women (tables 12, 13), note that since 2001 the retirement age, overall, has not significantly increased for men, but it increased by approximately 2 years for women. This can be explained in particular by the facilities offered to the retiring persons that have not been placed in the upper working groups, which maintained at a low level even the retirement limit age and the period for full retirement. Overall retirement age has been maintained at a low level and largely because of the anticipated retirements. This situation is not unique to Braila County, but at national level as well, it is observed a much slower growth of the retirement age than expected. At this indicator we noticed a recovery, meaning a more significant increase in retirement age in the years 2007, 2008, but in 2009 it has decreased again for women.

Table 8. The evolution of average score and the average pension for pensioners who are paying, whose duties shall be paid from state social insurance budget, according to the existing evidence CJP Braila during 2001 - 2010

Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average score	0,71020	0,7162623	0,75340	0,80905	0,84468	0,86237	0,89218	0,93065	0,94850	0,95950
The average pension Braila (lei)	129	158	180	223	256	296	380	566	678	700
The average pension in the country (lei)	131	163	187	232	267	311	399	593	711	:

Source: CNPAS C.J.P. Statistics Braila's own data processing

Table 9. Insurance Group State pensioners who were registered CJP Braila in the amount of the pension payment after June 2010

Indicator	Tranches indicator value of pension (lei)									
	Up to 200	201-400	401-600	601-800	801-1000	1001-1200	1201-1400	1401-1600	1600-2000	Over 2000
No. of individuals	8114	13636	20669	16462	12693	7691	3405	1270	920	350

Source: Statistics C.J.P. Braila's own data processing

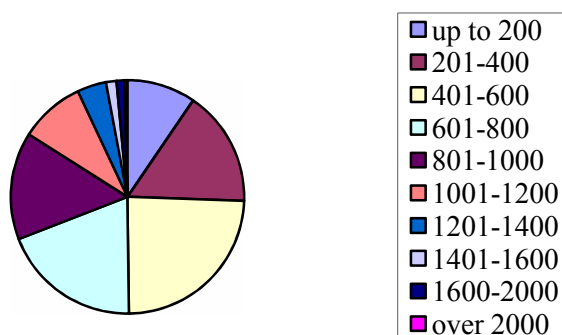


Figure 3. Gruping retiring according to the pension on June 2010

Table 10 The evolution of the number of pensioners in payment, whose duties shall be paid from state social insurance budget, according to the existing evidence CJP Braila during 2001 - 2010 (persons)

Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1. The total number of pensioners of state social insurance, including	76028	77224	78388	79071	79534	80078	79689	79548	80193	82323
2. The old-age pensioners with a full length of service	39039	39246	40046	40952	41545	42296	43187	44220	45575	47368
3. Old-age pensioners, with ain incomplete length of	15926	15309	14851	14154	13416	12555	11655	10854	10110	9919

service										
4. Disability pensioners, of which	9896	10331	10491	10943	11591	12287	12376	12394	12543	12786
5. Degree of disability pensioners	360	353	360	368	386	405	426	452	479	491
6. Grade II disability pensioners	6748	6674	6396	6336	6492	6536	6195	5999	5943	5982
7. Grade III disability pensioners	2788	3304	3735	4239	4713	5346	5755	5943	6121	6313
8. Early retirement pensioners	21	119	180	208	206	223	181	157	152	148
9. Partial early retirement pensioners	442	1630	2085	2183	2348	2453	2219	2080	2136	2373
10. Retired with a survivor's pension	10704	10589	10735	10631	10428	10264	10071	9843	9677	9729
11. Farmers' retiring	34004	32246	30302	28553	-	-	-	-	-	-

Source: Statistical data C.J.P. Braila's own data processing, for 2010 the average was performed on the first four months of the year

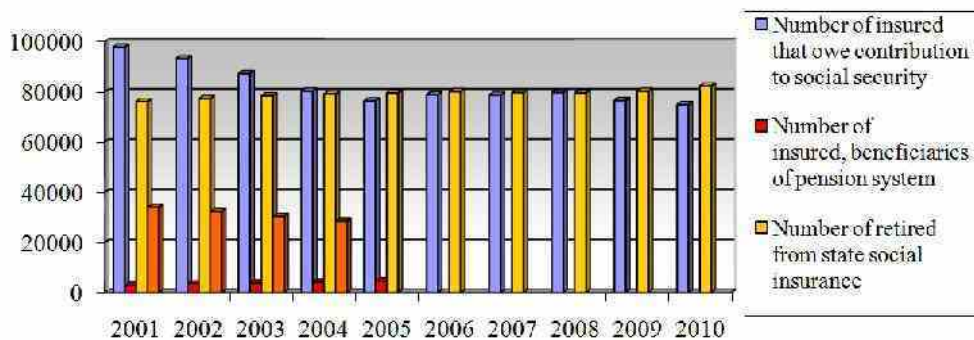


Figure 4. The evolution of the number of contributors and beneficiaries of the retirement system in the Braila County

Table 11. The evolution of the contributors / pensioners' report in the period 2001 to 2010 in Braila County

Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of taxpayers (individuals)	97787	93197	88532	82068	78525	81294	81389	81181	80297	81866
Number of pensioners whose rights are paid from the state social insurance budget (persons)	110032	109470	108690	107624	79534	80078	79689	79548	80193	82323
Report contributors: pensioners	0,88	0,85	0,81	0,76	0,98	1,015	1,02	1,02	1,00	0,99

Source: CJP's own statistical data Braila

Table 12. The evolution of the retirement age pensioners (men), whose duties shall be paid from state social insurance budget, according to the existing evidence CJP Braila during 2001 - 2010 persons

Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
The average retirement age for old age and early retirement with full length of service	60,1	59,1	58,3	58,4	58,7	58,4	59,2	59,5	59,9	60,3
The average retirement age for old age with a full length of service	60,6	59,0	57,8	58,0	58,2	57,8	59,0	59,2	59,7	59,8
The average retirement age for early retirement	59,3	59,7	59,5	59,5	59,2	60,4	59,9	60,7	61,2	60,8
The average retirement age for partial early retirement	59,8	59,4	59,1	59,3	59,4	59,6	60,0	60,3	60,4	61,4
The average age of retirement for disability	47,6	47,8	48,5	49,7	50,0	50,6	50,9	51,8	52,3	52,2

The average age of retirement for disability degree	46,9	47,0	44,0	46,7	49,0	49,9	51,3	49,0	51,4	50,3
The average retirement age for grade II disability	47,2	47,2	48,0	49,0	48,7	50,0	50,1	51,6	51,8	51,6
The average age of retirement for disability of grade III	48,9	48,8	49,8	51,2	52,0	52,0	52,3	52,0	53,1	53,7

Source: Statistical data C.J.P. Braila's own data processing, for 2010 the average was performed on the first four months of the year.

Table 13. The evolution of retirement age pensioners (women), whose duties shall be paid from the state social insurance budget, according to the existing evidence CJP Braila during 2001 - 2010 (persons)

Indicator	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
The average retirement age for old age with a full length of service	55,4	56,0	56,1	56,4	56,6	56,6	57,0	57,7	57,4	57,5
The average retirement age for early retirement	57,2	57,4	57,3	57,4	57,7	57,4	57,5	58,4	58,3	58,1
The average retirement age for partial early retirement	54,5	55,0	55,6	55,6	55,7	55,8	56,5	57,0	56,0	57,0
The average age of retirement for disability	54,8	54,5	54,4	54,6	54,6	55,0	55,2	55,6	55,7	56,5
The average age of retirement for disability degree	46,2	47,4	47,9	47,8	48,9	49,1	49,0	50,4	50,0	49,3
The average retirement age for grade II disability	51,0	48,4	47,5	52,2	47,6	50,9	50,3	47,8	50,1	40,0
The average age of retirement for disability of grade III	45,8	46,8	47,4	46,8	48,1	48,0	47,8	49,9	49,4	48,4
The average retirement age for old age with a full length of service	46,7	48,4	48,4	48,7	48,7	49,9	50,3	51,0	50,8	50,6

Source: Statistical data C.J.P. Braila's own data processing, for 2010 the average was performed on the first four months of the year.

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A Short Study on Cooperative Sector in Iran. Challenges and Issues

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Abstract: This paper aims to study the issues of cooperative sector in Iran. According to the theories, among the three sectors i.e. Public, private and cooperative sector probably cooperative sector because of participating people directly in its process, can work better for economic development and can be considered as a country economic developer example by job creation and others, **Prior Work** because Islam religion has invited people for having cooperation and also Iranian is a Muslim country then there have been a lot work on cooperative sector and this work is among the others who looks for the challenges and issues in this sector, **Approach** this paper looks for the challenges and issues of the cooperative sector in Iran to run effective cooperation, **Results** Cooperative sector in all developed and undeveloped and developing countries has its own challenges and in Iran as a fast developing country which want to speed the developing process then needs to consider the cooperative sector challenges in Iran and other countries as well, **Implications** Practitioners, academician and others who want to work on challenges and issues of cooperative sector in Iran and others. **Value** among the other important variables in economic development, cooperative has the priority because of its fast returned effects in economic development then this paper aims to study the challenges of this sector.

Keywords: Government; Public Policy; Economic Development; Iran cooperatives' need

Jel Classification: P13; P16

1. Introduction

The cooperative sector will continue to play a major role in the development of countries try to be developed or more developed ones. The notion and philosophy of co-operation is to unify the individuals and firms and small or big organizations to come together in a systematic and planed manner to achieve the desired common economic interests. According to Answers (2005) co-operation have a lot of different definitions but here is the one by the Co-operative Planning committee which defines co-operation "as a form of organization in which persons voluntarily associate together on a basis of equality for the promotion of their economic interests" (Answers, 2005). When cooperation founds there should be collective

action of participated members and individuals in cooperation to get common goals which may not have been possible for one isolated individual (Answers, 2005).

Iranian Organizations' Practical Guides to Running Effective Cooperatives

There are many major actions Iran can take to enhance the productivity of its cooperatives, some of which are discussed below:

Adjusting Governance Policies for Enhancing More Cooperation

Iranian governance should make some policy and regulatory adjustments to help motivate citizens to establish cooperatives. In some countries, people can establish a cooperative in one day but in Iran it is a difficult and complicated process. Also, the Iranian governance structure should allocate income rights and decision rights (i.e. it determines who receives income from the use of the organization's assets and who may decide over these assets).

Informing about the Advantages of Having Good Relationship with Buyers

A cooperative is just a different organizational form for a firm, and therefore has the same roles as other privatized firms. Cooperatives should follow effective management and organizational practices and should try to keep old customers while simultaneously obtaining new ones.

Inspiring Innovation and Differentiation Morality

In the Iranian cooperative sector, members usually do not participate in the process of production R&D or other innovation-driven practices. When this is the case, the participation scale is low and cooperatives struggle more. Therefore, Iranian cooperatives should try to enhance this participation to be an innovative cooperative.

Informing Ownership and Financing Issues Among Members

From the beginning of cooperatives as an organizational form, there has been a great need for open channels of clear communication to be available regarding financial and ownership affairs.

Price Setting

Price setting and other related subjects should be carefully considered in cooperatives, just as with other firms.

Marketing and Promotion

Decisions regarding marketing a new product offering from the cooperative should flow from the cooperative's role and policies and should not be a personal decision.

Market power, or more generally market imperfection, is the most common reason for establishing a cooperative mentioned in the economics literature (e.g., LeVay, 1983; Schrader, 1989).

Considering Formal and Informal Aspects

The informal aspects of organizations have to be considered together with the formal aspects in the design of governance structures for cooperatives (Baker, e.a., 1999, 2002).

Iranian Cooperatives should be linked with Superior International Cooperatives

The main function of the cooperative is to enhance income of member-firms by providing specific services that support the activities of the members (Bijman & Hendrikse 2003). Because trust is one essential matter in every cooperative, having a relation with other superior organizations for monitoring is desirable. It is notable that Iranian organizations follow Islamic teachings and speech, which encourage a high level of compliance with organizational norms and rules. Additionally, “a cooperative may also be superior to a stock listed enterprise due to the continuous exchange of information between members, which enables them to evaluate the decisions of the professional management better than the many small shareholders of stock listed companies” (Hendrikse and Cees, 2003, p.6).

Motivating Scholars who Want to Study about Iranian Cooperatives' Challenges

Iranian scholars should note the results of much economic research when engaging in the study of cooperatives. Iranian scholars should also engage in repeated interaction between the two research communities, association and R&D sectors in the form of conferences, workshops, and joint publications. Also they should pay more attention to increase awareness of the research traditions in the disciplines which it would be of great help. Cooperative studies can hardly be based on economics alone, but it would be foolish to disregard economics. Also Iranian scholars should use multidimensional thinking or open-minded and pluralistic attitudes, which can be the necessary ingredients of success (Kalmi, 2003).

Privatizing

Privatization can be stated as the transfer of operational control of an enterprise from the government to the private sector (Bahatia & Campbell, 1998). A move towards greater privatization results in the creation of more cooperatives in a society, so it should be considered one of the aspects to driving effective cooperative formation and maintenance in a country (Noruzi & Westover, 2010, p 97).

2. Iranian Cooperative Sectors' Need

All cooperatives need some actions to be survived in today's turbulent market and Iranian co-operations' are not except from this rule the following guides will help governors in the area of cooperative sectors.

1. Creating powerful structure at all levels of Iranian cooperation especially in primary level
2. Monitoring and supervising the Iranian cooperation regularly and sometimes randomly by province and capital supervisors and monitors for the capital flow, members and staff problems.
3. Programming all Iranian corporations with unified working system for better cooperating and more effectiveness.
4. Participating members more in cooperation affairs.
5. Building sustainable managerial and observation system for cooperative sector.
6. The ownership of the cooperative members should be reserved and they could give their suggestions for development of the cooperatives
7. Other countries of cooperative sectors should not be used directly and without pilot test, because they are developed for that country and if we want to borrow we should have a pilot test on it.
8. Governors should pursue the cooperatives for being multipurpose cooperatives because it will have competitive advantages over single purpose cooperatives, again it is depending on the environment they are operating in for example it can be good in one country or region but not to be used in other country.
9. Providing self-help spirit among people to establish or refinance cooperatives.
10. Governors should try to have a good, strong, and long term partnership with the cooperatives because this relationship will have mutual but it should be built on trust.
11. Successful cooperative building programs should be done by governors to make easy establishing cooperatives.
12. Building a suitable structure vertically or horizontally for cooperatives
13. Governors should try to make a good relationship between local organizations and cooperatives and ask them to solve their bureaucratic problems fast
14. Try to get donors for NGO cooperatives (Kathmandu, 2004).

3. Results and Discussions

Due to weakening of the cooperative institutions due to their poor financial condition and lack of professional management, not having enough knowledge about cooperative, lack of adequate infrastructure, lack of capability to withstand

competition, over-dependence on government for financial assistance and restrictive provisions of cooperative law (Vinayagamorthy, Pithadia, 2007) so the efficiency and the effectiveness of this sector got considerably reduced in the recent years. Also Iranian organization should use from the women in the cooperation sector suitably and by considering their main rule which the Islam has stated (keeping the bases of family) because as we can understand from the meaning of cooperation (working together) so women should not be taken away from this sector. Iranian cooperative sectors which want to be globalized should note the concept of co-operation emphasizes on the principles of co-operation define the basic characteristics of any co-operative organization in the world. These principles form the common thread that runs through all the co-operative societies which marginal variations (answers, 2005) and Iranian cooperatives can cooperate with other countries cooperative sectors for example Turkey, Azerbaijan and some Arabian countries because of having a common religion.

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**General Considerations Regarding the Industrial Activity of
ArcelorMittal Galati on the Environment**

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Abstract: Although everyone acknowledges the fact that industrial activities are bad for people's health and more so for the natural environment they are considered a necessary evil. You cannot expect to remain in the run of this competitive economic environment without industry. It is industry that makes the world go round even though if things keep going the same way we'll soon not have a world to talk about. However, these days there seems to be a global campaign of raising awareness about the damage we cause to nature, but unfortunately like everything else this also happened to move extremely slowly towards Romania. In Romania, national environmental groups seem to have made little impact in reducing pollution.

Keywords: environment, industrial activity, pollution, emission standards

Jel Classification: Q00; Q51; Q57

1. The Reasons for Selecting the Subject and the Study Area

Galati is the third important industrial centre in the country. It is also my hometown, therefore the reason I have chosen to write about it. It is situated in the east of Romania and beside its plants and factories has also the advantage of being placed on the bank of the Danube which makes it a port town. These two characteristics without a doubt help the economy but not without consequences suffered mostly by the environment and by extension by the people living here. This study will focus mainly on ArcelorMittal Galati and the effects its activities have on the surrounding area. I find it is of utmost importance to raise the awareness of the air pollution problem in Galati because even though many other have fought to reduce the negative consequences of this company's procedures, until now nothing seems to have changed. The cause is obvious to those who have tried again and again to establish a relationship with the executive figures of ArcelorMittal: there exists no transparency regarding their environmental programmes and no wish for collaboration whatsoever.



Study Area location



ArcelorMittal Galati is the largest integrated iron and steel works in Romania, accounting for over 50 per cent of the country's steel production. The plant occupies one-quarter of the area of the town of Galati (population approximately 300 000 people). Built in the 1960s, it currently has a capacity of 5.5 million tonnes, two thirds of which is exported to more than 40 countries.

The company was privatised in 2001 when it was acquired by ArcelorMittal Galati. With a major modernisation programme underway, the company has set itself the goal of becoming the operating benchmark for steelmaking in Central and Eastern Europe. ArcelorMittal Galati has long produced the high quality steel required by the world's most demanding industries – including shipbuilding, the automotive sector, construction and earth moving, oil and gas.” Or so they say. We should address the impact this giant that releases grey toxic puffs everyday in the air we breathe has on the community and more to the point how the executives in charge pretend to solve the environmental problems.

By 2001 the steelworks was reportedly losing an estimated USD 1 million a day, with hundreds of millions of dollars in debts (reports vary from USD 160 million³ to USD 900 million⁴). This led to its privatization. LNM bought the Sidex mill (again, reports vary on the amount paid - between USD 605 and USD 360 million⁶), causing a scandal in the UK where Prime Minister Tony Blair had signed a July 2001 letter to his Romanian counterpart endorsing the sale to Mittal.

After the privatisation the plant's name was changed to Mittal Steel Galati. In 2007 this changed again to ArcelorMittal Galati. Everyone expected the privatization to bring bigger wages for the employees, better working conditions and a new level of awareness in relation with the environmental impact the toxic wastes and releases had. Well, it didn't happen something even remotely close to this. In its heyday the plant reportedly employed 47 000 people, though by 2001 this was down to 25 000. By 2005 this had dropped to 18 000, with the aim of cutting a further 5000 jobs by 2008. This of course produced panic and led to strikes.

2. Environmental Threats

Environmental Issues



The main factors that change the natural attributes of the environment in Galati are: industrial activities (ArcelorMittal Galati- iron plant, Damen Shipyard- ship constructing, food and drink industry, textile industry, chemical industry, oil processing

industry, etc; waste products which are either thrown in the Danube or on the streets/in parks/in forests, etc; pollutant agents produced by transport vehicles and released in the air.

Although everyone acknowledges the fact that industrial activities are bad for people's health and more so for the natural environment they are considered a necessary evil. You cannot expect to remain in the run of this competitive economic environment without industry. It is industry that makes the world go round even though if things keep going the same way we'll soon not have a world to talk about. However, these days there seems to be a global campaign of raising

awareness about the damage we cause to nature, but unfortunately like everything else this also happened to move extremely slowly towards Romania. In Romania, national environmental groups seem to have made little impact in reducing pollution. Reasons for this inefficacy include there being little information about environmental groups and what they aim to achieve. There is a lack of advertising on their part, a lack of organisation and a lack of funds. Ecological parties, however, have gained seats in the Romanian Parliament, indicating that environmental issues are of concern to a significant number of the general population.

The challenge that the community faces living next to the ArcelorMittal it is people's day to day struggle for environmental justice and an environment that is not harmful to their health and free of pollution. The issue here is that for many living in Galati, the plant is a mixed blessing as they either work or has relatives or friends who work for ArcelorMittal. And although there have been numerous strikes, the complaints made were more about wage levels and not about working conditions or environmental threats. This must not come as a surprise because the effects of pollution and nature's damage are not so easily observed or felt. People are more concerned about ensuring a decent life standard for their family than about the thinning of the ozone layer or leaves and grass turning brown.



Another point to be made in connection with the people's ignorance regarding the damage this industrial giant causes on the town is the following: they have lived so long in this environment that they have adapted and do not detect changes or deterioration that for others/foreigners are noticeable. To back up this affirmation I can present my own experience. I have lived for many years in Galati, of course with the relevant travels on holidays, but after leaving town for only a week or two, on my arrival I couldn't feel a significant difference in the atmosphere. What I am trying to say is that, obviously I could not expect the air to be as clean as it is in the mountainous towns, but it seems my body was so intoxicated with that air to such an extent that it felt familiar. However, after I have left for college and have taken quite a long deep breath of mountainous air, going back to Galati hasn't been too easy. The first week I have spent in Galati was awful. I could actually feel the air was full of dust particles when inhaling, and at nighttime even in winter I would keep the window open because I felt I couldn't breathe. Surprisingly after that transitory week things started to improve, not much but breathing became quite bearable.

One more thing that we have observed is the sky. It is grey, or greyer than it should be anyway. The best days to observe this is on work days when the activity of the plant plus the intense transportation/circulation of the cars turn the whole city grey. Anywhere you go, you find exhaust fumes that make you choke and if it rains, the rainbow effect can be seen anywhere on the streets.

Galati is one of most polluted areas in the country and for several years the local Earth Friends NGO has been monitoring and campaigning on the environmental problems caused by the plant. Although the steelworks has been turned around economically during the last few years, ArcelorMittal Galati still suffers from serious environmental and health and safety problems, and improvements in these areas appear to be proceeding very slowly.

The problems stem mostly from the promises the company has made and exactly what they have delivered. The company received a USD 100 million short-term loan for Galati from the European Bank for Reconstruction and Development (EBRD) in 2001, which was extended in 2002. The project was classified as C/1 category and required an environmental audit. One of the elements of the project was to implement an Environmental Action Plan for the plant to reduce its extremely heavy environmental impact.

The main pollution concerns identified were as follows:

- Out of the 112 controlled emission sources of Sidex only 41 complied with emission standards (the main pollutants being dust, CO, NO_x, VOCs, SO_x, PAHs and heavy metals).
- Fugitive air emissions, exposure to heat and noise caused serious problems in the work place.
- Effluent waters polluted the two lakes (Catusa on the eastern side and Malina on the western side of the plant), which are connected to the River Siret. The main pollutants were cyanides and ammonia, which were said to have decomposed in the lakes rather than polluting the river.
- High energy and material intensity compared to that of a typical western European steel plant.

The short-term action plan for 2002-3 amounted to USD 19 million, excluding technological changes of benefit to the environment, due to be made separately, while the long term EAP was due to amount to about USD 76 million. One important requirement that came with the loan was that the company implements a public information programme. However NGOs have not been able to access the Environmental Action Plan.

The management of the plant has claimed in interviews that environmental investment in the plant is running ahead of schedule: EUR 33 million out of the planned EUR 61.2 million over 10 years had already been spent by mid-2006, and in 2005 the EBRD stated that 32 out of 54 action points had been completed, and that: “The annual progress reports on the implementation of the EAP show that good progress has been made over the past three years”.

However according to the local groups the environmental conditions have not subsequently been improved in the area and the EBRD concedes: “there is a (sic) considerable work left to do in the remaining six years”.

Labour and health and safety issues

The main aim of the plant’s takeover was to keep it operating and prevent total collapse, and the ensuing social disaster caused by the closure of the city’s main employer. However the workers’ initial relief at getting their wages paid on time has been mixed with a certain level of concern and dissatisfaction about the company’s intentions. The main issue for workers at the Galati plant after the



privatization was the threat of redundancy.

Compulsory redundancies were forbidden for the first five years after the sell-off by the privatisation contract, however this has not stopped lay-offs in the service companies

operating at the plant. As mentioned above, between the 2001 privatisation and 2005, the number of workers dropped from 25 000 to 18 000, with plans to lay off 5000 more.

Under the privatisation deal, LNM was declared exempt from VAT on imports or profit tax for five years. This exemption was terminated beginning January 1, 2005. However, the company has been accused of interpreting the clause too liberally, by refusing to pay wages tax or its workers' social costs and health insurance. The Guardian newspaper in the UK also reported frustration among workers at the new management's seeming reluctance to pay for a daily milk ration, to which 20,000 people are entitled on doctor's orders in order to reduce the health impact of a severely polluted working environment. In the last few years there have been several protests by workers at Galati. The main issues at stake are salaries. In 2005 members of the Solidaritatea union even went on hunger strike over Mittal's refusal to negotiate with the union on the collective bargaining agreement. In April 2007 the plant underwent the first general strike in its history, mainly over pay levels.



The number of injuries and deaths at the plant has raised concerns with safety inspectors citing 25 deaths and 254 injuries between the Mittal takeover in 2001 and July 2006. The company disputes the figures but admits to 17 deaths and 203 injuries serious enough to prevent employees working for some time. Mittal says it has improved safety since it took over: "We have put great emphasis on reducing the injury rates with considerable success. Prior to ArcelorMittal's ownership the average number of lost workday injuries per year was 147. In 2005, this had been reduced to 32, an improvement of 79 per cent," said a company spokesperson, who also claims that the average number of deaths at the plant has also fallen since Mittal took control. The company's claims to take health and safety seriously are disputed by many, including the state safety inspectorate. In the first half of 2006 the plant had already been fined nearly USD 60 000 for failing to regularly check equipment, for improper technology, for not checking employees' health and for inadequately marking dangerous areas.

3. Loans and Incentives offered to ArcelorMittal Galati to reduce their Environmental Problems. Ongo try to take Action but ArcelorMittal Galati is not open to Collaboration

Unreasonable subsidies for Mittal Steel Galati. Due to the Romanian government's wish to resolve the situation at the Galati plant, it offered incentives to Mittal in the form of tax exemptions. As mentioned above, until the beginning of 2005, Mittal Steel Galati was exempt from VAT on imports or profit tax for five years. As a result of commitments under certain agreements related to acquisitions and capital investments undertaken by ArcelorMittal, the income from operating activities in Romania was also exempt from taxes in 2004. Such benefits reduced the tax expense of Mittal's operating subsidiaries in Romania by USD 190 million.

In October 2001 the EBRD approved a short-term loan to ArcelorMittal Galati. It was a corporate revolving loan of USD 100 million (EUR 108 million), as part of a project with a total cost of USD 481 million (EUR 519 million). The loan was mentioned in the UK media during the scandal resulting from Tony Blair's 2001 letter to the Romanian Prime Minister recommending Mittal as a buyer for Galati and questions were asked about whether the UK government has exerted pressure on the EBRD to approve the loan for the privatisation.

In early 2002 the EBRD denied claims that the Department of International Development, headed by Clare Short, had tried to use its influence to promote

LNM, Lakshmi Mittal's company. "From our point of view we were backing the winner of a privatization process in Romania which had a sound creditworthy proposition that we could support," EBRD's head of banking, Noreen Doyle, said. Nevertheless, the UK government found itself in an awkward situation, on one hand receiving donations from Mittal and on the other hand being part of the EBRD's board making decisions on giving loans to Mittal.

In 2002 the EBRD extended a replacement loan of USD 100 million (EUR 100 million equivalent) to ArcelorMittal Galati, with an environmental category of B/1. The project aimed to support restructuring, and the loan proceeds were to be used towards financing the expenditure programme as agreed between the ArcelorMittal Group and the Romanian government at privatisation, including environmental and efficiency improvements, as well as working capital.

Non-governmental environmental groups TERRA Mileniul III and Earth Friends have communicated with the EBRD about the problems related to this project. However there has been little consensus on the results achieved, with the EBRD providing information on the actions Mittal claims it has carried out and the NGOs pointing out that hardly any improvements are visible to the local population and that the company is not willing to provide crucial data to civil society.

In July 2005, TERRA Mileniul III requested the environmental action plan from Mittal, but the letter remains unanswered. "The privatization gave tremendous financial facilities for the new owner in comparison with other large privatisations in Romania. The EBRD offered the steel works an opportunity to improve its environmental performance, but closed its eyes to the evidence of its missing transparency on environmental issues," states TERRA Mileniul III.

The Solidaritatea union expresses similar concerns, saying that many of the planned investments to improve the technological processes have been made on paper only, while those really carried out have used the cheapest materials,³² thus undermining their effectiveness.

In May 2004 the International Finance Corporation (IFC), the private sector arm of the World Bank, approved a corporate loan of up to USD 100 million to LNM Group for use in Kazakhstan (ArcelorMittal Temirtau) and Romania (Galati). According to the IFC the project's main purposes were to:

- improve the environmental performance of the plants

- create and maintain an environmental and worker health and safety system on a corporate level, so that it can help ensure that all its current and future operations will meet World Bank Group and/or European Union standards; and
- rehabilitate, de-bottleneck and provide working capital and cash support to its subsidiaries.

4. Conclusions

While the need for improvements to take place in Galati is clear if the plant is to stay in operation, questions marks remain over both the results of the loans as well as the justification for giving low-interest public loans and political support to a company headed by one of the world's richest men.

The local population has also a say in this. After conducting a survey in Galati, I have concluded that ArcelorMittal has a poor image indeed in that area. The main complaints made by the people are: 1. after the privatization, the staff reduction has left many citizens without jobs; 2. despite what the spokespersons at ArcelorMittal declared, there has been no noticeable improvement in the natural environment's quality. 3. Health issues caused partly by the extremely polluted air.

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Practitioners' Tools in Analysing Financial Markets Evolution

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Abstract: In a chaotic and confusing place as world of investing is, the practitioners, who operate on markets every day, have continuously searched to forecast properly the market movements. More minded to financial speculations, practitioners analyse financial markets looking for potential weaknesses of the Efficient Market Hypothesis, and most of the times their methods are criticised by academics. This article intends to present the traditional tools used by traders and brokers in analysing financial markets, emphasizing on critical opinions and scientific works published on this argument by now.

Keywords: Efficient Market Hypothesis; financial market analysis; fundamental analysis; technical analysis

Jel Classification: G14; G17; G19

1. Introduction

Generally, the methodologies used in analysing financial markets differ with the respect of the economic aim and foundation, and the focus of statistical fit. Thus, if the practitioners use methods that speculate the weakness of Efficient Market Hypothesis (EMH)¹ and Random Walk Theory², the academics use more accurate research instruments, considering the validity of EMH¹.

¹ It is an investment theory that was first expressed at the beginning of the XXth Century (Bachelier (1900), Cowles (1933)) and more developed later, starting with the early 1960s (Samuelson (1965), Fama (1970)). The EMH stresses that stocks always trade at their fair value on stock exchanges, so the financial markets are "informationally efficient". The "informationally efficient" means that any new relevant information appears, the agents update their expectations appropriately and thus the prices include the new information. Although the EMH is considered a cornerstone of modern financial theory, it is seen as controversial by some authors and it is often disputed (see, for example, Lee *et al.* (2010)).

² The Random Walk Hypothesis is a financial theory stating that stock prices perform according to a random walk. The stock price changes have the same distribution and are independent of each other,

Those who are actively involved in financial markets activities have always pled that the market is predictable to some degree, so that the study of past prices can be used to forecast future price direction. Therefore they use in their market “examinations” the simple analysis of historic price evolutions and their correlations, or the evolution of companies' financial indicators, methodologies named technical analysis and fundamental analysis.

On the other hand, scientific researches regarding financial markets include, among other, largely econometric articles, where VAR and GARCH type models are the most used.

This article presents the latest critical opinion, scientific results and professional texts regarding the traditional tools used by practitioners in financial markets analyses. The goal of the present work is to enrich the poor academic literature regarding technical and fundamental analysis.

The paper is structured in five main parts. Thus, the 2nd Section contains a brief presentation of Efficient Market Hypothesis and its forms, followed by the 3rd Section where fundamental and technical analyses are largely presented, with their methods and the literature review, while the Section 4 is dedicated to the criticism regarding these analyses. The 5th Section concludes the paper.

2. The EMH and the Financial Markets Professional Analysts

As Bodie *et al.* (2003) assert “investors invest for anticipated future returns, but those returns rarely can be predicted precisely”. Business cycle theorists believed tracing the evolution of several economic variables over time would clarify and predict the progress of the economy through boom and bust periods. The behaviour of stock market prices over time is the most suitable for this kind of analysis and one of the first to examine stock price changes was Kendall (1953). He found that he could not identify any predictable patterns in stock prices and prices seemed to evolve randomly. Thus, the data provided no way to predict price movements. In other words, Kendall's results imply that stock market follows no logical rules and at the beginning his affirmations disturbed some financial economists. However, on further reflection, economists seemed to accept and to share the idea that random

so the past movement or trend of a stock price or market cannot be used to predict its future movement. This theory was described as perfectly matching with the Efficient Market Hypothesis.

¹ A comparative study regarding both academic and professional methods used in financial markets analysis is the aim of another research we made that will further be published.

price movements indicate, in fact, a well functioning or efficient market and not an irrational one.

Anyway, the competition among professional analysts and investors leads to market efficiency and it is not difficult to show how. Suppose, for example, there is a model able to predict stock prices. A prediction regarding the dramatic rise of stock prices within few days implies a great wave of immediate buy orders to cash in from all investors with access to the model's prediction. In this case, no one would be willing to sell, and the consequence of investors' behaviour would be an immediate jump in stock price. Thus, the forecast of *a future price increase* leads instead to *an immediate price increase*, because the stock price will immediately reflect the “good news” offered by the model's prognosis. So, a forecast about favourable *future* performance leads instead to favourable *current* performance¹.

More generally, there is a twofold conclusion from this example. Firstly, any publicly available information that might be used to predict stock performance should already be reflected in stock prices and this notion is referred to as the *Efficient Market Hypothesis (EMH)*². The second conclusion is that as soon as there is any information indicating a stock is under-priced and offer a profit opportunity, investors will buy the stock and immediately bid up its price to a fair level³. So, it must be that prices increase or decrease only in response to new information. By definition, new information must be unpredictable. The conclusion is the stock prices that change in response to new and unpredictable information also must move unpredictably, following a *random walk (RW)* process.

The proof is obtained via the Law of Iterated Expectations⁴.

Suppose that the price of stock considered above at time t is p_t and can be written as the rational expectation of some “fundamental value” V^* , conditional on information available at time t , I_t :

¹ In other words, the future price expectation, conditional on information available today, equals today's price (Bailey, 2005, pp. 57). This represents the martingale model, who can be written in its simplest form as: $E[p_{t+1} | I] = p_t$.

² If the market prices fully reflect available information, markets are said to be *informationally efficient*. “Informational efficiency refers to the extent that asset prices reflect the information available to investors” (Bailey, 2005, pp.23).

³ At the fair level price, only ordinary rates of return can be expected.

⁴ The Law of Iterated Expectations says that “if one has limited information I_t , the best forecast one can make of a random variable X is the forecast of the forecast one would make of X if one had superior information J_t ” (Campbell *et al.*, 1997, pp. 23).

$$p_t = E[V^* | I_t] = E_t[V^*] \quad [1.1]$$

At the time $t+1$, the price p_t will be:

$$p_{t+1} = E[V^* | I_{t+1}] = E_{t+1}[V^*] \quad [1.2]$$

The expectation of the change in price over the next period can be written, considering equations [1.1] and [1.2], as:

$$E_t[p_{t+1} - p_t] = E_t[E_{t+1}[V^*] - E_t[V^*]] \quad [1.3]$$

But the information set at time t is included in the information set available at time $t+1$ ($I_t \subset I_{t+1}$), and the Law of Iterated Expectations says that:

$$E_t[E_{t+1}[V^*]] = E_t[V^*] \quad [1.4]$$

Replacing [1.4] in [1.3], results that

$$E_t[p_{t+1} - p_t] = E_t[V^*] - E_t[V^*] = 0 \quad [1.5]$$

So, realized changes in prices are unforecastable given information in the set I_t .

An important question regards the possibility that stock prices reflect all available information. The economic reality shows that there are lags between the new information availability and the market reaction. Moreover, it is possible to find that the degree of efficiency across various markets may differ. In the emerging markets, for example, information is harder to come by and thus these markets may be less efficient than developed markets, where information spread faster. Another example could be small stocks, which are less important for analysts and therefore could be less efficiently priced than large stocks.

In accordance with what the term “all available information” means, it is common to distinguish among three versions of EMH: *the weak*, *the semi-strong* and *the strong* forms of the hypothesis.

According to the *weak-form of EMH* stock prices already reflect all information publicly available regarding the market trading data, such as the history of past prices, trading volume or short interest. In this case, analysing the trend is useless because all investors have access to these information and their actions would result in an immediate price change.

The *semi-strong form efficiency* states that the information set contains all information known to all market participants and such information include, in addition to market trading data, fundamental data on the firm quality management, patents held, accounting practices and so forth. Any investor who has access to such information from publicly available sources will react and immediate price changes will be noticed.

The third form of EMH is the *strong* form. It states that stock prices reflect all information known to any market participant, even the information available only to company insiders. This version of the hypothesis is considered quite extreme.

Despite of all studies and demonstrations regarding the viability of EMH and their forms, it is not enthusiastically accepted by professional market analysts. Practitioners continue to analyse the historical price evolutions (technical and inter-market technical analyses) or the fundamentals of firms (fundamental analysis) in order to find trends that will enable them to earn abnormal profits.

There are not numerous scientific studies about fundamental and technical analyses, as these methods are typical for practitioners and not for academics. Even so, the published articles cover a vary range of arguments regarding these analysing methods, as further in the Section 3 are presented. Thus, there are articles who analyse if and how fundamental analysis and technical analysis can predict prices variations, other studies who investigate the influences of professional analysts on market price changes, or even articles who consider these approaches not sufficient robust for a real analysis of financial markets.

3. Fundamental and Technical Analysis

As Werner F.M. De Bondt (1992) said at the beginning of 1990s, “security analysis is still more art than science” The methods used by practitioners to analyse securities and to make investment decisions are divided in two main categories: *fundamental analysis* (FA) and *technical analysis* (TA)¹. The FA implies analysis of company’s characteristics in order to estimate its value. The TA, named also *chartists analysis* has a complete different approach. It is not interested in the value

¹ Some authors (Chorafas, 2005, for example) assert that nowadays dividing the market analysis in only two categories is not generally accepted, because quantitative analysis has become a self-standing discipline. So, the opinions are divided. However, in this work the argument is developed according to the opinion that quantitative analysis is a subdivision of technical analysis, alongside charting analysis.

of commodity or company, but only in the movement of the prices on the market. So, it is obviously that fundamental and the technical analysis are not only two different approaches to the same question, but they are entirely different in nature. Fundamentals deal with corporate financial results, while technical indicators focus on stock price trends (Thomsett, 2006).

3.1 Fundamental analysis

There are vary definitions of fundamental analysis¹ and basically all of them emphasize that FA is a process of evaluating a firm for its investment worthiness by looking at its business, at the basic or fundamental financial level. Fundamental analysis is about investing all the “fundamental” aspects that affect the price of a security and, according to some authors, represents “the more influential method of security analysis” (De Bondt, 1992). It involves examining a firm’s financial indicators and operations, and may also include the analysis of market behaviour (see Piotroski (2002), for example).

The theoretical basis for fundamental analysis is that the market’s pricing mechanism reflects faulty and frequently irrational processes. Stock prices vary more rapidly and drastically than value². Over the near term, the market seems to overreact to news and stock prices change, but on the long-run prices and values converge. The fundamental analysts are represented by those who are convinced that prices will return toward their long-run equilibrium values. Hence, if the price is below (or above) its fundamental value, they will buy (or sell). Such a trading strategy tends to stabilize the market since prices are pushed toward their equilibrium values.

The main goal of fundamental analysis is to generate insights that are not already reflected by market prices. In other words, fundamental analysts pursue to enhance the ability to predict future security price movements and use such predictions to design equity portfolio. Fundamental analysts usually start with a study of past earnings and an examination of company financial statements. They supplement this analysis with further detailed economic analysis, ordinarily including an

¹ “Fundamental analysis is the research on determinants of stock value, such as earnings and dividends prospects, expectations for future interest rates, and risk of the firm”(Bodie *et al.*, 2003).

² It must be mentioned here the distinction between market stock price and its intrinsic value. According to Cottle *et al.* (1988) intrinsic value is “the value which is justified by assets, earnings, dividends, definite prospects, and the factor of management”.

evaluation of the quality of the firm's management, the firm's standing within its industry, and the prospects for the industry as a whole (Bodie *et al.*, 2003). There is not a single set of well defined tools that constitutes a fundamental analysis. Some of the valuation measures it uses, that are often used in other types of stock valuation techniques as well, are:

- *Earnings*. Fundamental analysis places much emphasis upon a company's earnings. Earnings are important to investors because they give an indication of the company's expected dividends and its potential growth and capital appreciation. However, that does not necessarily means that low or negative earnings always indicate a bad stock.
- *Earnings-per-share (EPS)*. It is an important indicator in order to make earnings comparisons more useful across companies. EPS is calculated by taking a company's net earnings and dividing by the number of outstanding shares of stock the company has.
- *Price-to-earnings (P/E) Ratio*. This indicator is necessary in order to know how the market values the stock and figures out how much the market is willing to pay for a company's earnings. A stock's *P/E* ratio can be calculated by taking its price per share and dividing by its *EPS*. There can be "*trailing P/E*" (calculated for the previous year), "*current P/E*" (for the current year), or "*forward P/E*" (for the coming year).
- *Projected-earnings-growth (PEG)*. It is a ratio that takes into consideration a stock's projected earnings growth and is calculated by taking a stock's *P/E* ratio and dividing by its expected percentage earnings growth for the next year. *PEG* ratio is necessary due to the fact that the stock could have a high *P/E* ratio only because investors are convinced that it will have strong earnings growth in the future and so they bid up the stock's price now.
- *Dividend Yield*. The dividend yield measures what percentage return a company pays out its shareholders in the form of dividends. It is calculated by taking the amount of dividends paid per share over the course of a year and dividing by stock's price.
- *Dividend Payout Ratio*. This ratio shows what percentage of a company's earnings it is paying out to investors in the form of dividends. It is calculated by taking the company's annual dividends per share and dividing by its annual earnings-per-share (*EPS*).
- *Book Value*. The *book value* of a company represents the company's net worth, as measured by its total assets minus its total liabilities.

- *Price-to-book (P/B) Ratio*. The *P/B* ratio is determined by taking the company's per share stock price and dividing by the company's book value per share.
- *Price-to-sales (P/S) Ratio*. This indicator shows how much the market is valuing a company by comparing the company's price to its annual sales. It can be calculated by taking the stock's current price and dividing by the company's total sales per share for the past year.
- *Return-on-equity (ROE)*. *ROE* shows how much profit a company generates in comparison to its book value. The ratio is calculated by taking a company's after-tax income and dividing by its book value.

The authors of studies regarding the fundamental analysis strategy and the prediction of stock returns, particularly Piotroski (2000) and Elleuch (2009), have chosen twelve more complex fundamental indicators for their analyses: *inventory*, *accounts receivable*, *investments*, *gross margin*, *labour force*, *return-on-assets*, *cash flow*, *accruals*, *leverage*, *liquidity*, *assets turnover*; all these twelve fundamental signals are presented with their definitions in the Table 1.

Table 1 Definitions of fundamental signals

Signal	Measurement
Inventory (<i>INV</i>)	%Δ of sales - % Δ of inventory $\frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_{t-1}} - \frac{\text{Inventory}_t - \text{Inventory}_{t-1}}{\text{Inventory}_{t-1}}$
Accounts Receivable (<i>AR</i>)	%Δ of sales - %Δ of accounts receivable $\frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_{t-1}} - \frac{\text{Accounts receivable}_t - \text{Accounts receivable}_{t-1}}{\text{Accounts receivable}_{t-1}}$ <p>Earnings of operations is used as a proxy of gross margin.</p>
Investments (<i>INVES</i>)	%Δ of firm investments - %Δ of sales $\frac{\text{Investment s}_t - \text{Investment s}_{t-1}}{\text{Investment s}_{t-1}} - \frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_{t-1}}$
Gross Margin (<i>GM</i>)	%Δ of gross margin - %Δ of sales

Signal	Measurement
	$\frac{\text{Gross margin}_t - \text{Gross margin}_{t-1}}{\text{Gross margin}_{t-1}} - \frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_{t-1}}$
Labour Force (<i>LF</i>)	<p>%Δ of sales per employee</p> $\left(\frac{\text{Sales}_t}{\text{Employee number}_t} - \frac{\text{Sales}_{t-1}}{\text{Employee number}_{t-1}} \right) \div \frac{\text{Sales}_{t-1}}{\text{Employee number}_{t-1}}$
Return on assets (<i>ROA</i>)	Net income before extraordinary items _t / Total assets _{t-1}
Variation in Return on assets (<i>ΔROA</i>)	ROA _t – ROA _{t-1}
Cash flow (<i>CF</i>)	<p>Cash flow_t / Total assets_{t-1}</p> <p>Cash flow = Earnings before extraordinary items - Accruals</p>
Accruals (<i>ACC</i>)	<p>Accruals_t / Total assets_{t-1}</p> <p>Accruals = (ΔCA – ΔCash) – ΔCL – Dep</p> <p>Where:</p> <p>ΔCA: change in current assets; ΔCash: change in cash/cash equivalents</p> <p>ΔCL: change in current liabilities; Dep: depreciation and amortization expense</p>
Leverage (<i>ΔLEV</i>)	$\frac{\text{Long term debt}_t}{(\text{Total assets}_t + \text{Total assets}_{t-1})/2} - \frac{\text{Long term debt}_{t-1}}{(\text{Total assets}_{t-1} + \text{Total assets}_{t-2})/2}$
Liquidity (<i>ΔLIQUID</i>)	$\frac{\text{Current assets}_t}{\text{Current liabilities}_t} - \frac{\text{Current assets}_{t-1}}{\text{Current liabilities}_{t-1}}$
Assets Turnover (<i>ΔTURN</i>)	$\frac{\text{Sales}_t}{\text{Total assets}_{t-1}} - \frac{\text{Sales}_{t-1}}{\text{Total assets}_{t-2}}$

Source: Elleuch (2009), pp.101.

The benefits may be obtained using fundamental analysis only if the information is not yet recognized by the rest of the market. The efficient market hypothesis predicts that most fundamental analysis will add little value. If analysts rely on publicly available earnings and industry information, one analyst's evaluation of the firm's prospects is not likely to be significantly more accurate than another's.

3.2 Technical analysis

Technical analysis operates on the theory that market prices at any given point in time reflect all known factors affecting supply and demand, as well as a firm's relative financial strength. Thus, TA focuses on analysing market prices themselves, rather than directly evaluating of fundamental strength or factors of supply and demand. Strategies based on TA generally utilize a series of calculations designed to detect when a price change is likely to occur so that an investor can manage market positions in the short-term, such as the case in highly leveraged derivative markets. In contrast, FA takes on a more long-term perspective in determining which firms are most likely to perform well in the future, based on their fundamental business strengths.

A briefly definition of technical analysis says that it represents “a research on recurrent and predictable stock price patterns and on proxies for buy or sell pressure in the market” (Bodie *et al.*, 2003). Technical analysis assumes a slow response of stock prices to fundamental supply and demand factors, which is diametrically opposed to the notion of an efficient market. A very good synthesis of technical analysis philosophy is offered by Edwards and Magee (1992):

- the market value of an asset is determined only by the interaction between supply and demand;
- supply and demand are governed in any moment by numerous factors, either rational or irrational;
- prices use to move along trends that persist for a certain time period;
- trend changes that represent an important change in the balance between supply and demand, sooner or later can be identified in the actions of the market.

The aim of the technical analysis is to identify the increasing and decreasing trends of the market, and, most of all, to identify as early as possible the signals of trend changes, considered sell- or buy-action signals. Although technicians recognize the value of information that has to do with the future economic prospects of the firm, they believe such information is not necessary for a successful trading strategy. The basic principle of their analysis is that prices move in trends and thus they buy when prices increase and sell when prices decrease. Therefore, the information set necessary to develop the analysis contains only past prices and transaction volumes.

Technical analysis uses mostly *chart-based* techniques in order to evaluate the future potential trend of financial markets of individual securities. This is the reason why sometimes technical analysts are called *chartists*. *Chart-based* technique means the study of price time series trend and of indicators obtained using past prices and volumes. So, the methodology of technical analysis is very simple and rather intuitive. An example of a technical approach is the *relative strength* approach. The chartists compare the stock performance over a recent period to performance of the market or other stocks in the same industry. For example, a simple version of relative strength is the ratio between the stock price and a market indicator such as an important stock index. If the ratio increases over time, the stock is said to exhibit relative strength, because its performance is better than that of the broad market. Such strength presumably may continue for a long enough period to offer profit opportunities. The importance of *price trends* in technical analysis is crucial. The entire system is based on the idea that the most recent trends reveal and anticipate what is going to happen next.

Chartists use various trading rules to exploit true or imagined short-term patterns in prices. Pring (1991), for example, says that technical analysis includes three broad areas: *market feeling indicators*, *flow-of-funds indicators* and *market indicators*. According to DeBondt (1992), the technical trading rules are: *market timing*, *filter rules*, *measures of "relative strength"*, *line and bar charts*, *200-day moving average in prices*, *the study of trading volume*, *aggregate demand/supply analysis*. More recently, presenting the comparisons between fundamental and technical analysis, Thomsett (2006) make a brief description of the most used concepts of technical analysis as following:

- **Charts.** Charts represent the basic tools of technical analysis and are used to study price movements in the belief that specific patterns signal how future prices will change. Types of charts:
 - (a) *Bar chart*: is a form a price charting in which a series of daily prices is shown side by side over time. The vertical bar shows the range of prices during the day from high to low. A small horizontal extension to the right shows the closing price for the day and some bar charts also include a small horizontal extension to the left for the day's opening price;
 - (b) *Close-only chart*: it is a tracking chart showing closing price only, but not the range of high and low price ranges.
 - (c) *Point-and-figure chart*: a type of chart used by technicians to track price

but not time. Rising price and trends are represented by a series of Xs and the stronger the movement, the more Xs appear. Downward prices and trends are shown as a series of vertical Os.

(d) *Candlestick chart*: is a form of chart that efficiently summarizes a day's trading range, high and low price, and direction of movement.

- **Trading range**. It is the distance between a stock established high and low prices over a period of time, representing the current levels of price supply and demand for the stock.
- **Support and resistance**
 - *Support*: the lowest likely price for a stock within its established trading range.
 - *Resistance*: the highest likely price for a stock within its established trading range.
- **Breakout**. It represents a price movement above resistance or below support levels, which signals a change in trading range and volatility for a stock.
- **Trading patterns**. Technical analysts look for specific patterns to reveal and anticipate future movements, often as quickly as a matter of days or even hours. These patterns have been given names:
 - *Gaps*: spaces between one day's close and another day's opening price.
 - *Spikes*: exceptionally big changes in price, upward or downward, when compared to established trading levels, and characterized by a return to previous levels after the spike.
 - *Triangles*: trading patterns in which the range of high-to-low prices broadens or narrows within a short period of time.
 - *Flags*: short-term trading patterns in a specific direction in which the gap between high and low remains constant.
 - *Pennants*: short-term trading patterns in a specific direction in which the gap between high and low converges over time.
 - *V Formations*: a price pattern typified by a sharp increase or decrease in price to a new high or low level, followed immediately by a sharp reversal and price movement in the opposite direction.
- **Head and shoulders**: a price trend pattern involving three stages. In an upward head and shoulders pattern, stages one and three show prices reaching

a resistance level before retreating, and the middle stage tracking the same movements but with a higher resistance level. In a downward head and shoulders pattern, the same stages exist, but they involve support levels rather than resistance.

So, technicians believe that history tends to repeat itself. This is, evidently, against the efficient market hypothesis that stresses any past trading information is already reflected in the stock price and therefore any analysis made in order to discover undervalued securities is useless. Hence, there are authors that consider profitable some methods based on technical analysis¹, even if other numerous studies show there are little statistical evidence suggesting that technicians can beat the market.

The often disputed arguments regarding the methods used by technical analysis have produced an opening of TA towards more rigorously techniques. Incorporating elements of statistical analysis into a traditional technical trading analysis can greatly improves the performance of professional trading forecasts. Murray A. Ruggiero (1997), in the Chapter “A trader's guide to statistical analysis” of his book “Cybernetic trading strategies”, underlines there are some important statistical concepts that traders should understand².

Some other authors (Gallo and Pacini, 2002) analyse technical techniques from the statistical point of view and stress the possible link between technical analysis methods and more robust methodologies, as statistic and econometrics methods for time series. They also emphasize technical methods have no probabilistic or inferential considerations and their results have no explicit confidence level. Hence, some indicators could be interpreted more rigorously in a statistical-econometric environment. Gallo and Pacini (2002) present two categories of so called *indicators of technical analysis*:

- *trend indicators*: try to identify a particular trend and to signal the presence of a bullish or bearish market. The main trend indicators are:
 - moving average (*MA*);
 - exponential moving average (*XMA*);
 - Bollinger bands (*BB*).

1 Ruggiero (1997), for example, underlines that methods as *gap analysis*, *breakout systems*, *market modes* and *momentum preceding price* concept are profitable.

2 According to Ruggiero (1997), pp.95, these concepts are as follows: mean, median and mode; standard deviation; types of distributions and their properties; how mean and standard deviation interact; hypothesis testing; linear correlation.

- *moment indicators*: measure the power of an acting trend, and so to get an anticipated information regarding the trend exhaustion and the possible trend changes. Among moment indicators are included:
 - rate of change (*ROC*);
 - moving average convergence / divergence indicator (*MACD*);
 - relative strength index (*RSI*);
 - volume oscillator indicator (*VOI*);
 - on balance volume (*OBI*).

The definitions and calculation formulas for all the above indicators, according to Gallo and Pacini (2002), are put together in the Table 2.

Table 2 Technical analysis indicators

Indicator	Formula	Notes
Moving Average (MA)	$MA(k)_t = \frac{1}{k} \sum_{i=0}^{k-1} P_{t-i}$ for $k = 4 \Rightarrow$ fast MA for $k = 9 \Rightarrow$ slow MA	a) if $MA(4)_t > MA(9)_t \Rightarrow$ bullish market b ₁) if $P_t > MA(4)_t > MA(9)_t \Rightarrow$ very bullish market b ₂) and $MA(4)_t > MA(4)_{t-1}$ b ₃) and $MA(9)_t > MA(9)_{t-1}$ c) if $MA(4)_t < MA(9)_t \Rightarrow$ bearish market d ₁) if $P_t < MA(4)_t < MA(9)_t \Rightarrow$ very bearish market d ₂) and $MA(4)_t < MA(4)_{t-1}$ d ₃) and $MA(9)_t < MA(9)_{t-1}$
Exponential Moving Average (XMA)	$XMA_t = (1 - \alpha)XMA_{t-1} + \alpha P_t$ with $0 \leq \alpha \leq 1$, and $XMA_0 = P_0$	a) for $\alpha \rightarrow 0 \Rightarrow XMA_t = XMA_{t-1} = \dots = P_0$ (XMA _t is represented by a parallel to the abscissa in P ₀) b) for $\alpha \rightarrow 1 \Rightarrow XMA_t = P_t$, for $\forall t$ (XMA _t coincide with the original P _t series, the price series at current time)
In technical analysis α is determined as		
$\alpha = \frac{2}{k + 2}$		
Bollinger bands (BB)	lower BB: $BBL = MA(k)_t - mMTSD(k)_t$ upper BB: $BBU = MA(k)_t + mMTSD(k)_t$	a) if $\frac{P_t - BBL_t}{BBU_t - BBL_t} < 0.3 \Rightarrow$ bullish market b) if $\frac{P_t - BBL_t}{BBU_t - BBL_t} > 0.7 \Rightarrow$ bearish market

Indicator	Formula	Notes
	<p>middle BB: $BBM=MA(k)_t$</p> <p>BandWidth: $BBU_t - BBL_t$</p> <p>(<i>MSTD</i> represents <i>Moving Standard Deviation</i>, a statistical measurement of market volatility in technical analysis; <i>m</i> is a multiple of <i>MSTD</i> and its typical value is 2.)</p>	
Rate of change (ROC)	$ROC_t = \frac{P_t - P_{t-k}}{P_{t-k}} \approx \ln(P_t) - \ln(P_{t-k})$ $ROC_t = \sum_{i=0}^{k-1} \varepsilon_{t-i}$	<p>$ROC_{t+1} = ROC_t + \varepsilon_{t+1} - \varepsilon_{t+k-1}$</p> <p>So</p> <p>$ROC_{t+1} > ROC_t$ if and only if $\varepsilon_{t+1} > \varepsilon_{t+k-1}$</p> <p>where ε_{t-i} represents daily yield between $t-i$ and $t-(i+1)$</p>
Moving average convergence/divergence indicator (MACDI)	<p>MACD = XMA(12day) - XMA(26day)</p>	<p>MACD buy or sell signals are signal line crossovers</p> <p>The signal line is 9-day XMA of MACD</p>
Relative strength Index (RSI)	$RSI_t = 100 \frac{\sum_{r=0}^{k-1} \Delta^+ P_{t-r}}{\sum_{r=0}^{k-1} \Delta P_{t-r}}$	<p>There are inferior and superior attention thresholds:</p> <p>a) for $RSI = 20$ - oversold</p> <p>b) for $RSI = 80$ - overbought</p> <p>Other limits could also be 30 - 70</p> <p>The values of RSI_t are $0 \leq RSI_t \leq 100$; $RSI_t < 0$ if $\Delta P_{t-r} < 0$ during all k periods</p>
Volume oscillator indicator (VOI)	<p>$VOI_t = VMA(4)_t - VMA(9)_t$</p> <p>where VMA = volume simple moving average</p>	<p>if $VOI_t > 0$ ($VMA(4)_t > VMA(9)_t$) \Rightarrow volumes sustain current trend</p> <p>if $VOI_t < 0$ ($VMA(4)_t < VMA(9)_t$) \Rightarrow volumes signal exhaustion of current trend and possible inversion</p>
On balance volume (OBV)	$OBV_t = \sum_{r=0}^t \frac{P_r - P_{r-1}}{ P_r - P_{r-1} } V_t =$ $= OBV_{t-1} + V_t \mathbf{1}(\Delta P_t^+) - V_t \mathbf{1}(\Delta P_t^-)$	<p>OVB_t series oscillate around zero if</p> <p>$V_t \mathbf{1}(\Delta P_t^+) = V_t \mathbf{1}(\Delta P_t^-)$</p> <p>More negative OVB_t is, more the current decrease pressure is confirmed; in order to confirm this trend, the other indicators will be analysed.</p>
	<p>where</p> <p>$\mathbf{1}(\Delta P_t^+)$ is 1 if ΔP_t^+ is true ($\Delta P_t > 0$) and 0 if ΔP_t^- is true ($\Delta P_t < 0$) and vice-versa for $\mathbf{1}(\Delta P_t^-)$</p>	

Source: Gallo and Pacini (2002), pp.140-152.

Although the two analyses (fundamental and technical) are seen by many analysts as polar opposites, there are enough market participants who try to get profits by combining the two. Thus, some fundamental analysts use technical analysis techniques to figure out the best time to enter into an undervalued security. Oftentimes, this situation occurs when the security is severely oversold. By timing entry into a security, the gains on the investment can be greatly improved. Alternatively, some technical traders might look at fundamentals to add strength to a technical signal. For example, if a sell signal is given through technical patterns and indicators, a technical trader might look to reaffirm his decision by looking at some key fundamental data.

Vary papers underline that speculators rely on both technical and fundamental analyses to predict the directions of future market movements. Thus, the survey conducted by Lui and Mole (1998) in February 1995 on Hong-Kong foreign exchange dealers reports that more than 85% of respondents rely on both fundamental and technical analyses for predicting future rate movements at different time horizons. The authors emphasize that at shorter horizons dealers prefer technical analysis, but as the length of horizon considered is extended they prefer the fundamental analysis. Another conclusion of this study is that technical analysis is considered slightly more useful in forecasting trends than fundamental analysis, but significantly more useful in predicting turning points. Some other recent studies, that analyse the equity markets in the U.S., assert that market participants place more emphasis on technical analysis and less on fundamental the shorter the time horizon is (Marshall *et al.*, 2008).

As literature confirms, fundamental analysis takes a relatively long-term approach to analyse the market compared to technical analysis. The two analyses are different not only from the time interval point of view, but the goal of a purchase (or sale) of a stock is usually different for each approach. Mainly, technical analysis is used for a trade (for speculations), whereas fundamental analysis is used to make an investment. Anyway, mixing some of the components of technical and fundamental analysis is not well received by the most devoted groups in each school, fundamental or technical, and they are the first who start to criticize the others' methods.

4. Criticisms of Fundamental and Technical Analysis

Much of the criticism of fundamental and technical analyses has its roots in academic theory, specifically the efficient market hypothesis (EMH). Nevertheless, even the members devoted to each school of thought (fundamentalists or technicians) tend to criticize the other group. Fundamental analysts proclaim that financial results are the only dependable means for establishing the value of a company. The price trends, in the fundamental view, are short term, chaotic, and unreliable, caused by many conflicting and inaccurate momentary factors. The immediate supply and demand within the market is illogical, price movement overreacts to news and gossip, and much of the daily price movement is either random or artificial. On the other hand, technicians point out that by the time fundamental indicators offer accurate and reliable information, it is woefully out of date. The historical financial information published by a company has nothing to do with today's pricing trends or with the direction of price movements, the technicians believe. They underline that it is the timing decisions that determines whether you earn a profit or suffer a loss in the market.

But the biggest criticism of both methods comes from the academics, pleaders of the efficient market hypothesis and its forms. The believers of the efficient market hypothesis are usually in disagreement with both fundamental and technical analysts. The efficient market hypothesis contends that it is essentially impossible to produce market-beating returns in the long run, through either fundamental or technical analysis. The rationale for this argument is that, since the market efficiently prices all stocks on an ongoing basis, any opportunities for excess returns derived from fundamental (or technical) analysis would be almost immediately whittled away by the market's many participants, making it impossible for anyone to meaningfully outperform the market over the long term. The weak form efficiency considers that all past price information is already included in the current price. According to this form of efficiency, technical analysis can not predict future movements because all past information has already been accounted for and, therefore, analysing the stocks past price movements will provide no insight into its future movements. In the second form of efficiency, the semi-strong, fundamental analysis is also claimed to be of little use in finding investment opportunities. The third version of EMH is strong form efficiency, which states that all information in the market is accounted for in a stock's price and neither technical nor fundamental analysis can provide investors with an edge. The vast majority of academics believes in at least the weak version of EMH,

therefore, from their point of view, if technical analysis works, market efficiency will be called into question.

The more criticized of the two analyses has been the technical one. Maybe the most severe study regarding this argument is that of Neftci (1991) who, not only named the technical methods “naive trading rules”, but also emphasizes that “technical analysis is a broad class of prediction rules with unknown statistical properties, developed by practitioners without reference to any formalism”. His article investigates statistical properties of technical analysis in order to determine if there is any objective basis to the popularity of its methods. Later, Marshall *et al.* (2008) find, using other methodologies, that none of the 7846 popular technical trading rules they test are profitable after data snooping bias is taken into account. They conclude that there is no evidence that the market is inefficient over the analysed time horizon (January 1, 2002 - December 31, 2003).

During the past years, vary articles regarding the robustness of technical and fundamental methods were published, some of them disputing even the validity of efficient market hypothesis in the favour of arbitrage opportunities. In the 1998 Lim *et al.* (1998), for example, obtain as research result that market inefficiency persist for at least one month and these possible profitable arbitrage opportunities appear to occur throughout the time period tested (November 1988 - December 1993). However, the frequency of potential arbitrage opportunities appears to decline in the more recent time period examined. So, the findings suggest also that the increased levels of activity in the international stock and international bond markets may be contributing to higher levels of market efficiency over time. Different studies of mean reversion in stock prices confirm that two- to five-year returns are surprisingly predictable (De Bondt and Thaler (1989), for example). Thus, the data appear in conflict with random walk theory and with the notion of efficient markets. More recently, Lee *et al.* (2010), analyse if the efficient market hypothesis holds in stock markets under different economic development levels, conclude that real stock price indices are stationary processes that are inconsistent with the EMH. This shows the presence of profitable arbitrage opportunities among stock markets.

There are also numerous studies that proof abnormal returns using fundamental and technical analysis are possible to be obtained. Ou and Penman (1989) were the pioneers in this research area, and their study conclude that fundamental analysis identifies equity values not currently reflected in stock prices, and thus systematically predicts abnormal returns. Other scholars have developed models to

analyse a firm's financial statements over time in order to determine a relative financial strength indicator that is predictive of firm's stock price returns (see Edirisinghe and Zhang, 2007). Elleuch (2009) examines whether a simple fundamental analysis strategy based on historical accounting information can predict stock returns. The results show that over-performance of the winner portfolio seems to be attributable to the ability of the fundamental signals to predict future earnings.

Despite of their different tools used in analysis of financial markets, the chartist and fundamentalist approaches explicitly model the market behaviour. Vary studies assert the impact of traders' behaviour on market dynamics and proof that, while the market impact of fundamental traders is constant over time, the market impact of technical traders is time varying and depends on market circumstances (Westerhoff and Reitz, 2005)¹. To be mentioned here, among other studies, the contributions such as those of Kirman (1991), Brock and Hommes (1997), Brock and Hommes (1998), Lux and Marchesi (2000), Westerhoff (2003) and more recently Tramontana *et al.* (2010).

As can be noticed, many studies document significant abnormal returns. Their approaches focus on the market's inability to fully process and immediately reflect the implications of particular financial signals into price.

5. Conclusions

The financial markets' actors are convinced that the market is predictable and they can use past prices evolution in order to forecast future price directions. Their idea is contrary to the Efficient Market Hypothesis, according to which stocks always trade at their fair value, so the prices include all the available information that could give a profit opportunity.

There are three forms of EMH, each of them demonstrating that analysing the price trends is useless because all investors have access to information, and their actions would result in an immediate price change.

¹ Westerhoff and Reitz (2005), analysing the corn market in the U.S.A., emphasize the market impact of chartists increases when prices run away from their fundamental values. Since the market impact of fundamentalists remains constant, the market may temporarily stop tracking its fundamental value. As long as technical traders increasingly enter the market as the price deviates from its long-run equilibrium value, lasting and pronounced bull and bear markets may emerge.

The two methods used by practitioners in financial markets analysis, namely *fundamental analysis* and *technical analysis*, are very different in concepts and approaches.

Thus, the basis for fundamental analysis is that the market stock price vary more rapidly and drastically than stock intrinsic value, but on the long-run prices and values converge. Fundamental analysts develop their forecasts starting from a study of past earnings and an examination of company's financial statements.

On the other side, technical analysis operates on the theory that market prices at any given point in time reflect all known factors affecting supply and demand, as well as a firm's relative financial strength. Therefore, technical analysis focuses on analysing market prices themselves, rather than directly evaluating of fundamental strength or factors of supply and demand.

The main difference between the two methods is that TA utilises a series of calculations in order to detect when a price change is likely to happen so that an investor can manage market positions in the short-term, while FA, in contrast, takes on a more long-term perspective in determining which firms are most likely to perform well in the future, based on their fundamental business strength.

There is not a vast scientific literature regarding these methods of financial markets analysis, maybe because of the contrary view of the academics regarding the properly approaches needed in this analysis.

Anyway, in practice the two methods are used together most of the times, even if mixing some of the components of TA and FA is not well received by the most devoted groups in each school.

Both methods are criticised by the academics, especially by the pleaders of the EMH and its forms, but the most criticised have been the technical analysis. Even so, during the past years vary articles were published regarding both the inefficiency of these methods and their robustness, some of studies disputing even the validity of EMH in the favour of arbitrage opportunities.

The practice shows us that the tools used by practitioners in financial markets analysis could offer investment returns, but during financial turmoil their methods can not be considered as standard approaches that could guarantee significant abnormal returns.

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Information and Knowledge; Communication

The Vitality of Business Communication

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Abstract: Communication entails the transfer of ideas, thoughts or feelings by the sender to receiver via verbal or nonverbal means. This transfer gains special significance in business especially in the service sector, since the service providers work with humans and what distinguishes humans from any other species is their ability to communicate with others. Communication affects a wide variety of business issues including productivity and job satisfaction via improving the conveyance of information in every level of the organization. Thus, in order to establish effective communication, the managers in an organization has to channel the receiver what they mean to communicate in a simple, direct and precise manner whether it be on the oral or written modality. To achieve this end, they should also take into consideration the gender and cultural variations in terms of communication.

Keywords: Verbal and nonverbal communication; business management; gender and cultural differences

Jel Classification: D80, D83

1. Introduction

Needless to say, communication is essential almost in every field of life, from home to work. Although we are trained in our specialization areas, in economics, in management, or whatever it is, we do not acquire any communication skill directly. It is a social process that starts from babyhood to death for us as human beings.

Some jobs need less communication capability, as computer programming or truck driving, some need more, as being a receptionist or hotel administrator. Especially in hotel business, that is generally an international setting, in every step of the work if you are not a good communicator you have little chance to be successful. Smithson presents that, in the book, *Business Communication Today*, managerial success builds on good communication. In spite of its importance, many of the workers in hotel business overlook this point in practical world. It is something that is talked about much but done little.

Despite the fact that there are many different definitions of communication, they share some common points, as “transferring”, “interaction” and “sharing with others”.

Baguley (1994) defines communication as “*the process that occurs when ideas, information and feelings are conveyed between individuals or groups of individuals for deliberate purposes*”. We comprehend that it is not only about transformation of information but also that of feelings, thoughts, needs and observations.

Business communication is defined as “*the communication required of an organization in both its internal and external environments*” (Boone, Kurtz & Block, 1997). In business internal communication can be three ways; it can be upward with superiors, downward with subordinates and lateral with peers. External communication can be between customers and service suppliers.

Our aim to communicate is numerous, however the purpose of most of our communications is to affect the other(s)’ feelings, thoughts or even behaviors we are communicating with.

Message can be passed through different means; linguistic (content, meaning, speech qualities) and non-linguistic (body language, body contact, distance, appearance etc).

Communication is a two-way process that receiver and transmitter may take part at the same time. Transmitter knows how his message is understood by the receiver’s feedback. We will mention details of the receiver, transmitter, feedback and the other components of communication process later on.

2. Why Is Communication Important in Business?

Regardless of the size of your company, communication is fundamental for business success.

Communication is the process that enables materialization and achievement of public relation goals. Communication process is vital since it is done to inform, convince, motivate and provide mutual understanding (Genc, 2009). In other words, public relations experts should know what communication is first, and then they should know how to use communication tools effectively. They also ought to be aware of how message is transferred from source to receiver and how the message is perceived by the receiver.

Today, developments in technology provide opportunities for communication tools. By means of these developments communication tools gain ground for public relations. So, communication stands on a more central position than it did before.

In tourism industry, for public relation campaigns it is vital in the sense that how these communication tools are used and what kind of messages are transferred to consumers. These messages should be appropriate, meaningful, recollective, comprehensible and reliable. Furthermore, it is important to know by which intentions that the messages are pervaded.

In every kind of industry and specifically in tourism industry, the public relation campaigns use communication tools for various purposes. The communication tools are used in order to;

- Give messages to target consumer population and pervade the messages
- Distribute the messages correctly
- Convince target consumer population that the messages are correct
- Change target populations consumer attitudes by messages
- Change target population consumer behaviors by messages (Genc,2009)

Organizational intelligence and organizational integration are the two key terms in understanding communication. Through giving and taking messages, these two terms as consequences of organizational communication are fulfilled. As people settle exchange of messages in an organization, they may start to have common expectations and meanings that are transferred by messages (Figure 1).

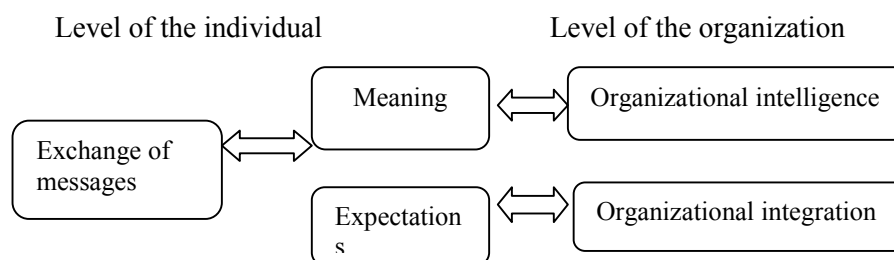


Figure 1. Key terms in the definition of communication as an organizing process

2.1. Communication & Productivity

Although the amount of the effect differs according to type of the business, or job design, or conceptualization of productivity, employees present a relationship between communication in job environment and their productivity (Clampitt & Downs, 1993).

The study showed that successful businesses were those which “more frequently provide channels for upward communication and listen to what their employees say” (Sanchez, 1999). In addition, successful businesses are better at downward communication patterns because of the fact that employees are more informed appropriately just in time, as well as they achieve “better understanding of organizational goal” (Sanchez, 1999).

Kress (2005) suppose five points of explanation to enlighten the relationship between productivity and communication;

- *Demonstrating the organization's investment in employees;*
- *Educating employees about how payment is determined;*
- *Reinforcing reward-and-recognition programs;*
- *Recognizing contributions in noncash ways;*
- *Soliciting employee feedback on issues that affect job performance.*

2.2. Communication & Job Satisfaction

In the literature, the relationship between communication and job satisfaction was found to be positively strong (Downs, 1988). Especially supervisory communication and subordinate communication have effect on employee satisfaction to a greater degree (Clampitt & Downs, 1993). Also Pincus' research in 1986 reached similar conclusions indicating the association between communication and job satisfaction.

Better upward communication gives to employee a sense of being taken into consideration by the employers since it creates an atmosphere of active participation in the organization which consequently results in employee job satisfaction.

3. The Elements and Process of Communication

3.1. Sender (Source)

The one who send messages to a receiver or receivers is called sender. Sender credibility, that is, how much the receiver trusts the sender, changes how the receiver behaves.

For hotel and restaurant setting, hotel or restaurant manager is the source of the communication through the feature of starting the process. The aim of the hotel or restaurant is to access its customers who are determined as target group before.

3.2. Receiver

The target person(s) is the receiver. But receiver is not a passive agent. S/he has experiences, set of ideas up to that time. If your listener is not interested in the topic you are talking about it is hard to point out his/her attention.

Customer is the receiver for the sector. According to the receiver, message should be organized. If so, managers should be aware who she or he wants to attain to.

3.3. Message

Any thought, idea, feeling, information that is transmitted in a written, oral or nonverbal way. It may be the pitch of your voice or a business letter or a mimic that gives clues about your anger. The contradiction between your body language and your words results in misunderstanding. Not being precisely transferring the message leads to less effective communication.

According to Genc (2009) if the message is given in tourism settings some points should be considered;

- The degree to which the message arouses interest at aimed receiver
- How the message will be evaluated by the receiver
- The degree to which the message leads customer's needs and demands
- Consistency between the message and cultural and psychological characteristics of the customer.

3.3. Channel (Method or Tools)

The tool that the sender and receiver communicate with is called the channel. From telephone to sense organs, to newspapers are channels of communication. They can be mass communication tools or more personal ones. Type of the method or tool should be determined regarding the message the sender want to transfer. Noise deforms the message's transference physically or its meaning.

3.4. Feedback

Feedback is often the immediate reaction of the receiver and how message is understood by the receiver. The only way for sender to understand, whether the receiver got the message correctly or not, is through feedback. It can be either verbal or nonverbal. As it may be a verbal response, it may also a gesture, a smile or a sigh. The sender changes or calls off the message accordingly. If the message is written getting feedback usually takes time.

Feedback is vital for hotel and restaurant public relations. Public relation experts - actually the manager- has the opportunity to know the quality of the communication. Was the customer satisfied? Were his or her needs met? Does he or she come to the same restaurant or hotel again if it is possible? Answers of these questions help the organization to establish its aims.

In parallel with communication literature in general, in public relations strong necessity has been realized in the sense that communication is not a one-way process. In contrast, customer-centric approaches increasingly have become more popular.

3.5. Context

Environment, cultural context and everything linked to the situation have an effect on communication. If there are lots of stimuli around the receiver, since attention has limits, the message may not be able to be received by him/ her properly. Culture is another common differentiating factor that may cause misunderstandings between the two parties. It will be examined in culture part of this chapter.

4. Effective Communication

Problems in the organizations mainly arise from poor communication or troubles in the communication skills. Since most of our communication appears spontaneously, there is a not unique formula.

The answer of the question, “should the relations be formal or informal” depends on the type of the restaurant or hotel. If it is a deluxe dinner house or let’s say Sheraton, it may require more formal relationship while a restaurant that addresses teenagers or a hostel may prefer more informal language.

Communication climate of the organization, which values are promoted by the organization, represents the effectiveness of communication in the work place. Managers’ approach to employees and customers influences effective communication generation. Managers should be aware of the fact that they work in service sector. By its name, it implies they should focus on customers’ needs and differences. Giving more emphasis on receiver, namely customer, brings success in communication.

The way of successful communication starts at understanding the audience and his response carefully. Regardless of the fact that the response you take is or is not parallel to you or your ideas, you should be able to keep the friendly atmosphere. In addition, shaping audience’s response is one of the successful communication signs. That partly depends on how much you are trustworthy. If you can convince that your message is credible, the effectiveness of the communication increases.

Although there may be style differences among enterprises, there are some common points that can be applied by them:

- Staff should be aware of the fact that it is a service-oriented job.
- Complaints shall be regarded as valuable.
- Explanation about things going wrong is not interest of the customer.
- Point of view of customer and staff are not the same.
- Staff should be sensitive to customers’ wishes.
- Gentle smile should not be overlooked.
- Teamwork is essential.
- Gestures are regarded thankfully by customers.

4.1. Repeating the message

U.S Navy used a technique containing;

- Tell them what you will tell
- Tell them
- Tell them what you told (Bazzett, 1999)

4.2. 5 W 1H

Bazzett (1999) presents the importance of 5w 1h questions;

- Asking yourself *why* you will communicate, what your purpose is by transferring this or that data and importance level of this communication.
- Asking yourself *what* you will communicate, in what extent you want to give details, in which borders of your information are.
- Asking yourself *who* is your audience, whom you want to reach, are they customers, or are they managers.
- Asking yourself *where* the communication takes places. What facilities the place has.
- Asking yourself *when* it is. How long it will possibly goes on, being quicker is often regarded as better than being slower.
- Asking yourself *how* you will communicate via phone, via letter or face to face. Since it determines what materials you will use it is essential to know the answer of the “how” question.

4.3. The role of the executive

According to Barnard, “serving as a channel for communication” is an essential role of the executive. He stated seven items (Barnard, 1938):

1. Channels of communication should be definitely known
2. Objective authority requires a definite formal channel of communication every member
3. The line of communication must be as direct or short as possible
4. The complete line of communication should be used

5. The competence of the persons serving as communication centers, that is, officers, supervisory heads, must be adequate
6. The line of communication should not be interrupted during the time when the organization is to function
7. Every communication should be authenticated.

5. Oral/ Verbal Communication & Listening

Different from written communication oral communication feedback is accessible for the communicator easily. He can reach the audience's reaction immediately. He can also give his message more properly since he uses his voice and body language with the exception of phone calls.

5.1. Listening

By saying listening we do not mean only the process that occurs in the ear. It implies "reading" whatever the other sends. In some sources, listening is qualified as an art. We will call desirable type of listening in successful communication as "effective listening".

Boone, Kurtz and Block (1997) mentioned a survey that explains the biological aspect of the failure of effective listening; "*average person talks about 150 words per minute, the brain can actually handle 400 words per minute- an overcapacity that can lead to inattention, misinterpretation, and boredom*". Human mind is faster at listening than speaking.

While we usually remember half of the conversation right after the conversation, we usually remember most probably only quarter of the conversation a few days later (Boone, Kurtz & Block, 1997).

5.1.1. Stages of Listening

Sensation: The first stage of listening is physiological phase. It is basically hearing the voice. Attention is crucial at his stage. The influence of physical conditions is inevitable. Not surprisingly, a noisy street may not be so appropriate to communicate for complex issues.

Interpretation: The second stage is interpretation, that is, giving meaning to what is sensed.

Evaluation: Audience evaluates the message. S/he makes decision about it.

Reaction: At this phase one behaves according to the message that is received.

6. Non-Verbal Communication

As we use language and words in communication, we benefit from nonverbal features. They include voice qualities and body language (eye contact, facial expression, mimics and gestures, head movements, postures, clothing, hair style, make up etc).

6.1. Voice Patterns

Qualities of voice, such as tone, pitch, volume, speed of voice, have some effect on your message. While a high pitch voice may say the audience something, a low pitch voice may say something different. We have an idea about the person's mood by his / her tone, pitch or volume of voice. High volume may give the impression of anger, one using low volume may start to talk about something not commonly known. However culture effect exists. People tend to speak louder in some countries.

6.2. Body Language / non verbal communication

According to nonverbal communication literature, the words we use effect 7%, our voice qualities (tone, pitch etc) 38%, while body language effects 55% on our speech.

Goman (2008) touch on the similarity between computer and body language in her book, *The Nonverbal Advantage*. We appreciate the importance of both the computers and our body language in terms of communication. However, we do not know, in advance, how to use those two languages in the service of effective communication. People cannot display with their body language what they aimed. Goman (2008) supposes it is not the matter of what the sender feels, it is the matter of what the target receives.

6.2.1. Eye Contact and Facial Expression

Face is the starting point that the audience receives information about your feelings and thoughts.

The ones who can look into receiver's eyes are more successful communicators than the ones who cannot look into the receiver's eyes. Eye contact provides two outcomes. First through eye contact you make the receiver think you have self-esteem and you believe in what you explain. Secondly, especially in the settings receiving many people, losing audiences' attention is one of the main issues for speakers. Eye contact helps the sender to catch the receiver's concentration and interest. Goman states that "looking at someone's eyes transmits energy" (2008).

6.2.2. Gestures and postures

We use gestures to support our messages. While you are saying "I am so happy" with your words, your slow hand movements and low shoulders are saying you are sad or tired, that would cause confusion in audience's mind. We can send messages intentionally or unintentionally with our bodies.

6.2.3. Physical Appearance

Physical appearance is the main element of the first impression. Combination of clothing, make-up, hair dressing or accessories expresses something to the others. People like or don't like you according to what they see immediately.

6.2.4. Physical Contact

Communication can be oral or written, people can transmit messages through touching, as well. By the act of touching, you can show warmth, friendliness, and understanding. However one should be careful to what extent the person he is speaking to allow. The nature of the relationship also is vital for touching behavior.

7. Writing

Although not being the most effective way of communication, e-mail was pointed out as main channel by 90% of employers (Sanchez, 1999).

Opposed to oral communication, written communication gives opportunity to control over the message. Written communication tools include a wide range of different forms such as memos, postings, reports, letters, presentations, resume.

Regardless of which form your writing is, your thoughts should be well organized and well constructed. Unless you know exactly what you want to say, the success probability of your writing is low. If so how will you achieve this goal?

Thill and Bevoée (1996) suggest three main phases for communicators:

- a) *Planning*: The communicator determines his / her aim to communicate, who his /her audience is, which channel or mean she / he will use.
- b) *Composing*: After the communicator organizes his thoughts he gives form his thoughts by maintaining sentences and the body of the writing.
- c) *Revising*: The communicator checks out his composition if he wrote as he purposed or not. If necessary he edits and re-writes the passages. He corrects spelling, grammar errors and arrangement.

Mind mapping is basically designing a figure that you put your thoughts and ideas linked to your main idea. Since it has very little constraints in comparison to outlining, it is a useful method. You can create more ideas in a more free way.

Written materials are not welcomed by its receivers. People only scan the text quickly. Catching the reader attention links to interesting headlines, subheads, bullets, pictures, graphs, illustrations etc.(Alessandra & Hunsaker, 1993).

7.1. Memos

Memos/memorandums include reminding or informing about a meeting or conference or making announcement or giving instructions or asking information. It can be sent to one person or more.

Your memos should be short, simple, accurate and clear as far as possible. Memos are generally one or two pages long. It should contain the sender's, the receiver's names and subject. Since reader has a short time to read, one should take into consideration what the reader needs.

7.2. Reports

People should be careful while they are writing reports since reports are long and detailed materials. Good reports also have an effect on the person's career as well as bad ones.

Business reports should be well-organized. While usage of charts, graphs, figures helps the writer in his/her explanation, it also facilitates the understanding of the reader.

Alessandra and Hunsaker (1993) advises some questions to be asked oneself writing a report:

- What is the familiarity of the reader with the problem?
- What expertise does the reader have in this area?
- What conclusions are of importance to the reader?
- What are the preconceived notions of the reader?
- Why was the report requested?
- What does the reader need to know in order to make a decision?

7.3. Letters

Business letters are formal, long-lived recordings that are written to other companies or customers for public relations purposes. According to the letter's function, one should arrange its formation.

As it is effective in other forms of writing, in letters, being precise, short and brief makes the communication more successful.

7.4. Presentation

Stage fright is the tension that is felt before any performance. Experience of the symptoms can change from person to person. Dry mouth, shaking legs and hands, tachycardia, butterflies in the stomach are only some of them.

Being sure about the purpose, why you are presenting that thing, is essential for preparation of the presentation.

Introduction is the most critical part of your presentation. Generally speaking, either you get your audience's attention or you lose them at the beginning. It can be a joke, an exercise that the audiences can participate in or a quotation that is relevant to your topic.

Conclusion is the other important part that should be paid attention. Most of the people cannot bear thing they hear for the first time in their mind at once. Primacy effect is the tendency of remembering the first elements in a series of elements

whereas recency effect is the tendency of remembering the last elements. Conclusion is important in this sense, repeating your main points at the end of your presentation will refresh and enhance the audience's memory about your presentation.

One of the main problems that presenter may encounter is the timing problem. In order not to go beyond the time or to finish early than expected, the presenter may write word by word his presentation for himself. By keeping time, he might know how much his presentation continues. However, at the presentation time, in front of his audiences he should not stand with his full-lecture at hand. Instead of this, he can hold his short notes as the plot of his speech. If the lecturer uses power point slides, he shouldn't put too many words and long sentences to his slides, as well. Finally, reading the slides is one of the common mistakes and causes for failure. Audiences, whether they are customer or co-workers, ought to feel you are well prepared for them. By that, they evaluate the importance you gave themselves as well as yourself.

We mentioned the significance of body language for communication before. Doing the same actions, like swinging on two legs distracts the audience. Meaningful jests and gestures keep audiences' attention alive. Furthermore, the second vital component of communication is the voice qualities. Changing tone, pitch and volume of the voice also helps the presenter to capture receivers' interest.

8. Communication and Gender

One should be careful when s/he is talking about gender differences. First of all we should remind the constructed nature of gender opposed to regarding gender as innate.

Women are not allowed to promote to highest positions at work since glass-ceiling effect remains (Davidson and Burke, 2004; Ryan and Haslam, 2005). However, investigating gender issue according to west and east countries may help us more in terms of tourism.

In the west side of the world, it is claimed for international business communication that women can be successful as soon as their communication tone resembles men's. It means accepting leadership effectiveness equals to masculinity (Rosener, 1997).

In the literature, there are two essentialist approaches due to sex; gender difference as a result of socialization and gender dominance as a result of economic power of men (Barett and Davidson, 2006).

One of the famous best seller writers Tannen (1990), a linguistic professor, believes that men and women impose different meanings to conversation, thus rapport talk vs. report talk. According to Tannen, while women seek for relationship (shaping rapport) and use language of intimacy, men's purpose is information, thus, is reporting to people. She also suggests that women use more indirect, "polite" language in comparison to men.

It was suggested that both hemispheres of women brain include speech-specific and language-specific areas. In Organization for Economic Cooperation and Development research, involving 32 nation, girls performed higher at reading and boys performed higher at math (Sokoloff, 2001). For instance Hall (1984) and Everhart, Schucard, Quatrin and Schucard (2001) claimed women "conform more, are more susceptible to influence, and are more adept in encoding and decoding nonverbal communications." These findings may indicate not only the differences between men and women but also why women are better at understanding "details" in communication.

9. Culture

Behavior is directly affected by culture. Understanding the effect of culture is critical to manage, to work and to be involved in tourism sector since hotels or restaurants are inevitably international settings for success.

Many features of organizational communication are influenced by cultural norms and values. Style of problem solving differs from culture to culture. In a survey, Van Dausen et al. (2002) found a culture effect that result in diversion in problem solving ways and quality. The survey is occurred in seven countries including South Korea, US, New Zealand and the others. For instance Chinese workers do not report the problem until the manager realizes it. On the other hand, in Western countries, pointing out a problem is rewarded by the managers.

Culture is generally classified as high-context and low-context. High-context refers to implicitness of most of message. They pay more attention to organization thoroughly and slowly. Japanese, Arabic and Latin American cultures may be examples of high-context cultures. On the other hand, low context refers to

explicitness of the information. They demand quickness opposed to the former. German, North American are defined as low-context cultures.

Lawrence & Edwards (2000) studied European countries with respect to their communication skills. While British managers are good at communication, Scandinavians try to stay away from conflicting situations. In Spanish countries oral communication is more common opposed to French choice of writing. In Turkey, managers are aware of the importance of communication.

Griffith (2002) suggests that managers' success is linked to his cognitive, affective and behavioral competences.

Cognitive competence is defined as one's competence at discovering intended message that a source gave by verbally or nonverbally (Applegate & Sypher, 1988; Kim, 1991). Cognitive competencies make people more easily adapt to different environmental settings.

Affective competence is about emotional flexibility of the person. Motivational and attitudinal openness to experiences can give rise to affective competence (Kim, 1991).

Behavioral competence has connection with the person's adjustability of his/her behaviors to the present atmosphere. While behaviorally more competent managers can create new and more effective communication, behaviorally less competent managers can create less effective communication (Griffith, 2002).

He asked if so how a manager can act for better communication in intercultural settings. The reply is the figure below:



Figure 2. A manager’s guide to establish better communication in intercultural settings

As we mentioned glass-ceiling for women in gender part of this chapter, it stands for minorities, as well.

In order to manage a hotel or a restaurant more effectively, one should overcome the invisible ongoing barriers of the countries by using communication tools in a powerful manner.

What can be done to improve communication in multicultural settings? As we mentioned, manager stands on critical point with respect to his job status. Firstly, training programs teaching how to manage intercultural settings may be useful.

Lippitt and Hoopes advice some crucial points for managers;

- *be aware of values that are inherent in the host culture;*
- *become familiar with the significant unique characteristics of the culture;*
- *take considerable interest in what people in the culture do;*
- *be able to greet people in their language and know certain key phrases;*

- ask the individuals to indicate cultural and technical pitfalls, expectations, and potential problems a manager might experience before the assignment;
- ask clear open-ended questions; and develop the attitude that the host organizational system is “not problem people” but “people with a problem.” (p. 28)

Language is one of the most vital barriers that cannot be totally overcome in multi-cultural settings but when you can learn more about cultural diversities, you have the opportunity to communicate effectively. Not only speaking the language but also being conscious of cultural variations and nuances is important for interaction. Even though you are sensitive about these issues, there can still be confusing situations. In case of that kind of ambiguity, trying to be easy-going helps both sides. Keeping in mind that every culture all around the world deserves to be regarded as worthy, helps getting rid of barriers.

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The Necessity of Physics' Quantum Skills Strategies, Intellectual Capital and the Study of Knowledge Management in the Crisis Era

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Abstract: Knowledge, competence, and related intangibles have emerged as the key drivers of competitive advantage in developed nations. This is not just because of the importance of knowledge itself, but because of the rapid expansion of goods and factor markets, leaving intangible assets as the main basis of competitive differentiation in many sectors. There is implicit recognition of this in both management theory and practice with the growing emphasis being placed on the importance of intangible assets, reputation, customer loyalty, and technological know-how. By using physics quantum skills in the era of management managers uses from basic science in the area of managerial issues well and they can look widely for the contemporary issues. This paper aims to review the Intellectual capital notion and learning organizations. Also a new perspective to create LOs by implementing competitive strategies like Quantum strategies comes as well.

Keywords: Intellectual Capital; Quantum Skills; Learning Organization; Management

Jel Classification: O34; J24

Introduction

Organizations function as organic entities that evolve and adapt in response to their internal and external environments. Organizational responses to their environments emerge in the course of executive interpretation of organizational strategic needs. In recent decades theorists have identified intellectual capital (IC) as an organizational asset that enhances organizational survival in the 21st century (Carrel, 2010).

History by definition reflects past events. These past events lay the foundation and indeed mandate the design and structure for the organizations of the future. From organizational history, we are able to track patterns and forecast trends of organizational behavior. This historical reserve communicates tools and resources that have been successful and also identifies those management attempts that were

not successful. The wise recognize the value of these lessons learned and benefit from the understanding of the classical management theorists' dialogue. Oliver Wendell Homes (1809-1894) stated "When I want to understand what is happening today, I try to decide what will happen tomorrow; I look back; a page of history is worth a volume of logic." To renew our understanding of organizational behavior a brief overview of the evolution of management theorists, applicable to both organizational theory and human resource utilization, is illustrated in this section. An understanding of why organizations think and behave as they do in the 21st century sets the stage for an appreciation of the environment intellectual capital is seeded. Understanding where we came from enriches our understanding of who we are and aid in predicting where we are going as well as contributing to the success of the trip (Sussland, 2001; Weick, 1999; Carrel, 2010).

As the 1990's ended, the business environment became one of virtual offices using complex networks and sophisticated technology for communication and aggregating data. The desirable employees for this millennium were knowledge-workers who knew and understood the organizational strategy and were able to aggregate information, synthesize and analyze data, make decisions instantaneously, and implement them independently (Carrel, 2010)

In the end, wealth creation in a world of heightened competition comes down to developing and owning difficult to replicate (intangible) assets, and orchestrating them astutely. The latter capability is what I have referred to elsewhere as dynamic capabilities (Teece, 2002). It is estimated that; intellectual capital research has primarily evolved from the desires of practitioners (Bassi and Van Buren 1998; Bontis 1996a; Darling 1996; Edvinsson and Sullivan 1996; Saint- Onge 1996). Consequently, recent developments have come largely in the form of popular press articles in business magazines and national newspapers (Davis, 2009, p.18).

At first this paper has a literature review on intellectual capital and benefits of Intellectual Capital in management and organization. Then the notion of Learning Organizations and Characteristics of a Learning Organization and Associated Best Practices and benefits of learning organizations comes. Finally the quantum organization and Quantum skills for learning organizations and the relationship of the quantum skills to key workplace challenges and the most important factors in quantum strategy in Intellectual Capital practical strategies to creating Intellectual Capital learning system come in details.

Intellectual Capital

The Delphi Group White Paper (2001), drawing upon the work of Edvinsson offers a useful definition, paraphrased as follows. IC can be segmented into three sub-categories: Human Capital, Structural Capital and Customer Capital. Each of these can be considered as valuable assets of an organization in a rather similar way to that of 'goodwill' on that organization's balance sheet. Human Capital is the organization's 'know-how', Structural Capital may be considered as the organizations systems or work processes, and Customer Capital as its relationship with its customers (Thompson, 2010).

Organizations do not invent, it is the people within organizations who do that and so it is important for those engaged in managing intellectual capital to take notice of the human factors. This section considers the considerable influence of human behaviors on intellectual capital management.

There are many reasons why people invent or innovate. One of the more powerful drivers amongst these reasons might include an individual's need to invent, rather as a writer must write or a painter must paint. The difference between the purely functional engineering design and the elegant one can be seen, be it of an aircraft or a bridge. Good design, like good style, is easy to recognize but difficult to describe. Apart from competency in design and innovation, the difference may be that of passion for the outcome. This passion, like that of an artist, manifests itself in the outcome of the design. Thus as the inventor develops an idea he may become as passionate about it as a painter would of his painting, and that passion may well rub off onto those with whom he shares it (Thompson, 2010).

Facilitating the Development of intellectual Capital

Those involved with the development and management of intellectual capital need to be aware of specific dynamics and aim not only to avoid stifling ideas offered from individual knowledge workers, but also to nurture them. As Tapscott and Williams (2007) put it: "The production of knowledge, goods, and services is becoming a collaborative activity in which growing numbers of people can participate. This threatens to displace entrenched interests that have prospered under the protection of barriers to entry, including the high costs of obtaining the financial, physical, and human capital necessary to compete"(Thompson, 2010).

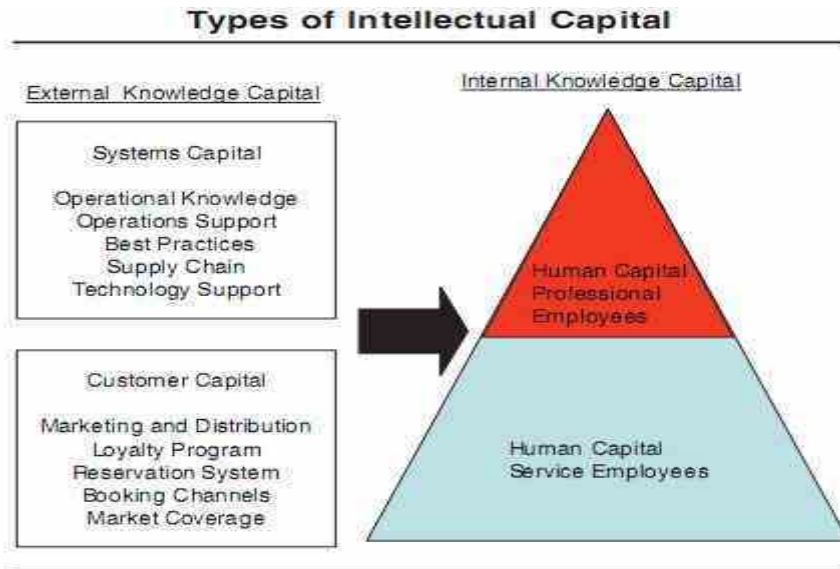


Figure 1. Types of Intellectual Capital

Source: (Walsh et al, 2008, p.302).

Benefits of Intellectual Capital in Management and Organization

Knowledge, competence, and related intangibles have emerged as the key drivers of competitive advantage in developed nations. This is not just because of the importance of knowledge itself, but because of the rapid expansion of goods and factor markets, leaving intangible assets as the main basis of competitive differentiation in many sectors. There is implicit recognition of this in both management theory and practice with the growing emphasis being placed on the importance of intangible assets, reputation, customer loyalty, and technological know-how. By using a good structure like learning organization we will have organizational structure that have the ability to support the Intellectual capital in today's market. So today's organizations should try to use this paradigm (learning organizations) to be competitive. Also because our contemporary organizations may differ from the traditional organizations and so we should implement new skills to be learning organization so that our staff can adjust themselves with new technologies. Also can sense the weak signals in the environment and can reply the prosper answer to them. In this situation our managers and executives and CEOs can effectively manage the Intellectual Capital in the organization.

IC Measurement

Plenty of convincing arguments have been forwarded in support of the need to better understand

IC via measurement and reporting. As discussed, these range from an intuitive understanding that it 'matters' (Stewart, 1997) to evidence that reporting IC has the potential to improve the efficiency of both capital and labor markets. Few authors¹, however, have traced the sequence of events involved in the development of IC. A historical perspective is important in understanding the context in which IC started appearing in company annual reports. A general timeline of major IC practice and research milestones appears in Table 1 (Cuganesan, 2010).

Period	Progress
Early 1980s	<ul style="list-style-type: none"> Continuing general notion of intangible value (often generically labeled as 'goodwill') held over from the earliest days of doing business.
Mid 1980s	<ul style="list-style-type: none"> The 'information age' takes hold and the gap between book value and market value widens noticeably for many companies.
Late 1980s	<ul style="list-style-type: none"> Early attempts by practitioner consultants to construct statements/accounts that measure IC (Sveiby, 1988).
Early 1990s	<ul style="list-style-type: none"> Initiatives by certain companies (e.g. Celemi and Skandia) to systematically measure and report on company stocks of IC to external parties. In 1990, Skandia AFS appoints Leif Edvinsson 'Director of IC'. This is the first time that the role of managing IC is elevated to a position with formal status and given an air of corporate legitimacy. Kaplan and Norton introduce the concept of a Balanced Scorecard (1992). The Scorecard evolved around the premise that 'what you measure is what you get'.
Mid 1990s	<ul style="list-style-type: none"> Nonaka and Takeuchi (1995) present their highly influential work on 'the knowledge creating company'. Although the book concentrates on 'knowledge' the distinction between knowledge and IC is sufficiently fine as to make the book relevant to those with a pure focus on IC. Celemi's <i>Tango</i> simulation tool is launched in 1994. <i>Tango</i> is the first widely marketed product to enable executive education on the importance of intangibles. Also in 1994, a supplement to Skandia's annual report is produced which focuses on presenting an evaluation of the company's stock of IC. 'Visualizing IC' generates a great deal of interest from other companies seeking to follow Skandia's lead (Edvinsson and Sullivan, 1996). Another sensation is caused in 1995 when Celemi uses a 'knowledge audit' to offer a detailed assessment of the state of its IC. Pioneers of the IC movement publish bestselling books on the topic (Kaplan and Norton, 1996; Edvinsson and Malone, 1997; Sveiby 1997).
Late 1990s	<ul style="list-style-type: none"> IC becomes a popular topic with researchers and academic conferences, working papers, and other publications find an increasingly diverse audience. In 1999, the OECD convenes an international symposium in Amsterdam on IC.
Years 2000- 2004	<ul style="list-style-type: none"> The Meritum project (2001-2003) involves six European countries working together to deliver guidelines for the development of an IC report. The 'new' Danish guidelines are developed (Danish Agency for Trade and Industry, 2003). The guidelines relied upon input from 17 Danish organizations. The aim was to guide companies in the development of their own IC statements.
Years 2005 onwards	<ul style="list-style-type: none"> Other countries develop or consider develop guidelines for intellectual capital or extended performance reporting while leading global companies continue to produce IC statements.

Source: Cuganesan, 2010, *Intellectual Capital Measurement and Reporting: Issues and Challenges for Multinational Organizations*, p.79

Learning Organizations

Apparently, learning as the core value of a company is hard to disagree (Senge, 1990; Redding, 1997). Nevertheless, we may oversimplify the key elements of organization accomplishment and think learning as an omnipotent dose dealing every problem in an organization. Although Senge’s conceptual works provide ideal scenery for the management, putting concepts into action is not so easy. Senge believes that all companies should possess the characteristic of a learning organization in order to achieve continuous success. According to Senge, a learning organization can be achieved by practicing five disciplines: a shared vision, personal mastery, strong mental models, group learning, and system thinking (Senge, 1990; 1991). The assumption is quite rational and inexpugnable, but we can soon realize that there is a knowing-doing gap. The job of changing one’s mental model and behavior is such big challenge, not even talking about changing the organization as a whole (Lee, 2007).

Another complication is the generalization of management theories proposed in Western culture to other cultures. The five disciplines working well in the West might lead to destruction in the East. For example, Chinese culture respects highly the patriarchal system. Anyone who disagrees with an authority is considered ingratitude. Transplanting different cultural values to another culture without any modification is questionable. Table 1 summarizes the characteristics of IC-knowledge based organizations (Lee, 2007).

Table 1. Characteristics of IC- knowledge based organizations *

Characteristic	Definition	Associated Best Practices	Positive Byproducts
Self mastery-individual	The ability to honestly and openly see reality as it exists; to clarify one's personal vision	<ol style="list-style-type: none"> 1. Positive reinforcement from role models/managers 2. Sharing experiences 3. More interaction time between supervisory levels 4. Emphasis on feedback 5. Balance work/non-work life 	Greater commitment to the organization and to work; less rationalization of negative events; ability to face limitations and areas for improvement; ability to deal with change

Mental models - individual	The ability to compare reality or personal vision with perceptions; reconciling both into a coherent understanding	1. Time for learning 2. Reflective openness 3. Habit of inquiry 4. Forgiveness of oneself 5. Flexibility/adaptability	Less use of defensive routines in work; less reflexivity that leads to dysfunctional patterns of behavior; less avoidance of difficult situations
Shared vision - group	The ability of a group of individuals to hold a shared picture of a mutually desirable future	1. Participative openness 2. Trust 3. Empathy towards others 4. Habit of dissemination 5. Emphasis on cooperation 6. A common language	Commitment over compliance, faster change, greater within group trust; less time spent on aligning interests; more effective communication flows
Team learning - group	The ability of a group of individuals to suspend personal assumptions about each other and engage in "dialogue" rather than "discussion"	1. Participative openness 2. Consensus building 3. Top-down and bottom-up communication flows; 4. Support over blame; 5. Creative thinking	Group self-awareness; heightened collective learning; learning "up and down" the hierarchy; greater cohesiveness; enhanced creativity
Systems thinking - group	The ability to see interrelationships rather than linear cause-effect; the ability to think in context and appreciate the consequences of actions on other parts of the system	1. Practicing self mastery 2. Possessing consistent mental models 3. Possessing a shared vision 4. Emphasis on team learning	Long-term improvement or change; decreased organizational conflict; continuous learning among group members; Revolutionary over evolutionary change

Adapted from the work of Senge (1990), Argyris and Schon (1996), Argyris (1991)

Benefits of being a Learning Organization

Twenty first century is the century of knowledge and there are many benefits to improving learning capacity and knowledge sharing within an organization. The main benefits are;

- Adapting better than your competitors to external pressures

- Systemizing innovation and new ideas
- having the knowledge to better link resources to customer needs
- Improving quality of outputs at all levels
- Increasing the pace of change within the organization
- Improving company image by becoming more people-orientated

Characteristics of a Learning Organization and Associated Best Practices *

Characteristic	Definition	Associated Best Practices	Positive Byproducts
Self mastery- individual	The ability to honestly and openly see reality as it exists; to clarify one's personal vision	<ol style="list-style-type: none"> 1. Positive reinforcement from role models/managers 2. Sharing experiences 3. More interaction time between supervisory levels 4. Emphasis on feedback 5. Balance work/non-work life 	Greater commitment to the organization and to work; less rationalization of negative events; ability to face limitations and areas for improvement; ability to deal with change
Mental models - individual	The ability to compare reality or personal vision with perceptions; reconciling both into a coherent understanding	<ol style="list-style-type: none"> 1. Time for learning 2. Reflective openness 3. Habit of inquiry 4. Forgiveness of oneself 5. Flexibility/adaptability 	Less use of defensive routines in work; less reflexivity that leads to dysfunctional patterns of behavior; less avoidance of difficult situations
Shared vision - group	The ability of a group of individuals to hold a shared picture of a mutually desirable future	<ol style="list-style-type: none"> 1. Participative openness 2. Trust 3. Empathy towards others 4. Habit of dissemination 5. Emphasis on cooperation 6. A common language 	Commitment over compliance, faster change, greater within group trust; less time spent on aligning interests; more effective communication flows
Team learning - group	The ability of a group of individuals to suspend personal assumptions	<ol style="list-style-type: none"> 1. Participative openness 2. Consensus building 3. Top-down and bottom- 	Group self-awareness; heightened collective learning; learning "up

	about each other and engage in "dialogue" rather than "discussion"	up communication flows; 4.Support over blame; 5.Creative thinking	and down" the hierarchy; greater cohesiveness; enhanced creativity
Systems thinking - group	The ability to see interrelationships rather than linear cause-effect; the ability to think in context and appreciate the consequences of actions on other parts of the system	1.Practicing self mastery 2.Possessing consistent mental models 3.Possessing a shared vision 4.Emphasis on team learning	Long-term improvement or change; decreased organizational conflict; continuous learning among group members; Revolutionary over evolutionary change

Adapted from the work of Senge (1990), Argyris and Schon (1996), Argyris (1991)

Becoming a Learning Organization

According to Peter Senge the 5 dimensions that distinguishes learning from more traditional organizations is the mastery of certain basic disciplines or ‘component technologies’ are:

Systems Thinking

Systems Thinking represents the ability to see the big picture and identify patterns and themes instead of individual events. Senge argues we tend to apply overly simplistic frameworks to complex systems; focusing on the parts instead of the whole. Classically we look to actions that produce improvements in a relatively short time span. However, when viewed in systems terms short-term improvements often involve very significant long-term costs. We may learn from experience but a simplistic short term view may mean we never learn. The argument runs, a better appreciation of systems will lead to more appropriate action (Learning Organization, 2005).

Personal mastery

Organizations only learn when individuals learn but individual learning does not guarantee organizational learning. People with personal mastery are continual learners and are aware of their short comings, development needs and ignorance yet they have the self confidence to be active learners.

Mental Models

This is about understanding that our assumptions and generalizations profoundly influence how we see the world and the decisions and actions we make. The process here is to uncover those assumptions or mental models and test them. It is also about balancing advocacy and inquiry and avoiding non-productive corporate games and politics. It is also about more distributed and local team ownership. In other words it is about fostering a mental flexibility and openness (Learning Organization, 2005).

Building Shared Vision.

The emphasis is on a “shared vision” which means collaborative development to foster genuine engagement and commitment rather than just compliance. This is the exact opposite of a CEO selling a vision. Visions spread because of a reinforcing process. Increased clarity, enthusiasm and commitment rub off on others in the organization. ‘As people talk, the vision grows clearer. As it gets clearer, enthusiasm for its benefits grow. Shared visioning build commitment for the future(Learning Organization, 2005).

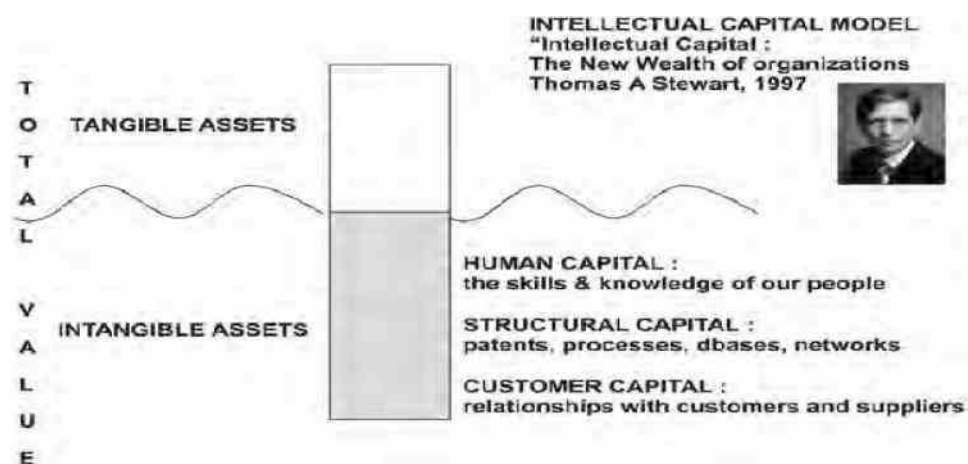
Team Learning

This is about discussion and team alignment; it is about creating the results that the team desires. It builds on vision and personal mastery but these are not enough. Teams have to learn to work and learn together. It is about team disciplines and the quality of the team’s discussions and insights. When teams learn together, Peter Senge suggests, not only can there be good results for the organization; members will grow more rapidly than could have occurred otherwise (Learning Organization, 2005).

Intangible Assets Era

As the 1990’s ended, the business environment became one of virtual offices using complex networks and sophisticated technology for communication and aggregating data. The desirable employees for this millennium were knowledge-workers who knew and understood the organizational strategy and were able to aggregate information, synthesize and analyze data, make decisions instantaneously, and implement them independently (Chiavenato, 2001; Daft, 2004). In the virtual corporate environment employee judgment has to be trusted and depended on to be representative of the organization without the luxury of

drawing consensus, accessing team input, and without supervision and mentoring of a manager down the hall or two floors above (Smallwood, 2004). This environment mandates that organizations optimize their employee corporate awareness, knowledge, and interconnectivity: their intellectual capital. Employee skills and core competencies are expected to be present while it is the employee's sought (Ulrich, 1997; Roos et al., 1998; Guthrie, 2001). Organizations need to look at their human resources and identify the intellectual capital necessary to provide sustainable momentum for the organization's competitive advantage (Edvsson et al., 1997; Roos et al., 1998; Carrel 2010).



Source: (Laycock, 2005, p.523)

The Quantum Skills of Physics

At about the same time that Taylor and Fayol were developing management theories congruent with the Newtonian worldview, Einstein was conducting experiments that eventually turned this worldview upside down. Einstein discovered that in the realms of the very small (subatomic) and the very large (cosmic), Newton's laws are null and void. By the 1920s, this discovery launched a new branch of physics called quantum mechanics. The word quantum literally means "a quantity of something"; mechanics refers to "the study of motion". Quantum mechanics is, therefore, the study of subatomic particles in motion (Shelton, 1999, pp. 1-2). According to quantum theory, the universe is basically a set of signals or a field of information. It is much more like a great thought than the

great machine metaphor of the Newtonian paradigm (Shelton & Darling, 2003, pp.358-359).

The Quantum- Physics Organizations and Quantum Skills for Learning Organizations

As leaders use these quantum skills, they create what Shelton (1999) refers to as quantum organizations – organizations where all stakeholders know how to access the infinite potential of the quantum field. Quantum organizations are, therefore, learning organizations – places where continuous improvement and constant learning are cultural norms. Table I shows the relationship of each quantum skill to seven contemporary workplace challenges: quality, innovation, motivation, empowerment, social responsibility, change, and diversity. As leaders adapt new mental models that are congruent with the quantum worldview, they will discover highly innovative ways of dealing with these organizational challenges (Shelton & Darling, 2003, pp.358-359). According to quantum theory of Physics, the universe is basically a set of signals or a field of information. It is much more like a great thought than the great machine metaphor of the Newtonian paradigm. The quantum worldview, which characterizes the universe as a dynamic, unpredictable, subjective, self-organizing system, provides the conceptual foundation for seven quantum skills – skills that enable leaders to surface and test their mental models and thus improve their capacity to learn. The quantum skills are defined as follows:

- (1) Quantum seeing: the ability to see intentionally.
- (2) Quantum thinking: the ability to think paradoxically.
- (3) Quantum feeling: the ability to feel vitally alive.
- (4) Quantum knowing: the ability to know intuitively.
- (5) Quantum acting: the ability to act responsibly.
- (6) Quantum trusting: the ability to trust life's process.
- (7) Quantum being: the ability to be in relationship (Shelton, 1999, p. 4; Shelton & Darling, 2003, pp.354-355).

The summary of quantum theory is summarized below in table II:

Table 2. The relationship of the Physics quantum skills to key workplace challenges

Challenge	Quantum skill	Definition	Behavior
Quality	Quantum seeing	The ability to see intentionally	Focused
Innovation	Quantum thinking	The ability to think paradoxically	Creative
Motivation	Quantum feeling	The ability to feel vitally alive	Energetic
Empowerment	Quantum knowing	The ability to know intuitively	Confident
Social responsibility	Quantum acting	The ability to act responsibly	Ethical
Change/chaos	Quantum trusting	The ability to trust life	Flexible
Teamwork/diversity	Quantum being	The ability to be in relationship	Compassionate

Source: Shelton & Darling, 2003, p. 359

The Most Important Factors in Physics Quantum Strategy in Intellectual Capital Management Practical Strategies to Creating Intellectual capital learning system

(1) Individual learning is an emergent process that seems to arise through interaction and seems to depend on a number of factors, of which the most important are:

- Who an agent met;
- How often an agent met a certain other agent;
- Which characteristics the agents respectively had;
- The characteristics of the agents, i.e. how much does an agent trust other agents, how motivated is an agent, how orderly, etc.

(2) Whether collective learning takes place depends on the composition of the team and their characteristics. That will eventually determine whether a group of agents will reach their group threshold.

(3) How quick an agent learns, depends on his characteristics and the characteristics of the agent he meets.

(4) An agent can learn, but he can also “unlearn” if his motivation and trust drop.

(5) Agents that represent R&D people and marketing managers seem to learn faster.

(6) The extent to which a senior manager slackens his control is determined by the degree of trust he has in the project manager, which in turn depends on the degree of trust a project manager has in other agents.

(7) A run of the model wherein senior managers were left out of the hierarchy showed that learning took place faster than in prior cases which hinted at the existence of self-organization (Harkema, 2003, pp.344-345).

Conclusions

It has long been recognized that 'economic prosperity rests upon knowledge and its useful application' (Teece 1981). Indeed, 'the increase in the stock of useful knowledge and the extension of its application are the essence of modern economic growth' (Kuznets 1966). Enlightened economic historians have long emphasized the role of technology and organization in economic development. Most organizations have adapted or transformed their management styles and business models to manage intellectual capital (IC) and respond to the IC-enabled dynamics of the knowledge economy. Many of these organizations have done it without even realizing that they are adopting an intellectual capital management (ICM) approach. A top executive of a leading consumer products company, whose name is withheld, commented that his company is not interested in ICM. "Show me the money," he said. "All I see are the circles and pyramids that ICM people draw in conferences." What this executive did not realize is that he was already managing IC in one way or another on a daily basis to make money. If it weren't for this executive's daily reliance on his gut feeling and tacit knowledge to manage his employees' innovation, the company he works for wouldn't be a market leader. If the company's employees did not care about the management of customer and structural capital, it wouldn't invest millions of dollars in its interactive Web site to solicit consumers' feedback 24 hours a day, seven days a week (ICM, 2009).

By using a good structure like learning organization we will have organizational structure that have the ability to support the Intellectual capital in today's market. So today's organizations should try to use this paradigm (learning organizations) to be competitive. Also because our contemporary organizations may differ from the traditional organizations and so we should implement new skills to be learning organization so that our staff can adjust themselves with new technologies. Also can sense the weak signals in the environment and can reply the prosper answer to

them. In this situation our managers and executives and CEOs can effectively manage the Intellectual Capital in the organization.

Successful managers and businesses have been managing intellectual capital one way or another all along, whether consciously or intuitively. This however, does not mean that they have an ICM program or strategy. Managing IC as a matter of common business sense is not sufficient for the development of ICM as an organizational competency. It is only when a management style moves from being intuitively applied to a planned and systemized process that it can be perfected. Only then can it be substantially transformed from being an art to becoming a science. Once it transitions into a science, it becomes testable, measurable, more predictable, and, most importantly, repeatable. Though organizations that apply ICM advance this goal, there is still a long road of experimentation and applied research ahead for the emerging field of ICM to become more of a "science." (ICM, 2009) One of the established precepts of ICM to date, however, is dividing IC into human, customer, and structural capital-what. Also doing a successful strategy and transferring a traditional organization to a knowledge-based one, and keeping and accumulating the IC and intangible resources in the organization more efficient, organizations should use from LO and knowledge accumulate strategies and professional team building strategies in their organizations to survive and growth and dynamical capability in today's' competitive era (Hung et al, 2005; Groves, 2002; Levet & Guenor, 2000). Formalization, the sharing of personal knowledge, and the development of structural approaches as a mechanism to transfer learning throughout the firm may on the other hand sap creativity and impede learning. Ideally, one would like to develop approaches or models which have a common essential logic, but which enable customization of particular features. This is but one of the many challenges to service firms in the new economy where knowledge sharing itself can often be the basis of competitive advantage (Teece, 2002).

In the modern knowledge intensive business environment, most organizations stand to gain a substantial prize in terms of innovative ideas, but these need to be coaxed out to win that prize. Part of that coaxing is likely to include an imperative of innovation as an ongoing activity to gain competitive position, and in turn managers will need to heed the foregoing points on organization (Thompson, 2010).

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Intelligent Agents in Knowledge Acquisition and Structuring for the Fault Diagnosis of Virtualized Systems

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Abstract: The knowledge acquisition concerning the behavior at the fault of the complex systems is a systematic process, first, by the presentation of the processes, procedures and stages that occur throughout of a acquisition project of knowledge. Also, a good knowledge of the system, with all its features, is a good decisive factor concerning the successful realization of the knowledge acquisition. In addition, for the fault diagnosis it is required the knowledge and the knowledge acquisition for the fault behavior (anomaly/symptoms and manifestations, granularity of the defects, relations between them in various operating environments).

Keywords: intelligent agents; knowledge acquisitions; virtual machine; platform virtualization; application virtualization

Jel Classification: D80; D83

1. Introduction

Lately, the development of the information technology has opened new ways of structuring the hardware infrastructure, of the applications and thus by making operations. Thus, recently, the infrastructure of some organizations has become

partially or fully virtualized, and because of this, the processes have become a dynamic and distributed character, and the static and hierarchical structures have become even more adaptable and flexible.

Thus, the existing tools and utilities provide a specific functionality to the management systems that are in the system, but they cannot know and detail in timely manner the way in which the various IT infrastructure components behave and interact. Although they are often difficult to use or not reliable, sometimes it is necessary to implement some more sophisticated management tools involving the placement of staff throughout their IT infrastructure having as purpose to collect the necessary information of the management systems to offer a efficient, effective and of control of the IT services. Some are skeptical about the implementation of the agents because they may affect the performance of the devices or could overload their network and starting from here, they conclude that that all of their IT infrastructure could destabilize.

2. Intelligent Agents

For better monitoring and managing of the virtualized system as and for a better distribution of tasks and competences of the agents, we consider necessary a division on layers of the system subject to the study case. Consequently we have the following layers: physical (FL), virtualization (VL), virtual machine (VM), operating system (OS) and applications (Apps), layers exemplified in Figure 1.

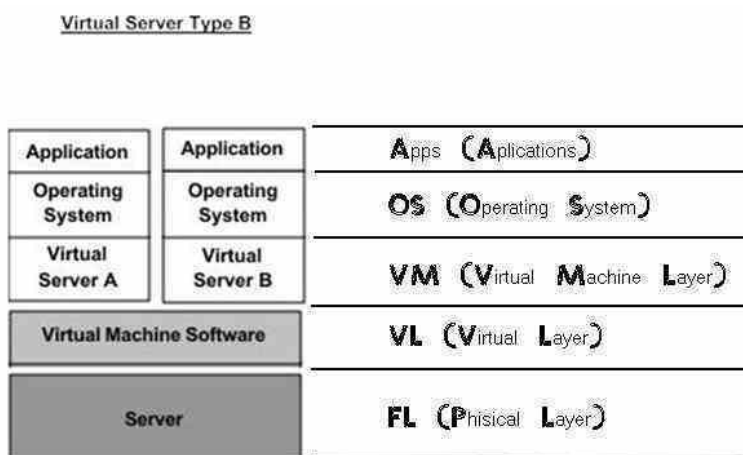


Figure 1. Computer system layers

Thus, the monitoring, administration and acquisition of knowledge for the fault diagnosis from within the system will be made with the help of the intelligent agents based on their location on the layer, with the mention that the layers VL, VM, but and OS and Apps will be monitored together, as being considered only one layer which we will name in the following VL&VM and OS & Apps. In addition, the storage space is considered as a separate layer which also requires a separate monitoring and managing. In other words, the distribution of the agents will be made on each layer, thus being specialized and having the level of competence only on the layer were they are placed.

Initially, within the system, the intelligent agents are placed only on the appropriate layer having implicit the level of competence corresponding to their placement within the system. Also, they have the monitoring and surveillance role of the followed characteristics and of insertion in the data base of the found events (cases). After the insertion into the data base of the events (cases) that lead to a functioning which is not within normal parameters (defective) or even lead to a possible failure of the components (is not referred only to the physical ones), the human agent plays the most important role, where it decides what operation or action should be taken.

Following the operations taken by the human agent for each case found in the database, is recorded and the action taken or if there were more identical cases, the action that produced the best results. Here, if is considered necessary that for the same fault to be performed the action (operation) which produced the best results, the responsibility can be transferred to the intelligent agent. In this case, at the occurrence of the same event, the intelligent agent inserts a new record in the database, and, following the granting of confidence by the human govern, searched in the database the action that must be taken, according to an event after it executes it, inserting of course and the action taken by him. After this, the human agent notified of the operations performed by the intelligent agent and thus he can determine whether it was acted correctly and after the consultation of the identical or similar cases can decide whether the further action that the agent will take to remain the last decision considered the best or must be changed with a new one.

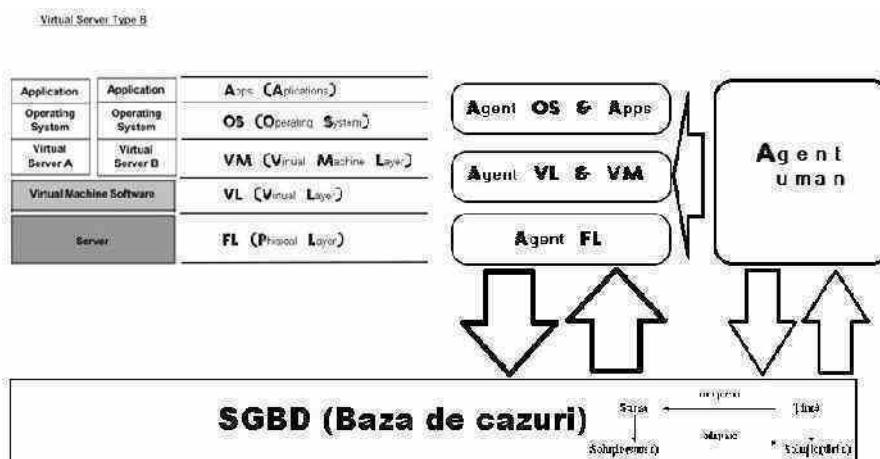


Figure 2. Distribution and role of agents in the acquisition of knowledge

Worthy to note is that if at the first the intelligent agents cannot take actions, along the way they earn a degree of freedom. Of course that to an intelligent agent can be granted the right to take action by themselves in the case of repeating of the same fault by a certain number of times, without the human intervention, but first we decided that it is more prudent that the human agent to decide when the intelligent agent can take automatically actions.

It must be specified that the intelligent agents have initially, as it was noted above, only the supervisory role, and of insertion in the database of the information (error message) in case of an operation that does not fall within the normal parameters or in the case of a fault. Thus, they are involved in observing the functionality of the physical resources and of the abstracted ones, checking the status of IP connectivity of the physical and virtual machine, reading and loading the resources but and consulting the loading logs.

Further we describe the role and functions of the intelligent agents according to the layer were they are placed.

Physical Level (FL)

The physical level consists of all the hardware equipments that enter in the component of the computer system. Here we have the equipments from the network, equipments from the composition of the center of data, the physical servers and the storage environments (SAN).

FL Coupling at Network

Within this level the human agent has the largest share in observing and intervening on the physical components from the system component. On this level most of the operations are performed by humans and therefore in the knowledge acquisition and structuring, the human expert occupies the principal place.

The intelligent agents are involved on this layer in the observation of the physical resources functionality, checking the state of the IP connectivity of the physical machine, reading and displaying the resources and but consulting the loading logs to insert the errors in the database.

The IP connectivity we will do with the help of the ping network tool that is used to verify if a certain computer can be accessed through some network of IP type. In this case we used free software called Server Ping, its role being pretty small, resumng just to a two color display of the response status ICMP “echo response” from the destination host after some request “echo request”.

Resources Monitoring FL

Also, the agents besides the above mentioned role have and the task to read and display the situation of loading the physical resources as is seen from the figures below.

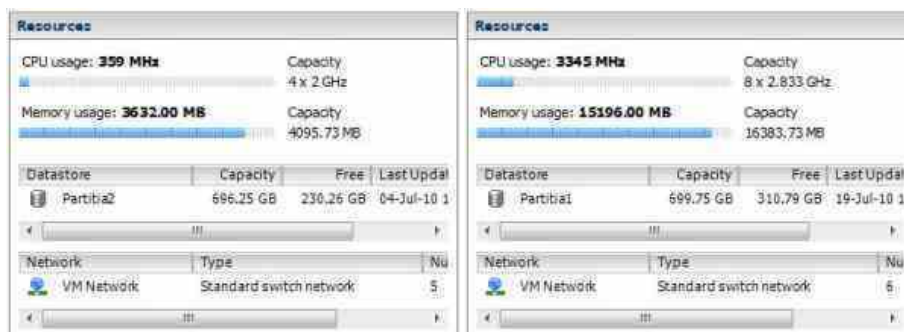


Figure 3. Resources monitoring Blade 1 and Blade 2



Figure 4 Monitoring resources load (CPU) Blade servers (1 and 2)

Signaling of Error Apparitions and Insertion in the Cases Base

Also, in the case in which appears a new entry that signals an abnormal functioning or a deviation from the nominal operating parameters of some physical resources, the agent has the role to undertake the record and to insert it into the database along with the degree of discretion or impairment of the functional status.

In the figure below are some examples of errors that have occurred throughout the case study, which were inserted into the cases base.

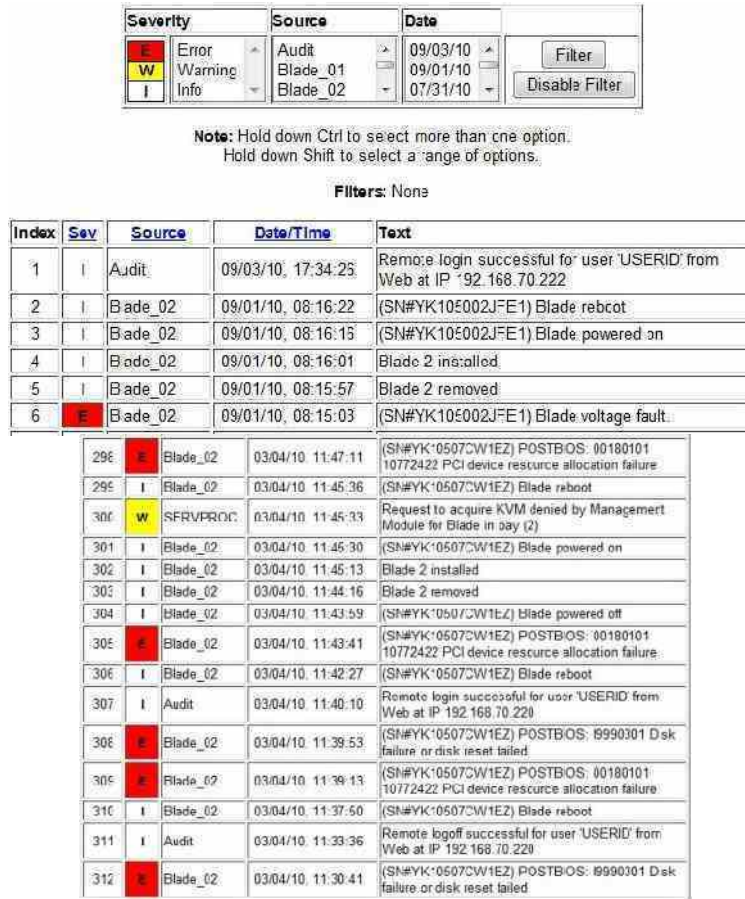


Figure 5. Signaling appearance event

The Virtual Level and Virtual Machine (VL & VM)

Is the state of abstraction of the hardware resources and is also the boundary of separation between the physical layer (hardware) and the software one. In our study case, we pushed the limits of virtualized resources by assigning an increased number of virtual machines by overbid. By overbid we understand that the use of a fixed number „n” of resources as we have „n+k” resources, where {n.k}> 0 (Figure 6). From the allocation made is clearly that in the physical machine Blade 1 we have 2 physical processors with 4 cores for each (the equivalent of 8 processors), 16 GB Ram and 700 Gb of storage space, of which we allocated to the virtual machines the correspondent of 18 virtual processors and 54 GB RAM.

This allows us a degree of increased use of the physical available resources due to the allocation on more virtual machines simultaneously of the processing power of which we have it through overbid. In other words, the virtual machine can have a maximum virtual resource allocated equivalent with the physical one.

The fact that we can overbid the available resources of the abstracted system leads us to a resource allocation per virtual machine that we consider that we must have or to dispose it at some point, event that resources was theoretically allocated initially to some machine. Thus, the share of the abstracted resource allocated from the physical resources on each virtual machine it will be in the interval $[\min n = \frac{n}{n+k}, \max n = \frac{n}{n+k}]$, where n is the total available natural resources and $n+k$ the total number of the abstracted allocated resources (k is the overbid number of resources). Within the report we will detail the approach modality.

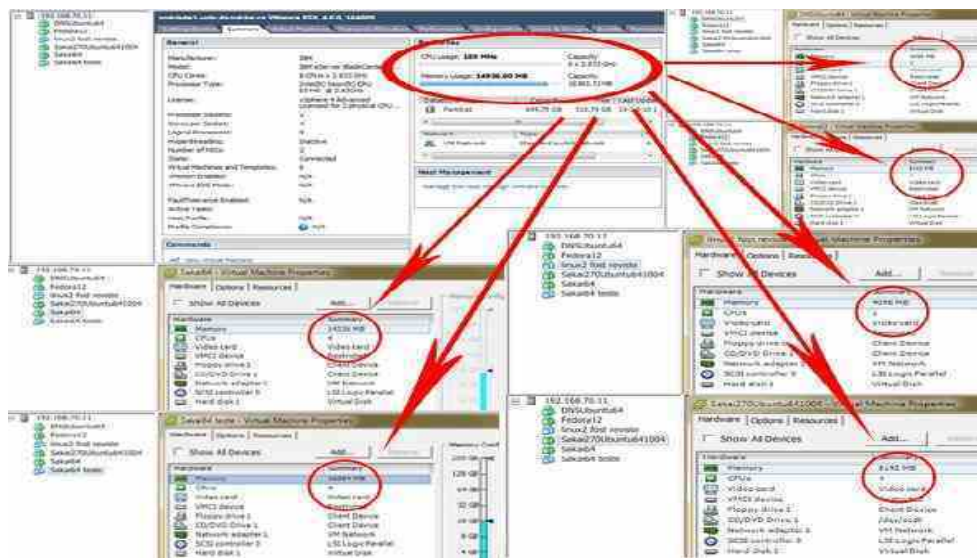


Figure 6 Virtual machine resource allocations

VL & VM Connectivity and Monitoring

On this level the intelligent agent, as in the case of physical layer, the IP connectivity but and the loading level of all the virtualized resources. We consider

the IP connectivity the most important characteristic because this layer is the base of the virtual infrastructure.

Still here we dynamically manage the totality of the abstracted physical resources but and the allocation of the resources on each virtual machine (VM) as well as and their loading level.

Similar with the physical level, by a particular importance is the IP connectivity verification, with the help of the ping network tool (in our case, we utilized a demo called Server Ping), used to verify if the virtual layer as well as and the virtual machines are functional and presents connectivity, exemplified work in the figures below.



Figure 7. IP connectivity for VL & VM

The same modality of IP connectivity verification we have represented within the diagnostics site, where we find the state of the virtual machines, according to the figures below.



Figure 8. IP connectivity status of the abstracted servers

The screenshot shows a web interface for server management. On the left, there is a sidebar with navigation options: SERVERS, SERVICES, EVENTS, and AGENTS. The main content area is titled 'VIRTUAL MACHINES LIST' and contains a table with the following data:

ID	NAME	SERVER	STATUS	ACTION
1	DNSUL01	BleJe-1	Offline	DETAILS LINK DELETE
4	BleJe-02	BleJe-1	Online	DETAILS LINK DELETE
5	bleje-03	BleJe-1	Offline	DETAILS LINK DELETE
6	bleje-04	BleJe-1	Offline	DETAILS LINK DELETE
8	bleje-05	BleJe-1	Offline	DETAILS LINK DELETE
7	bleje-06	BleJe-1	Offline	DETAILS LINK DELETE

Figure 9. IP connectivity status of the virtualized machines

Thus, on each virtual machine we can allocate resources in a dynamic way, resources that we can manage quite easily with the help of the application VMware vSphere Client. The application allows us the visualization of all the physical abstracted resources and their allocation in dynamic way on the created virtual machines.

Here we are monitoring especially the loading of interest resources (processor, memory and disk) as and the evolution of their loading in time. Here, we talk of development we do not refer at the level of loading the resources but and to a balancing of their load.

We have also to mention that if the allocation of the available virtual resources is made for every virtual machine in part, the physical resources used in commune. Thus, if we have an “n” number of physical processors, the allocation of a “k” number of virtual processes (where $k = \overline{1, n}$), on each virtual machine is made according to the needs of processing that the system administrator considers them necessary at a given time, thereafter having the chance to increase or decrease the power allocated to the machine.

The paradox is represented by the fact that in the end we find that the amount of the virtual processors allocated to each virtual machine in part is higher than the total number of physical processors, this enabling the balancing of the processing power function by the loading that re giving the active processors. This is available in the case of all physical available abstracted resources.

Initially, the physical resources are divided proportionally to the amount of resources allocated on each virtual machine, and in the case in which a process needs more resources; these are dynamically distributed from the physical ones.

In other words, if a virtual machine, at a given time needs a high processing power, through balancing is allocated a higher percentage of the physical resource. In the figures below we illustrate the load level which it can have the virtual layer and the level of loading of the resources allocated to each virtual machine. Particularly, we will analyze the VL layer, but and a virtual machine on which is installed a application that is highly resources consumer and which is accessed by a large number of users. Here we refer to the virtual machine generically called Sakai64 after the application that supports it. On this virtual machine is installed a platform LMS called Sakai, application addressed to over 6000 clients and which requires considerable resources.

In the figure below is noted that on the physical machine Blade 1, correspondent to the IP 192.168.70.11 we have six virtual machines that use in commune the physical abstracted resources.

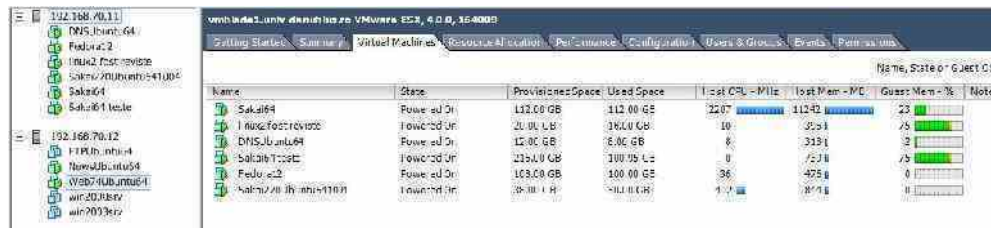


Figure 10. Blade 1 (192.168.70.11)

The loading degree of the abstracted resources, related to the physical machine Blade 1, is exemplified in the figure below.

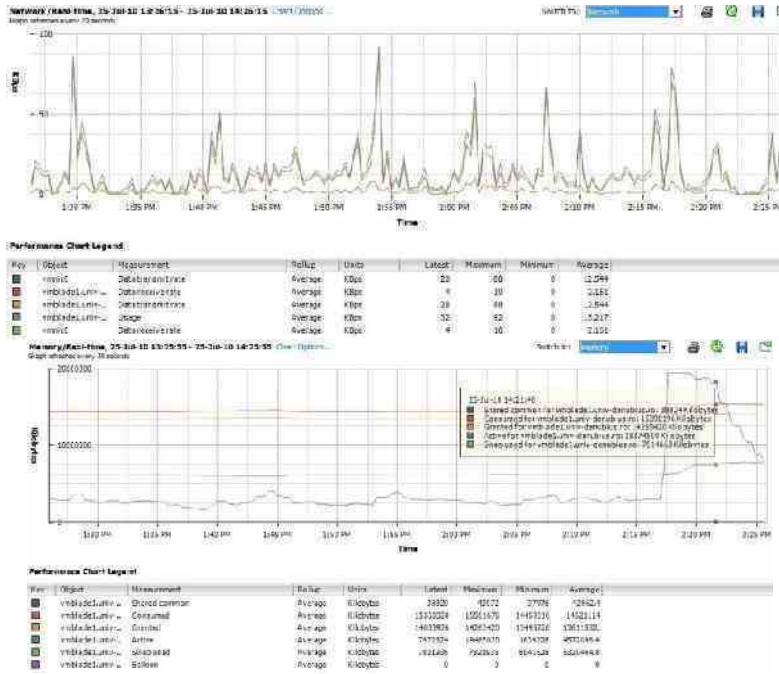


Figure 11 Network and memory loading Blade 1

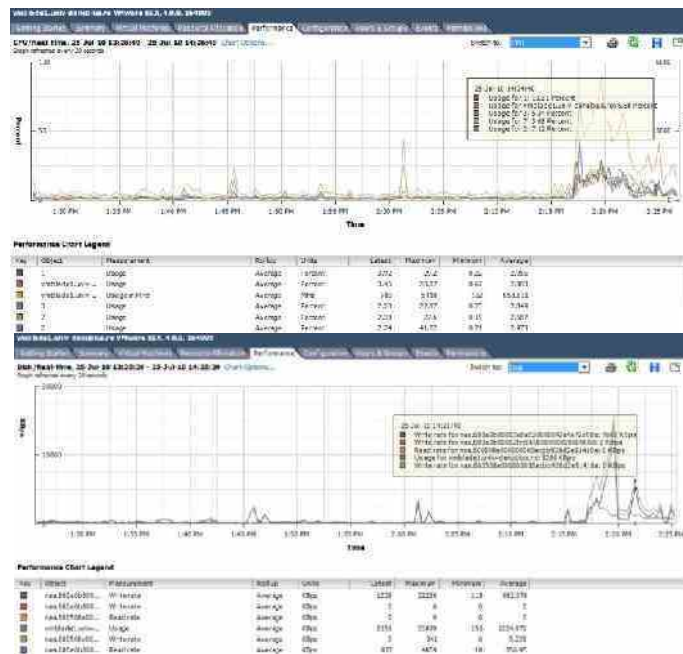


Figure 12. Processor and disk loading Blade 1

The virtual machine Sakai64 uses from the physical abstracted resources according to the figure below, but the interesting part is that from the total memory RAM allocated, the usage degree is around 90%.

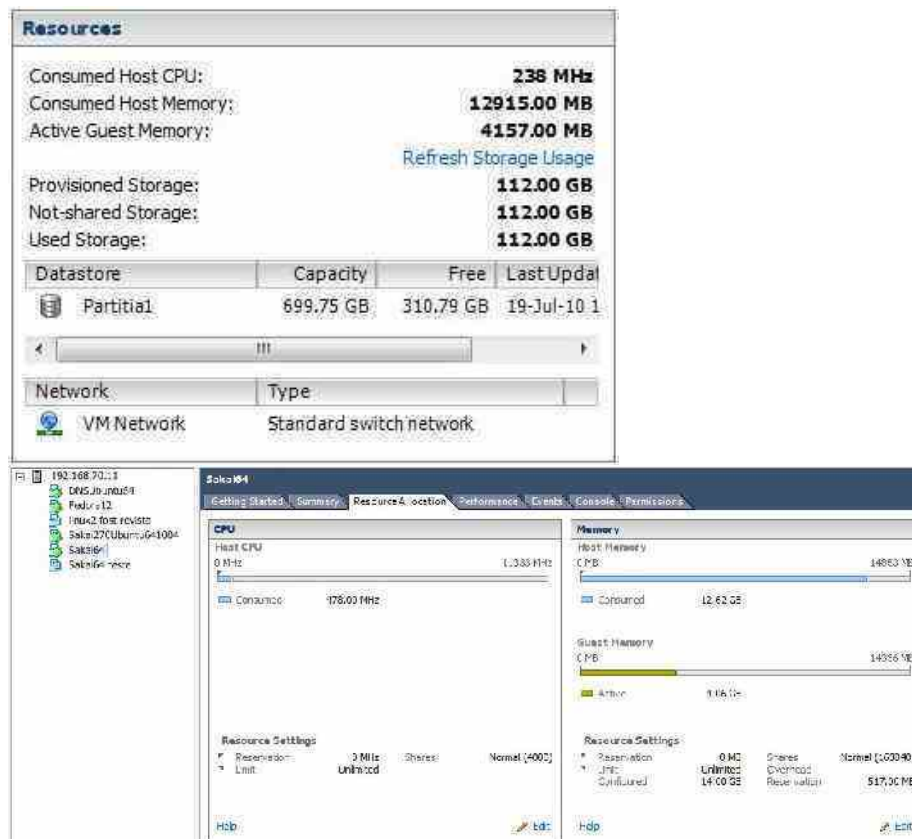


Figure 13 Sakai64 virtual machine allocations

Also the loading degree on each abstracted resource allocated to the virtual machine Sakai64 is exemplified in the figures below. We observe that from the allocated resources, the loading degree is rather low with the exception of RAM memory, which present a high degree (about 90%). This leads to the conclusion that in the case in which the applications will need resources, especially the RAM, we can expect a blocking or delay of the processors. Also, in the case of some increased number of requests from the clients we can expect at blockings or interruptions of the applications functionality due to the prioritization processes.

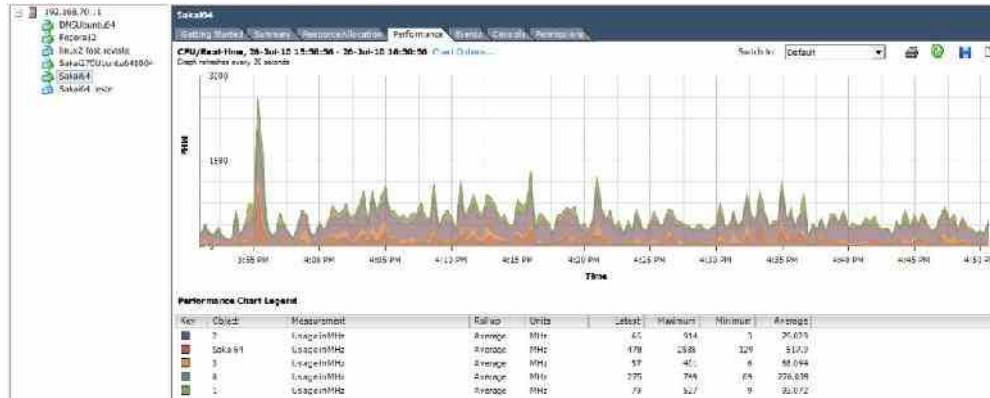


Figure 14 Processor loading virtual machine Sakai64



Figure 15 Processor and disk loading virtual machine Sakai64

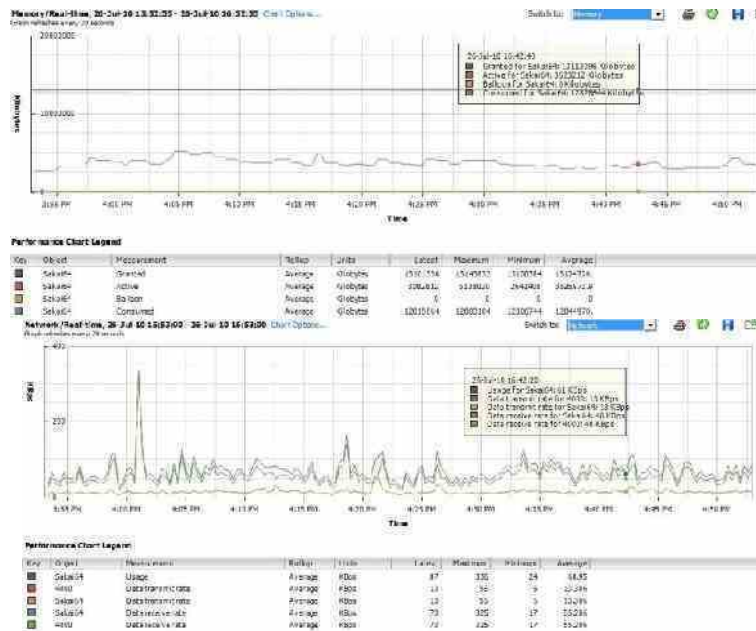


Figure 16 Memory and network loading virtual machine Sakai 64

OS & Apps Level

Installing on a virtual machine of the operating system (regardless of the manufacturer and version) and of the application does not poses particular problems compared to the classic installation when we have a physical machine. In the contrary, the applications and operating system once installed on a virtual machine, the latter can be duplicated as many times as we want, with the condition to rename them (not to have the same names) and to reassign them in network different IP's. In other words, we can have a growing number of servers unprecedented in a relatively short period of time. At the level of operating system the focus is directed towards the local resources management of application, transfer rate towards HDD, on the number of processes that are found in background and on the swap memory loading.

Also, on this level, the functionality of the applications is the most important objective that must be carefully followed. Here we put accent especially on the response time, at a request or login of the application, on the number of clients simultaneously connected and at the way in which their number affect the application's functionality. As we previously mentioned, we will focus our

attention, within this level, on the Sakai application, which we will describe briefly below.

Sakai

The Sakai Project was initially launched by an academic collaboration between the University of Michigan, Indiana University, MIT and Stanford University, today bringing together over 200 universities that are using it, making integrant part of the Sakai community. Fulfilling the specific requirements of using the ICT in higher education, the collaborative environment Sakai was created by academics for academics, being oriented towards collaboration both in purposes of education, as well as for scientific research projects. Consequently, it can be used to create a Course Management Environment (VLE), which integrated with other collaborative applications leads to the completion of a portal dedicated for collaboration with all the university members (teachers, students and researchers) to achieve the objectives from the education and research.

Making a short trip through time, after a trial period of testing of 6 months with the version 2.5.0, on different hardware platforms having different operating systems – iMac (MacOS X Leopard), x86 (Ubuntu 8.04 LTS) and x86 (Windows Server 2008) – to observe the various problems that may occur at installation and utilization of the platform but and the incompatibilities of Sakai CLE with the operating systems and implicit with the hardware platforms, there were created several test of course sites where the students could experience and use the tools provided by the collaborative environment Sakai. The conclusions at which were reached were in the favor for starting the pilot phase, so it was decided the formation of the team T&L (T&L WORKING GROUP).



Figure 17. Opened practices community

A particularly important role in the positive evaluating of the collaborative environment Sakai, was that we are active members of the Sakai community and of Opened Practices community – A community of practice for teaching and learning with open/community source tools (Figure 17) (<http://openedpractices.org/users/florinpostolache/track>).

In the 2009 – 2010 academic year, it was put in service in the pilot phase the portal Danubius Online supported by the Sakai version 2.6.0. The portal operated with a relatively small number of course sites both from the license and from the master, the main objective being the accumulation of experience of usage in real conditions of exploitation. In the 2010 – 2011 academic year, it will be passed to a newer version Sakai 2.7.0, installed also on a visible virtual machine on Blade 1, called Sakai 270Ubuntu641004.

The portal was installed on a virtual machine (Sakai64) hosted on a server VMware ESX 4.0, with internal memory of 16 GB and with 100 GB space initially allocated on the Hard Disk, operating on a physical machine IBM Blade Center. It was used a database server MySQL 5.0, and as web servers there were used Apache 2.2.8 and Tomcat 5.5.26.

Installed on the virtual machine Sakai64 having as operating system Ubuntu Linux (64-bit), Sakai 2.6.0 is very important application, so that is why we will turn to it four our case study, especially to the fact that in present on this platform are enrolled about 6000 students but also from the consideration that, over a year, we tested this platform, having sufficient data.

Thus, during one year of testing, we concluded that the hardware platform is successfully facing supporting 6 virtual machines, which at their turn supports the application that work within normal parameters. From the data analysis, is showed that a large part of the physical available resources are not used at their full capacity. Thus on the physical machine Blade 1, the processor presents a load varying between 0.1 and 30%, this being apparent from the data collected within an hour over the several days in a year of testing. In the figure below is observed the CPU loading that varies between 0.29 and 11.56% on 12.07.2010.

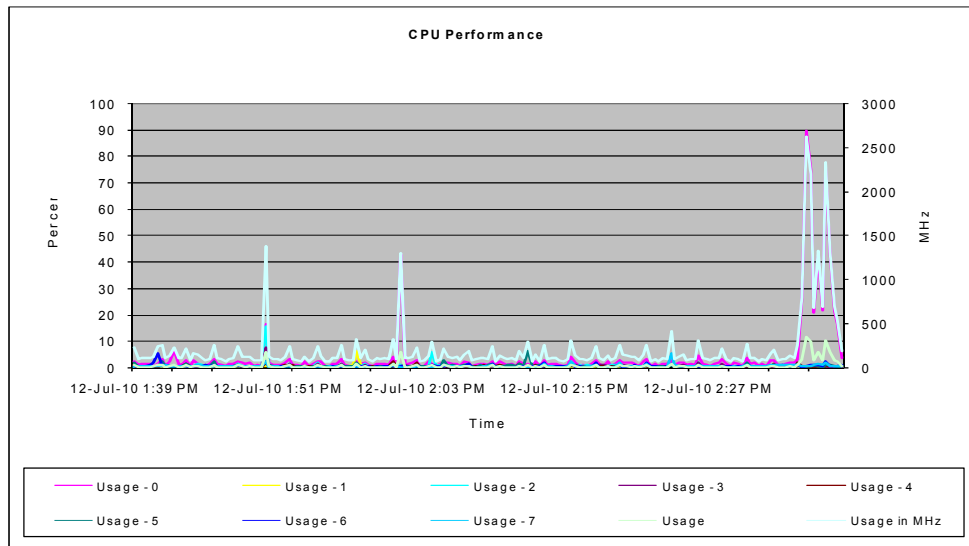


Figure 18 Processor loading Blade 1

From the data collected, it was found that identical to the processor’s loading, the network and disk loading is placed at a low level. A special case presents the memory loading. From the data collected in the testing period we concluded that of the total memory available, over 90% is currently used, which is a sub-dimensioning of the memory capacity, visible fact and in the figure below.

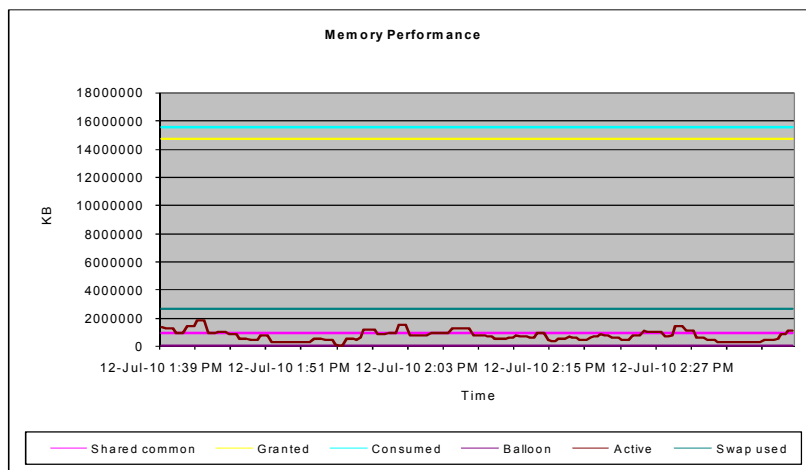


Figure 19 Memory loading Blade 1

Because the application is accessed simultaneously by a large number of clients, we followed the processes occurred at the level of operating system but and at the application level. Thus, in the connecting moment of a simultaneously large number of clients it was noted a delay, even a blocking on a short time of the application.

Also, it was followed the resources loading throughout the pilot phase and finally it was concluded that the processor, disk and network loading it is not major, but even insignificant. Instead, because of the insufficient physical memory as well and the allocation of a part to the virtual machine led to the conclusion that the usage Swap has radically increased, which explains the delay and short blockings in generating a answer to the incoming requests.

Also, we mention that a continuously running for a long period of time led to an abnormal functioning of the Tomcat server, presenting errors or blockings, which required restarting the application or of the virtual machine. Taking into account of all these factors, the knowledge acquisition seems a challenge as the process of abstraction.

Conclusions and Future Research Directions

1. Structuring the field concerning the facilitation of knowledge acquisition

By structuring the field we obtain the advantage that every specialized agent on a certain layer will identify and insert in the cases database only the cases where this is placed, allowing a better localization, allowing a deep level of discrimination of the components as precisely as possible, implicit a small granularity, the diagnostic in such cases being detailed facilitating a complete intervention in reworking.

2. Modelling interactions between the physical and virtual resources

The fact that we overbid the resources allows us a better balancing of the needs that an application may have at a time.

3. Weight of influence of a “situation” in the global functioning of the system

Depending on the degree obtained by the system at the moment t_1 and the degree given to the system in the moment t_2 , results the share that is having the fault in the appreciation/depreciation of the functional state of the system.

4. Characterization of the global state of the system which intervenes in the punctual allocation of the resources by a critical factor (resources allocation for a machine which has critical need of resources) because:

- 1) Situation (state of fault) – network connection, client, background services
- 2) Components (processor, RAM, HDD)
- 3) Direction of recourses criticism
- 4) I/O constraints
- 5) Resource sharing

The future study will refer to the modality of approaching the virtual system if we see a fault functioning at the “n” virtual systems, to enter in functioning the system “n+1” Basically, when accessing some application by a large number of clients, is being tried a cloning of the virtual machine which support the respective application, thus allowing a clients redistribution, basically a relief of the traffic on a single machine and implicit a decrease of loading resources.

This it is possible to remove the blockage or delay in what concerns the response time to the customer requests

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Consulting in Electronic Commerce

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Abstract: Economic development of electronic services provide advice and many agents of existing referral systems to recommend and provide products, information and customized views of the community through a personalized interaction in real time. Distributed systems of autonomous agents are becoming increasingly important in electronic commerce because the basic decisions of agents advice on trust and reputation are taken in a similar way human society. If these decisions will be as a real consumer protection, when new aspects of online consumer legislation will become useful information in advice and consulting of electronic commerce.

Keywords: advisory agents; recommendation systems; electronic commerce

Introduction

The technological innovation and the decisive factors in businesses determine major changes in the way in which the organizations cooperate and compete in the global market. Any electronic commerce system has to meet the beneficiaries' needs and those of its users better than competition in order to survive. The success of electronic commerce is based upon the combination of informatics and commerce technologies, making up a background which invites the users, being prospective beneficiaries, to involve their businesses in this new field. The use of software agents in the structural and operational modeling of electronic market has

grown up and will grow up due to the substantial power of economic market automation. In the centre of such a market there is noticed certain ontology of the domain and services modeling which was built up through the mediation of agents.

We can consider the use of software agents in the electronic market from two points of view: that of the customer and that of the supplier. From the customers' point of view, the better agents who are more useful, for the purposes of utility are those providing customized services, who learned the preferences of a certain customer. Certain customers wish to receive advice in relation to the usage of a certain product, to the possible alternate usages, and an agent may provide such information by applying filters by which the overloading of information for the customer is avoided.

A customer may be informed by an agent about a special price of a product which could be of interest, and, in short time, the piece of information could propagate a buying transaction of the product. An agent as well by negotiation techniques, on behalf of the customer, may purchase the product by rendering intermediation services during the advisory process. From the supplier's point of view, in the latest years, the customers have been considered as long term "assets" of the business and not simple purchasers outside the organization. The recommendation systems were converted into business tools as companies realize that it is simpler and cheaper to have devoted customers, than attracting new customers, and thus they focus on establishing long-term relationships and on discovering prospective customers. The researches show how the customers „buy” promises first, as potential solutions to their problems. If these promises correspond to the reality they wish, the organization will become credible. This is the reason for which the site has to be always prepared to provide safety and stability through granted consultancy and to be able to develop long-term relationships.

Which is the Current Condition of the Consultancy in Electronic Commerce?

Agents and Recommendation Systems

Generally, the recommendation techniques are customized shares of a site when incorporated into them, as they help the site itself in adjusting to each customer. The recommendation systems, although based on filters and selections, own a different architecture; there are differences between B2C commerce systems and the decision support systems in the supply chains.

In the light of consultancy, the techniques in artificial intelligence in B2C market were rendered evident mainly for selecting the product in recommendations, in advising the customers, in the automated generation of answers, of decisions concerning the price fixing. Artificial intelligence is used for advising the users concerning the goods that they want to examine or to buy on the Internet.

This type of advisory is shown in various types of recommendation selections and approaches. The products may be recommended based upon a top made up by the sellers, on consumers' demographic criteria, or following an analysis of the consumer's past behavior as a prediction of the future purchasing behavior. The recommendation forms shall include suggestions for products, shall provide customized information about products, community opinions, including criticisms.

Table 1. Advisory agents of purchasers in electronic commerce

Agent/Address Of The Site	Advisory Type For Purchasers
BARGAIN DOG Http://www.bargaindog.com	Alert online agent for services sales
BAR POINT Http://www.barpoint.com	In exchange for introducing the barcode the agent supplies specific information related to product, including the contact producer, information about the comparison of the price to other products and the reviews of the production reports.
BIG COMPARE Http://www.thebigcompare.com	Supplies meta-searches for shopping
CANGETIT Http:// www.cangetit.com	Service placing products for the purchaser at the price mentioned by the purchaser
DASH Http://www.dash.com	Personal shopping assistant offering discounts from selected online merchants
DEAL TIME Http://www.dealtime.com	Searches for the retail merchants and classifies for the best price
MYGEEK Http://www.mygeek.com	Helps the user the find the products and compare their prices
SALES CIRCULAR Http://www.salecircular.com	Compares the prices and the facilities for the retail products in his own shops

<p>PERSONAL LOGIC Http://www.personallogic.com</p>	<p>A tool allowing the consumers to narrow the list of the best products meeting their needs. The system filters the products from a certain category depending on the specific characteristics exposed by the consumer. An agent returns an ordered list of products meeting the most pretentious requirements.</p>
<p>BARGAINFINDER Http://bf.cstar.ac.com</p>	<p>It is the first virtual shopping agent establishing the price of a user of musical CDs by examination. Parallel to the examination there is used the architecture of meta search engines such as MetaCrawler.</p>
<p>FIREFLY Http://www.firefly.com</p>	<p>This recommendation system manages through an ACF approach based upon “word of mouth” to provide solutions to the consumer by using a collaborative filtering mechanism. The system is used for musical products and books.</p>

Current Directions of Consultancy by Recommendation in Electronic Commerce

The recommendation systems are used by a greater number of sites in order to help the purchasers. The products may be recommended based upon a top made up by the sellers, on consumers’ demographic criteria, or following an analysis of the consumer’s past behavior as a prediction of the future purchasing behavior.

The recommendation forms shall include suggestions for products, shall provide customized information about products, community opinions, including criticisms. The automated recommendation systems represent specialized data mining systems having been optimized more for their interaction with the consumer. They were designed for a customized interaction in real time with consumers. Consequently, they focus more on learning algorithms in real time than on the construction and execution model.

Recommendations improve the electronic commerce in three large directions:

- turning a web navigator into a purchaser;
- increase of the sales volume through cross-sell (a system may suggest additional products based upon the products existing in the shopping basket);
- building up loyalty.

Various approaches were applied in order to obtain correct and efficient recommendations. The used technologies use databases examinations until a large range of data mining techniques, learning machine and evolutionary strategies.

Development Directions of Consultancy Systems in Electronic Commerce

The individual buying a product feels a psychological discomfort sometimes or often as he has had to choose among items each having its advantages and finally he is not sure about the choice he has made. So, against his will he comes to make an assessment after having purchased the respective items.

In order to reduce this discomfort caused by the nonconformity between his well thought-out choice and the best choice that he could have made, the current consultancy services need optimization. The customers need positive interlocutor agents, good traders characterized by honesty, patience, humanism, persuasion, optimism, tact and initiative.

The large scale use of today Cybertrade, shows that many participants do not consider the legal matters involved by a certain activity too important. Concerning the electronic commerce, it is very likely that the parties are not located in the same jurisdiction and they will communicate through a non-direct communication line so that several sets of national laws will be involved in any dispute.

It is possible that these laws are not harmonized when enforced in relation to the dispute and the final conclusion is not that expected by parties. Which is the situation of Cybertrade? Firstly it is about a very new commerce area, so that there are very few precedents or even none from certain points of view.

In case of a dispute, while it is possible to identify the blamable parties, it will be difficult to appeal to legal procedures as the parties are located in different jurisdictions with different laws. The complexity of legal problems which could appear on the Internet shows that the Internet is a structure lacking legal regulations. How is the electronic consultancy reflected in the light of the agreements and abusive clauses? The consultancy agents do not help the purchaser to this end, at present. What is necessary, is represented by an international regulation of the Internet and of electronic commerce, but introduced in a clear manner so that the intelligent agent could supply and announce the problem to the merchant in an accurate way.

The Council Directive 85/577/CE to protect the consumer in contracts outside commercial premises consolidates the existing protection of consumers in essential

fields where numerous claims have been filed in the latest years, such as the under pressure sale and the involvement of abusive clauses in contracts. The Directive imposes on the merchant in the electronic space the obligation to provide to the consumer a clear set of information allowing him to choose being fully aware (for instance, the main characteristics of the product, the geographical address and the identity of the merchant, the price with all fees included, all the additional transportation, delivery costs or those related to the postal expenses), norms concerning the delivery and the transfer of risk to the consumer, the setting up of a thinking period in which the consumer may change his opinion, a list of the contractual abusive clauses forbidden in any situation.

At the level of recommendation systems, the advisory from the part of consumer protection is almost absent. A viable explanation would be that a certain legislation so recently approached has not been well apprehended yet. A virtual store respecting itself and wishing to build customer loyalty could provide consultancy from this legislative point of view.

The European Commission launched on the 5th of June 2009 eYouGuide, a new online tool providing practical advice concerning the digital rights of the consumers in compliance with EU legislation.

When connected to the internet, the European consumers have the following rights: to obtain clear information concerning the prices and the conditions before making a purchase; to decide if and how their personal data are treated; to receive the product within 30 days since the purchase date; a „reflection” period of at least 7 business days after having made the purchase, during which he may change his mind; a warranty of at least 2 years for purchased products; protection against unfair sellers, against contractual abusive clauses and unfair commercial practices.

Conclusion and Future Work

At computerized level, the advisory coming from the consumer protection is almost absent. A viable explanation would be that a certain legislation so recently approached has not been well apprehended yet. At present there is a legislative tool allowing the acquisition of knowledge necessary for legislative consultancy offering to online users a trust ratio for a merchant. The trust models, SPORAS, REGRET, TRAVOS, and FIRE could be improved by this legal component relating to clauses and abusive practices.

Thus, adopting the Mui's typology which unifies the concepts about reputation used by researchers in the distributed artificial intelligence, to the reality of electronic commerce, also the reputation propagated by the most frequent abusive clauses met in electronic transactions may be introduced in order to calculate a trust ratio based on reputation. A virtual store or an auction site respecting itself and wishing to build customer loyalty could provide consultancy from this legislative point of view even at the level of European unit for the beginning, being developed subsequently depending on the consumer's reaction, in the entire Cybertrade. As the laws concerning the electronic commerce is consumer's protection legislation, a legal advisor agent or a consultancy agent taking into consideration the matters of the new legislation in his recommendations, would manage to protect his consumers and to gain their trust.

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