1. Introduction

E. Jacques was probably the first to introduce the term “organizational culture”. He defined organizational culture as a “typical way of thinking and acting, shared, to a larger or smaller extent, by all members of the organization. New members have to learn this way and at least partially accept it, in order to be accepted in the organization” [Aniszewska 2007, p.13]. A substantial increase in attention to this phenomenon started in the 80’s. One of the reasons for this is accelerated globalization, which forced many companies to reconsider issues of domestic organizational cultures, so that they could fit solutions in their overseas subsidiaries. It then became evident that the transfer of solutions between countries /cultures is fraught with difficulties. People in different countries have different attitudes, norms, expectations, and values and these may work against the adaptation of new concepts of behavior. Consequently, there is an increase in cross-cultural studies for these differences at a national level and in organizational cultures.

Organizations create their own specific values, norms, standards and understandings, shaping of personal interrelationships, communication patterns, symbols, means to resolve problems, propensity to accept risk, attitudes towards group work, loyalty and cooperation, acceptance of authority, etc. Such forms are shared by members of an organization and taught to new members as correct [e.g., Duncan 1989]. Culture provides members with the sense of organizational identity. Best managers strive to create a culture that
promotes diversity, encourages initiative, allows experimentation, equality, trust, and supports lifelong learning. Questioning status quo is a norm, as is the search for opportunities, even though this exposes to ambiguity, mistakes, and risk taking. Also, an important feature of many contemporary firms is knowledge management – the way of thinking about organizing and sharing an organization’s intellectual and creative resources. It refers to the efforts to systematically find, organize, and make available a company’s intellectual capital and to foster a culture of continuous learning and knowledge sharing so that organizational activities build on what is already known [Daft 2004, p. 297]. “One of the primary characteristics of learning organizations is a strong organizational culture. In addition, the culture of a learning organization encourages change, risk taking, improvement and adaptation. A danger for many successful organizations is that the culture becomes set and the company fails to adapt as the environment changes. When organizations are successful, the values, ideas, and practices that helped attain success become institutionalized. As the environment changes, these values may become detrimental to future performance” [Daft 2004, p. 371].

Even though extensive research has been carried out on organizational culture in the last few decades, there are still several items that remain unclear or cause inconsistencies in drawing conclusions regarding organizational cultures. Sułkowski [Sułkowski 2005, p. 149] considers the following as key problems:

- Lack of equivocal, sharp, and uniformly accepted definition of organizational culture, as well as its components, models and typologies;
- Whether the notion “organizational culture” should be considered per se or as a metaphor;
- Diversity in paradigms and research approaches may be used to explain how organizational cultures evolve;
- Some research on organizational culture suggests that a unifying overview of organizational cultures cannot exist and there can be no explanation of its impact on the performance of organizations.

The objective of this paper is to identify the propensity of the Polish national culture to absorb and adjust to suggestions and requirements of a model of organizational culture in knowledge based organizations. G. Hofstede’s interpretation of culture and organizational culture form the basis for our comparative analysis – i.e., national culture vs the culture of knowledge-based organizations. The Polish culture is interpreted as described by Nasierowski & Mikula [Nasierowski and Mikula 1998] in the report that followed Hofstede’s [Hofstede 1982, 1984] methodology – i.e., “Polish respondents score high in Power Distance and Uncertainty Avoidance, average in Individualism, and moderately above average in Masculinity, as compared to Hofstede’s Hermes data-base results”. Similar to the above are results of studies on the Polish
national culture by Sitko-Lutek [Sitko-Lutek 2004, p.154], who claim that high Power Distance, high Uncertainty Avoidance, task orientation and passive attitudes, high Masculinity and status by nomination are characteristic of the Polish society.

The paper is organized into the following sections in order to achieve the above declared objective.

Firstly, the key features of the culture in knowledge-based organizations are outlined, followed by the presentation of characteristic features of the Polish culture from the organizational perspective. Remarks about the context to support knowledge-based firms in Poland are then provided. These items form the platform to describe the results of a comparative analysis of the Polish culture with the culture required in knowledge-based organizations. Discussion of observations leads to the conclusions of our study.

2. Key features of the culture in knowledge-based organizations

“The emergence of a knowledge-based economy is often associated with the growing share of R&D-intensive industries and with the increasing use of advanced knowledge in hitherto “low-technology industries” [OECD 1999, p. 16]. It is also associated with sectors where no-R&D innovations form the key to business success [e.g., Arundel et.al. 2005]. Knowledge-based organizations seek success in knowledge and a vast web of contacts, interrelationships, and cooperation. Their know-how combined with the know-how of their partners is the main source of new values whereby the benefits of these new values are available to all participating stakeholders including; owners, clients, workers, society, as well as the competition through the facilitation of development and coexistence. Such organizations create and sell products/services, whose value exceeds the value of the physical items used to create such a product. Clients are encouraged to use them, and the knowledge items embedded in such products, which are difficult or costly to obtain, are highly specialized or protected. Knowledge-based organizations continually learn and improve methods to manage knowledge. Knowledge management is the dominant ingredient to their success, the basis for functioning, adaptation to changes in environment, innovation, networking, and the development of human capital [Mikuła 2006, pp. 25–39] [Leibold et.al. 2002, p. 19] [Roberts 2004, pp. 48–49] [Morawski 2006, pp. 82–83].

One of the characteristic features of knowledge-based organizations is organizational culture that is conducive to effective knowledge management. Such a culture has to emphasize the intellectual side of behavior and the norms that create its values and attitudes which foster knowledge creation and transfer. Such standards make it possible to operate in the turbulent environment characterized by a high degree of risk and uncertainty. Such organizations emphasize continuous learning, team work, honesty, confidence and loyalty. The
systematic control of organizational culture is one of the key strategic challenges in such companies.

While keeping in mind Hofstede’s dimension of culture one can propose that knowledge-based organizations should have the following features:
- low power distance (PD) – in order to reduce differentiation and inequalities between workers, that are created by hierarchies and the barriers between management and workers;
- low level of uncertainty avoidance (UAV) – in order to accept uncertainty associated with risky ventures and to facilitate innovation;
- low level of individualism (IND) – in order to allow for team work and collective learning; though a high level of individualism may provide the “lightening rod” for initiation of organizational culture changes;
- high level of masculinity (MAS)– in order to set ambitious objectives, and emphasize honesty, though there is also a need for openness, trust, ability to compromise that are frequently characteristic of low level of masculinity.

Values of Hofstede’s indices for selected countries are presented in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Poland</th>
<th>Spain</th>
<th>Canada</th>
<th>Sweden</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD</td>
<td>72*/68**</td>
<td>57</td>
<td>39</td>
<td>31</td>
<td>35</td>
</tr>
<tr>
<td>UAV</td>
<td>106*/93**</td>
<td>86</td>
<td>48</td>
<td>29</td>
<td>65</td>
</tr>
<tr>
<td>IND</td>
<td>56*/60**</td>
<td>51</td>
<td>80</td>
<td>71</td>
<td>67</td>
</tr>
<tr>
<td>MAS</td>
<td>62*/64**</td>
<td>42</td>
<td>52</td>
<td>5</td>
<td>66</td>
</tr>
</tbody>
</table>

* Nasierowski and Mikuła (1998), ** Hofstede and Hofstede (2007)

The knowledge-based organizational culture can be examined from the perspective of efficient learning and knowledge creation, accumulation, and diffusion. The values that are essential in such an organization include variety, holistic thinking, team work, cooperativeness, trust, efficiency, drive toward excellence [e.g., Mikuła 2007, pp. 158–160].

An important element in operations of knowledge-based (or learning) organizations rests with the issue of exploration vs. exploitation. “The first is the case of mutual learning between members of an organization and an organizational code. The second is the case of learning and competitive advantage in competition for primacy. ... [It is claimed] .. that adaptive processes, by refining exploitation more rapidly than exploration, are likely to become effective in the short run but self-destructing in the long run” [March 1991, p.71]. “Compared to returns from exploitation, returns from exploration are systematically less certain, more remote in time and organizationally more distant from the locus of action and adoption” [March 2001, p. 73]). There is customarily a problem
of balancing exploration and exploitation that is exhibited in the distinction between refinement of an existing technology and invention of a new one. “It is clear that exploration of new alternatives reduces the speed with which skills at existing ones are improved. It is also clear that improvements in competence at existing procedures make experimentation with others less attractive [March 1991, p. 72]. “Two distinctive features of the social context are considered. The first is the mutual learning of an organization and the individuals in it. Organizations store knowledge in their procedures, norms, rules, and forms. They accumulate such knowledge over time, learning from their members. At the same time, individuals in an organization are socialized to organizational beliefs. Such mutual learning has implications for understanding and managing the trade-off between exploration and exploitation in organizations. The second feature of organizational learning considered here is the context of competition for primacy. Organizations often compete with each other under conditions in which relative position matters. The mixed contribution of knowledge to competitive advantage in cases involving competition for primacy creates difficulties for defining and arranging an appropriate balance between exploration and exploitation in an organizational setting [March, 1991, pp. 73–74].

3. Characteristic features of the Polish national culture – organizational perspective

The subject related literature presents a somewhat diversified view regarding the Polish organizational culture. As stated by Mikułowski-Pomorski [Mikułowski-Pomorski 2007, pp. 344–34] this resulted primarily from:

- Fifty years of semi-Communism at the end of XX century have flattened the social structure, whereas an average Pole demonstrates the features of a vocal landlord, and a pragmatic peasant. Consequently, it is observed that Poles frequently change their attitudes from euphoria and self-confidence, to melancholy and depression;

- Many Poles have been living in two contexts, which strongly impact on their attitudes. The first deals with revolutionary times of radical changes. The second is oriented on preservation of traditional values of the society. The first has called for perseverance, determination, hard work, and social solidarity. The second has been evoking egoism, a tendency to start arguments, and clan type attitudes;

- Recent economic and political changes mark differentiation between:
  • old and new generations, which suggests an ease to adapt to new conditions;
  • people who prefer routines of the old system, and these who prefer creativity and to bring new values to reality;
  • these who expect, or even demand social assistance, and those who rely on entrepreneurship and creative solutions.
With the dimension of Power Distance, we explore the extent to which less powerful members of a society accept the unequal distribution of power and rewards as normal features of the society. Generally, Poles exhibit rather high power distance. In this context, one can expect high centralization, emphasis of control, justified and desired inequity, a high degree of subordination, authoritarian management style, a very emotional relationship between supervisors and subordinates, special privileges and symbols of status desired and accepted, change manifested by a change of the management team, corruption regarded as a serious problem and a tendency to hide scandals [(Hofstede and Hofstede 2007) [Nasierowski and Mikula 1998, p. 501]. Similarly, Mikulowski-Pomorski [Mikulowski-Pomorski 2007, pp. 350–351] claims that Poles exhibit a high power distance that is characterized by high subordination to higher-ups, punctuated by a lack of trust, refusal and a passive resistance. Consequently, some managers try to use a participative management style in order to gain support and reduce uncertainty of subordinates.

Power Distance is related to the wealth of the country. Items related to increased wealth, and decreased Power Distance are exhibited in the development of a modern agriculture, high-tech sector, high urbanization and ease of mobility, a well developed education system and a strong middle-class [Hofstede and Hofstede 2007, p. 81)]. Poland exhibits several socio-economic problems and delays when compared to the so-called developed countries and, surprisingly, to those that are developing. One of the items related to power distance deals with intensity of control. Stor [2008, p. 17] claims that intensified control of Polish employees decreases their engagement in productive work. However, in conditions of high power distance, management does not trust employees, which leads to increased control. This, in turn, decreases open communication and pro-innovative attitudes. He also observes that subordinates do not trust management’s conceptual or financial support when solving problems, nor in the area of collecting, processing or dissemination of knowledge [Rutka and Czerska 2005, p.453]. These perceptions are intensified by emotional barriers that exist when subordinates interact with other subordinates [Glińska-Neweś 2007, p. 206].

“Organizations located in individualistic cultures are more successful than organizations located in collective cultures in their propensity to absorb and diffuse imported technology [Kedia & Bhagat, 1988, p. 565]. The results of investigations of individualism do not show unequivocal results. The characteristics of individualism and collectivism are, in the case of Poland, intermixed. This creates a notion of collectivist-individualism. Its specific feature is marked by a desire to realize individualistic objectives by belonging to a group that simplifies such a goal. Other related features include; children are taught to behave in terms of “I” and “we”; individual conflicts are avoided, group conflicts are a norm, informal contacts form the basis for information - along with mass
media [Hofstede and Hofstede 2007, p. 108]). According to Stor [Stor 2008, p. 3], Poles value belonging to a group, but strive to protect their own identity. They will support objectives of the firm, but only for as long as they are consistent with their personal goals. Glińska-Neweś [Glińska-Neweś 2007, p. 203] claims that Polish individualism is manifested by individual goals, activities and by a decreasing loyalty towards the organizations that employ them. Additionally, she marks an average respect to group norms, average impact of groups upon individual behavior and low intensity of informal groups.

As the literature overview indicated “masculine cultures, more driven to compete, are more dynamic and action oriented. To compete successfully in the global economy, one has to learn strategies for successful implementation of imported technologies” [Kedia & Bhagat 1988, pp. 565–566)]. As well, masculine cultures are more effective than feminine cultures in absorbing and diffusing imported technology in organizational context” [Kedia & Bhagat 1988, p. 565]. Mikułowski-Pomorski [Mikułowski-Pomorski 2007, p. 352] makes references to research results that evidence a low degree of masculinity in Polish society. However, there are also elements to the contrary, such as strikes in the Gdansk Shipyard and the acceptance of radical and, at times, painful, economic restructuring in the early 1990s. Other results indicate a tendency towards higher masculinity. Examples to support a slight dominance of masculinity in Polish society include:

- The existence of differentiation between female and male roles in the society
- Female responsibility for emotional, and male responsibility for material side of life;
- A stereotype of a tough and ambitious man;
- Emphasis on high earnings;
- Considering homosexuals as a social threat;
- Considering politics as a struggle with an enemy [e.g., Nasierowski and Mikula 1998; Hofstede and Hofstede 2007, pp. 145–173].

Characteristically most investigated managers identify their professional success with higher salary [Kubik 2006, p. 138].

Issues of uncertainty avoidance deal with the extent to which people in a society feel the need to avoid ambiguous situations and the extent to which they try to manage these situations by providing explicit and formal rules and regulations, by rejecting novel ideas, and by accepting the existence of absolute truths and super ordinate goals in the context of work organizations. Uncertainty avoidance of Poles is considered to be high. According to Hofstede [Hofstede 2007, pp. 187–217] in such societies high stress, anxiety, and a feeling of permanent threat is a norm, as is:
- Risk aversion and the lack of tolerance;
- Cautious attitude towards new products and technologies;
- A drive towards stability of employment and infrequent attempts to change careers;
- A low level of innovation;
- Abundant legalities and bureaucracy;
- Conservative attitudes; and
- Strong reverence to law and order (paradoxically, rules are frequently not respected).

A high level of uncertainty avoidance poses a hindrance towards a search of optimal organizational solutions. However, it is also asserted that Poles adapt to such conditions. “Uncertainty and changes are interpreted as a threat, yet also as an opportunity. This interpretation is accepted mainly in new organizations whose development relies upon changes. Then motivation factors start to be important – for example motivation bonuses” [Mikułowski-Pomorski, 2007, 353]. In such conditions, attitudes associated with low tolerance (acceptance) are strengthened. This includes discrimination because of sex, sexual orientation, disabilities, ethnic origin, age and organizational or political affiliations. Research by Cewińska and Wojtaszczyk [Cewińska and Wojtaszczyk 2005, 2007] indicates intensification of such pathologies. This may result in violations of personal rights in the work-environment and in unlawful actions. Paradoxically, a search for legal gaps (lack of clarity of law) is regarded as a means to cope with the problem. According to Rutka and Czerska [Rutka and Czerska 2005, p. 542] a culture with little tolerance to uncertainty dominates. Changes are unwillingly accepted and are regarded as a threat --- “people are afraid to ask what is going on and do not have understanding of the needs of the company”. Therefore, there is a tendency to accept routine, formalized procedures [Glińska-Neweś 2007, p. 209].

Based on the above one can make some comparisons. As compared to the ‘old’ European Union countries (EU-15), the Polish culture is most similar to Greek culture (with an exception of individualism). To be noted, Greece has not experienced any spectacular economic success for a long time. Thus, if culture is the dominant factor in economic performance, one should not expect such success in Poland. However, looking at the economic situation in 2009, this is not a correct assumption. So far, Poland is coping with the crisis quite successfully. As far as a comparison to the culture of the ‘new’ EU members, Polish culture is most similar to that of the Czech Republic. It may be expected that their economic successes can, from the viewpoint of culture, be attributed to a lower power distance than that of the Poles, and lower (though still quite high) uncertainty avoidance.
4. Remarks about the context to support knowledge-based firms in Poland

Beyond cultural determinants, there are several items that impact upon the organizational culture of knowledge-based firms. Some are manifested by solutions adopted within Human Resources subsystems of the National Innovation System. As far as Poland is concerned, several facts should be kept in mind [Nasierowski 2009]. Poland is encountering a continuously falling share of graduates in S&T disciplines. This problem has not been properly addressed. There are only a few mentoring initiatives promoting science among children and youth, as well as among the general public. There seems to be, however, a strong focus on improving HR by business sector through training, courses, and internships in universities. However, understanding the business context and needs of university researchers are ignored. The measure - *Regional Innovation Strategies* (RIS) and *Transfer of Knowledge* - includes internships for higher education institution graduates and for employees of the R&D sector and scholarships for the best higher education graduates continuing the PhD courses in strategic areas defined by the RIS. This initiative can be regarded as an incentive to attract students into science, engineering and technology education programs [PETCI, 2006, pp. 26–27].

The share of Poland’s population with a tertiary education is 15.6%, which amounts to 71% of the EU-25 average in 2004 [PETCI 2006, p.15]. This is yet another indicator of possible problems with the creation of pro-knowledge-based culture since it is not likely to change overnight. Concurrently, the unemployment rate is high. It is particularly worrying that more than half of the unemployment rate is a result of structural unemployment, which normally occurs when there is a gap between job requirements and the skills or availability of local workers. Despite significant unemployment rates in Poland, there are no measures addressing or identifying how it will overcome this obstacle for innovation [PETCI 2006, p. 13]. Despite these problems, Poland has shown an impressive acceleration of labor productivity, which increased from 4.1% to 7.7% from 2004 to 2005. The improvement is a result of a web of determinants, such as labor quality, the skills mix of the workforce, technological progress and know-how accelerated by the increasing inflow of foreign direct investments (FDI) and sectorial reallocation effects [PETCI 2006, p. 13]. However, the export boom has been the main engine of economic growth in recent years.

Deficiencies can also be identified in other subsystems of Polish NIS. Low levels of funding in R&D, lack of cooperation between universities, business sector and governmental research institutes and a generally hands-off approach of the Polish government with respect to pro-innovative initiatives are evident. These policies can be the main factor in Poland’s low ranking in innovation [EIS 2006 to 2009] [GII, 2008] and entrepreneurship [WCY 2008]. These assessments indirectly indicate that the climate to foster cultures supportive of knowledge-based firms in Poland is hampered.
As well, we have compiled some statistical data relative to knowledge-based organizations and innovation [WCY, 2008] for selected countries – i.e., Poland; Spain (because of its similar size to Poland) and some innovative leaders, i.e., Germany, Canada and Sweden.

Table 2. Some statistical data relative to knowledge-based organizations and innovativeness [(WCY, 2008)]

<table>
<thead>
<tr>
<th></th>
<th>Poland</th>
<th>Spain</th>
<th>Canada</th>
<th>Sweden</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita, in PPP, in $US (tab. 1.1.20)</td>
<td>15,806</td>
<td>29,028</td>
<td>37,383</td>
<td>34,703</td>
<td>33,175</td>
</tr>
<tr>
<td>Unemployment rate – percentage of labor force (tab. 1.4.06)</td>
<td>9.60</td>
<td>8.30</td>
<td>6.03</td>
<td>6.10</td>
<td>8.30</td>
</tr>
<tr>
<td>Labor productivity (PPP) – estimates GDP (PPP) per person employed per hour, in $ US (tab. 3.1.04)</td>
<td>21.19</td>
<td>35.18</td>
<td>39.33</td>
<td>39.47</td>
<td>39.87</td>
</tr>
<tr>
<td>Broadband Subscribers – number of subscribers per 1000 inhabitants (TAB. 4.2.11)</td>
<td>76.36</td>
<td>149.65</td>
<td>228.87</td>
<td>257.47</td>
<td>182.11</td>
</tr>
<tr>
<td>Total expenditure on R&amp;D per capita- $US per capita (TAB. 4.3.03)</td>
<td>49.8</td>
<td>287.2</td>
<td>767.1</td>
<td>1,609.4</td>
<td>886.9</td>
</tr>
<tr>
<td>Development and application of technology --- are hindered by the legal environment to are supported by the legal environment (tab. 4.2.14)</td>
<td>4.73</td>
<td>5.89</td>
<td>7.62</td>
<td>7.88</td>
<td>6.56</td>
</tr>
<tr>
<td>Qualified engineers --- are not available in your market to are available in your labor market (tab. 4.5.18)</td>
<td>4.74</td>
<td>5.36</td>
<td>6.79</td>
<td>6.69</td>
<td>4.85</td>
</tr>
<tr>
<td>Knowledge transfer --- is lacking between companies and universities to is highly developed between companies and universities (tab. 4.5.19)</td>
<td>4.52</td>
<td>3.89</td>
<td>6.35</td>
<td>6.31</td>
<td>5.45</td>
</tr>
<tr>
<td>Total public expenditure on education per capita - $ US per capita (tab. 4.5.02)</td>
<td>494</td>
<td>1,124</td>
<td>2,373</td>
<td>2,881</td>
<td>1,422</td>
</tr>
<tr>
<td>University education --- does not meet needs of a competitive economy to meets the needs of a competitive economy (tab. 4.5.12)</td>
<td>5.13</td>
<td>3.60</td>
<td>7.96</td>
<td>6.74</td>
<td>6.25</td>
</tr>
<tr>
<td>Management education --- does not meet the needs of the business community to meets the needs of the business community (tab. 4.5.13)</td>
<td>5.48</td>
<td>3.80</td>
<td>7.58</td>
<td>6.86</td>
<td>6.31</td>
</tr>
<tr>
<td>Science in schools --- is not sufficiently emphasized to is sufficiently emphasized (tab. 4.3.13)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4.87</td>
<td>3.25</td>
<td>3.25</td>
<td>4.78</td>
<td>4.76</td>
<td></td>
</tr>
<tr>
<td>Youth interest in science --- is insufficient to strong (tab. 4.3.14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.87</td>
<td>3.26</td>
<td>5.23</td>
<td>4.19</td>
<td>4.53</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship --- of managers is not widespread in business to is widespread in business (tab. 3.4.08)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.57</td>
<td>5.02</td>
<td>6.23</td>
<td>5.91</td>
<td>5.02</td>
<td></td>
</tr>
<tr>
<td>Ease of doing business --- is hindered by regulations to is supported by regulations (tab. 2.4.16)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.39</td>
<td>4.25</td>
<td>5.89</td>
<td>5.35</td>
<td>4.14</td>
<td></td>
</tr>
<tr>
<td>National culture --- is closed to foreign idea to is open to foreign ideas (tab. 3.5.03)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.11</td>
<td>6.45</td>
<td>8.08</td>
<td>7.41</td>
<td>6.27</td>
<td></td>
</tr>
</tbody>
</table>

Indicators of a context identified by such indicators clearly indicates that indeed rich countries (Canada, Sweden) may not have problems with supporting a climate of knowledge-based organizations. German context seems to have mixed patterns – strong on regulations and numbers, weak on initiatives. Certainly, the Polish and Spanish context do not foster innovation or a pro knowledge-based culture. Characteristically, at the roots in some instances Poland sows seeds for development (pro-science orientation for youngsters and in education) which seems to be wasted (neglected) when it comes to the application or implementation stage.

5. A comparative analysis of the Polish culture with the culture required in knowledge-based organizations

In Table 3 below, a synthesis relative to the comparison of norms and values of organizational culture in knowledge-based organizations with characteristics of the Polish culture as determinants in the creation and functioning of such organizations is presented.
Table 3. Knowledge-based organizational culture vs characteristics of the Polish culture that suggest solutions within organizational culture

<table>
<thead>
<tr>
<th>Knowledge-based organizations</th>
<th>Polish organizational culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat organizational structures</td>
<td>hierarchical organizational structures</td>
</tr>
<tr>
<td>Organic structures</td>
<td>mechanical structures</td>
</tr>
<tr>
<td>De-centralization</td>
<td>centralization</td>
</tr>
<tr>
<td>High degree of autonomy of employees</td>
<td>low degree of autonomy, subordinates rely on supervisors and expect orders and instructions (even though they do not trust supervisors)</td>
</tr>
<tr>
<td>Supervisor as a trainer, coach</td>
<td>supervisor as a decision maker and a judge</td>
</tr>
<tr>
<td>Leadership</td>
<td>management</td>
</tr>
<tr>
<td>Democratic management style</td>
<td>authoritarian management style</td>
</tr>
<tr>
<td>Knowledge as a source of authority</td>
<td>nomination and position in the hierarchy as a source of power</td>
</tr>
<tr>
<td>Actions tailored to the situation</td>
<td>structured, routine type decision making</td>
</tr>
<tr>
<td>Low formalization</td>
<td>high formalization</td>
</tr>
<tr>
<td>Acceptance of uncertainty</td>
<td>uncertainty avoidance</td>
</tr>
<tr>
<td>Acceptance of deviant (different) opinions</td>
<td>different opinions are not tolerated</td>
</tr>
<tr>
<td>Atypical and new conditions as a source of inspiration</td>
<td>atypical situations are a threat</td>
</tr>
<tr>
<td>Flexible work time tailored to needs</td>
<td>strictly enforced work time</td>
</tr>
<tr>
<td>Confidence and reduction of control mechanisms</td>
<td>low level of confidence and excessive control</td>
</tr>
<tr>
<td>Emphasis of high level of education, knowledge and skills</td>
<td>lower level management is relatively less educated</td>
</tr>
<tr>
<td>Knowledge and skills as key criteria for promotion</td>
<td>promotion depends upon being a member of a leading group and connections</td>
</tr>
<tr>
<td>Open channels of communication</td>
<td>information as a source of power that must be controlled</td>
</tr>
<tr>
<td>Problem solving process involves those who are affected by the problem</td>
<td>managers and experts solve the problem</td>
</tr>
<tr>
<td>Cost reduction as a source of resources for investment</td>
<td>cost reduction as a source of increased profit</td>
</tr>
<tr>
<td>“Future exists today”</td>
<td>there is a lot of time to approach future tasks.</td>
</tr>
<tr>
<td>Continuity</td>
<td>linear perceptions of time</td>
</tr>
</tbody>
</table>

(based on Hofstede and Hofstede 2007; Nasierowski and Mikula 1998).
6. Discussion and Conclusions

It can be concluded that the creation of knowledge-based organizations in Poland will be extremely difficult when keeping in mind characteristics of the Polish culture. There are several contradictions that will create barriers in the process of the development of attitudes oriented on continuous learning and cooperation with institutions in the environment based on confidence and trust, and innovation. Certainly there are means to cope with existing, typical obstacles as evidenced by industrial practices. One such method is the selection process of employees who exhibit attitudes needed in knowledge-based organizations. Another approach can be associated with routine control over whether norms and values of employees comply with knowledge-based philosophy and interventions if these do not comply. This method, however, can be demotivating and abused.

In addition, it is important that organizations create a culture that fosters knowledge management and makes processes involving knowledge more dynamic. Such initiatives should result in conditions where:

- employees feel a sense of belonging, that the organization is loyal to them and reciprocate this loyalty;-
  - there is an increased ability for employees to learn and use the new knowledge and skills;
- communication barriers are reduced when a standardized “organizational language” is accepted;
- there is a free flow of information;
- there is a continuous process for professional development programs in place for all employees;
- group-work and horizontal patterns of work orientation are in place;
- there is a strong dedication to please internal and external customers, including identification, acceptance, and satisfying their needs;
- there is a high level of motivation for employees to be innovative, accept experiments and learn from mistakes [Mikuła, Pietruszka-Ortyl, Potocki 2002, p. 97].

For many organizations, this would call for a radical redefinition of culture, and an acceptance of the key principles of Total Quality Management.

However, Porter [Porter 2006, p. 172] is “fairly optimistic that culture can be changed, because it is not inherent but learned, and culture is derived from what is rewarded in society. Therefore, changing rules will lead to a change in culture. If you live in a society where rent-seeking behavior is rewarded, then you will inevitably see such behavior become widespread [Baumol, 2002]”. Consequently, even though national culture may not be conducive to creating knowledge-based firms in Poland in general, on a firm level, imposition of rules may be the means to overcome this hindrance. This can be evidenced by organizational cultures in several organizations in Poland. Mainly, those that are subsidiaries of foreign based firms.
There is the need to form subsystems within organizations so that they support the knowledge-management approach. Jaspara [Jaspara 2006, pp. 256–257] indicates that the following may be helpful: social gatherings, web sites, motivation rules that foster an exchange of knowledge and experience, allocating time to exchange knowledge, strengthening joint values. Romańczuk [Romańczuk 2000, p. 71], claims that employees should understand the benefits of sharing knowledge for themselves and for the organization, and should be rewarded for such attitudes. Further to these lines of reasoning, Wigg [Wigg 1999, pp. 3–37] recommends to aggressively accept goals that are conducive to knowledge management, proactive management reacting to the changing environment and industry, a strong team culture that supports the exchange of ideas, cross-functional execution of business initiatives, effective champions who promote change, the aid to teams to withstand outside distractions, very strong leadership support from the chairman and CEO and a high trust culture for shared learning.

Furthermore, at least following the neoclassical concepts of regional development, decreasing returns, mainly because of congestion, renders investment in knowledge in “core” areas less efficient [Rodriguez-Poze 2001]. Thus, following objectives of the European Union to improve levels of innovation, there is a chance that more resources will be invested in Poland in order to create knowledge-based organizations. This opportunity will materialize only if governments see it as a chance to increase innovation and more actively engage in pro-innovative initiatives. On the business side, as evidenced by economic results, there is a willingness to improve and successfully compete.

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Abstract
Polish national culture is explored from the perspective of its capacity to absorb recommendations and requirements of organizational culture in knowledge-based, learning organizations. The issue is important because more and more Polish firms are starting to operate in the so-called high-tech sectors. It is noticeable that, mainly due to a tradition of using highly centralized mechanistic structures, high Uncertainty Avoidance and high Power Distance, the development of the organizational culture characteristic of knowledge-based companies may be fraught with difficulties. On the other hand, somewhat ambivalent levels of Individualism (a mixture of very high and very low levels) and a comparatively moderate level of Masculinity, may assist in the creation of an organizational culture that fits knowledge-based firms well.
References


WCY, 2008. World Competitiveness Yearbook, Lausanne, Switzerland.