A THREE-DIMENSIONAL APPROACH TO MANAGING SOCIAL AND INTELLECTUAL CAPITAL

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Abstract: The shift from neo-classical economic paradigm to more transactional and institutional approaches is based on the arguments which assert that markets as well as hierarchies are fallible and insufficient to solely achieve organizational and/or collective goals. The new dimensions - network models, social, intellectual and human capital- have been included in contemporary management, political and economic literature. In line with this movement, this paper is concerned with a more holistic approach to manage social and intellectual capital; and argues in favor of linking hierarchy, market, and community relations with social capital approach to improve information sharing in oganizations. The paper concludes these models of interactions have individual pros and cons, and none of them has any superiority over others. Nevertheless, each of these models have comparative advantages in terms of managing social and intellectual capital

Keywords: Community, Hierarchy, Market, Intellectual Capital, Social Capital, Organizational Goals.

SOSYAL VE ENTELLEKTÜEL SERMAYE YÖNETİMİNE ÜÇ BOYUTLU BİR YAKLAŞIM

Özet: Neo-klasik ekonomi paradigmasından işlevsel ve kurumsal paradigmalara yönelen yaklaşımlar örgütsel ve kolektif amaçları gerçekleştirmede ne piyasa ne hiyerarşi modellerinin tek başına başarılı olamayacağını vurgulamaktadırlar. Networks (ağ) modelleri, sosyal, entelektüel ve insan sermayesi gibi yeni boyutlar günümüz yönetim, siyaset ve ekonomi literatüründe daha sık tartışılır olmaya başlamıştır. Bu trende uygun olarak, bu makale sosyal ve entelektüel sermayenin yönetimine daha bütüncül bir yaklaşım getirmeyi amaçlamaktadır. Ayrıca hiyerarşi, piyasa ve cemaat (community) gibi etkileşim türlerinin, sosyal sermaye yaklaşımı ile ilişkilendirildiğinde örgütlerde bilgi paylaşımının daha etkin bir biçimde gerçekleştirilebileceği vurgulanmaktadır. Makale sonuç olarak bu etkileşim modellerinin her birinin ayrı ayrı avantaj ve dezavantajları olduğuna işaret etmekte ve hiç birinin ötekinden daha üstün olmadığı yargısına varmaktadır. Önemli olan bu modellerin sosyal ve entelektüel sermayenin yönetimi açısından karşılaştırmalı üstünlüklerinden faydalanabilmektir.

Anahtar Kelimeler: Cemaat, Hiyerarşi, Piyasa, Entelektüel Sermaye, Sosyal Sermaye, Örgütsel Amaçlar.

I. INTRODUCTION

In today's business environment intangible has gained ascendancy over tangible assets. Egalitarian (as in a community and market) and hierarchical relations are the software of organizations without which linking human and intellectual capital with more tangible resources of organizations would be impossible. Knowledge and information can be created, appropriated, aggregated, and transferred effectively within and between organizations which possess well-structured and well-operated networks of communication and transaction. Thus the objective of this essay is to clarify the relationships between social and intellectual capital as well as three ideal-typical forms of social coordination models. This paper also argues that an appropriate form of social (organizational) capital contributes to the development of intellectual capital providing that three competing forms of coordination models -market, community and hierarchy are effectively co-utilized.

These three coordination models can be defined as the following way:

- Main characteristic of **market** is the connections among autonomous actors and units who have the right and feeling of ownership. The exchange of information and other resources occurs through the media of price (or other individual incentives).

- In a **community** there are networks of interdependent (semi-autonomous) individuals among whom trust, reflexive learning, group solidarity, the convergence between common and special interests, and loyalty are highly developed features.

- On the other hand, **hierarchy** can be defined as a rational foundation (a made-order) which increases the organization's ability to define and enact common goals, the cohesiveness of information, and the consistency of incentives through the media of power and law.

Emphasis, here, is placed on that these are not only coordination models but also social interaction mechanisms. In other words, they are three different types of ties linking nods (individuals) in a network. Even in a dyadic relation, which involves only two persons, all of the three modes of relations may co-exist.

II. DEFINING SOCIAL CAPITAL

The interest in social capital (henceforth "SC") is growing and the concept proved itself not to be a fad. An interesting fact is that the growing interest in the subject involves not only defining it but also identifying its practical implications for every form of social-economic organization and transaction. Moreover there is considerable evidence showing that organizations, even states, have actually invested in SC by building social, political and economic institutions in order to strengthen their stronghold over certain assets and power long before the concept has been forged into a meaningful concept. It seems that SC is a discovery rather than an invention. Individuals participating in a social environment can interdependently create or dismantle institutions at the face of organizational and market failures or to survive the dangers of externalities created by markets and hierarchy.

Social institutions usually perceived, especially by sociologists, as a state or a static variable (norms, traditions, taboos, beliefs and ethics), yet for management science and economics it means the social dynamics and resources (trust, loyalty, commitment, and relations) of an organization. Moreover, SC is an intangible resource that facilitates the building of complex and efficient networks of exchange (transaction) helping organizations in their formation, growth, and longitude. Putnam's definition of social capital refers to "features of social organization, such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit" [1]. Coleman explained SC as the most useful relationships for individuals that act as a form of social insurance, provide communication and information networks, and create norms and sanctions facilitating social action [2].

However, there are some concerns in the relevant literature pointing at less favourable aspects of social capital or strong social connections that exist, for example, in Mafia and gang collectivities. Strong social institutions (or the closure of the network structure) might inhibit change, participation, creativity and risk-taking as it can also be used mainly to serve the strongest partial interests in organizations and communities and tend to be utilized for driving special interests of powerful network members. Thus SC is susceptible to being projected as an equivocal term as it has aspects that seem to contradict each other - which can be true especially for social institutions. SC, thus, appears both as a resource and a liability. The problem is partially with the definition of the concept or the confusion of perceiving SC and social institutions as the same things. Instead of social capital, one can suggest the replacement of the concept with the term "social equity" estimated, if possible, by subtracting the cost of social institutions (including the cost of both making and tolerating) from its benefits. Or, instead, we can simply acknowledge that social capital is the beneficiary features of social institutions to meet both individual, organizational, and social objectives.

III. DEFINING INTELLECTUAL CAPITAL

The literature suggests that the organizations rich in intellectual capital (henceforth IC) have relatively less problems such as incompetent and redundant workers and difficulties in learning new developments, making innovations in processes and products. IC is defined by O'Donnell et al. as a "dynamic process of situated collective knowing that is capable of being leveraged into economic and social value" [3]. The firm's intellectual capital, thus, comprises many things possessed by its members; their knowledge, experiences, expertise, and established internal and external relations. Stewart defines intellectual capital very broadly as "the sum of everything everybody in a company knows that gives it a competitive edge" [4]. Intellectual organizations devise strategies and initiatives to capture and disseminate what they learn over time, facilitate the embracing and sharing of new ideas and experiences across organizational boundaries, and manage all the information and knowledge acquired in a rational, rather than haphazard, way [5]. An intellectual (or learning) organization has the following features: Effective utilization of information technology, creative and innovative organizational culture, maximum use of human capacity, constant renewal of knowledge and skills, fast process of learning, receptiveness to change, high value-add to processes, products, customers and employees, low levels of transaction costs, opportunities for self-development and actualization, ability to move toward the leading edge of their sector, dynamism and responsiveness.

These highlights about intellectual capital suggest that organizations as corporate actors must understand the role of inter- and intra-community building and involvement, and allow knowledge to be created and shared through trust and reciprocity networks which lower the barriers and the cost of exchange.

IV. MANAGING INTELLECTUAL CAPITAL

In terms of managing SC and IC, there are conflicting opinions among the proponents of the concepts. Given the importance of exchange and sharing of knowledge, scholars are interested in defining the tools and practices that enhance organizational capability in knowledge management by rightly focusing on one-sided approaches are it technological, communitarian,

communicational, or reward-based (market). In this section the main assumptions of these schools are investigated and the need for reconciling their arguments will be considered.

Developments in information technology stimulated as well as assisted the creation of information society and information management. Information management became a specialist area and a path for career development in organizations. In addition to material and technological infrastructure (computer networks, databases, and clever operation systems), an organization needs a community-based model for information sharing and to lever its individually-held intellectual assets into attaining organizational goals. Before taking this idea into a rule of conduct, one need to be aware of a common fallacy which sees the organization as a composition of formal (made institutions) and informal (spontaneous institutions) structures. This is an incomplete taxonomy as recent integrative developments between social sciences show that organizations are made of three (some times four if we add "contract" to them but we do not because we think "contract" is inherent in all the three models) distinct coordination models hierarchy, market, and community (network). Although they are distinct models their characteristics can be visible in every social organization. Furthermore, social dynamics of an organization operates alongside its formal and informal structures. For example, projects teams and task forces are formally organized groups but they operate in an environment mostly made of informal relationships and networks. Making a distinction between formal and informal does not provide management with any tools but determining different models of exchange within a network provide both an understanding of organizational social dynamics and a guideline to develop new management tools.

IV.1. Communitarian Relations

SC is, obviously, in abundance in *community-like networks* whether it is a sub-structure of a market or hierarchical environment. The organizations rich in SC are assumed to have the ability to accumulate knowledge and skills of individuals through sharing and exchange within dynamic interrelationships and to achieve successful collective action towards a common goal. A Communitarian approach may suggest that in a community people are more willing to work together, share risk, and innovate if individual and collective objectives converge.

A research done by Florida et al. suggests that areas with high level of innovation in the US tended to have below-average levels of social capital. They argue that strong relationships can make the community complacent and insulated from outside information and challenges. Weak relations or ties (that foster diversity

and openness), on the other hand, both allow the challenging and the acceptance of new ideas and newcomers on their merit in addition to a sufficient level of information sharing and collaboration [6].

By the same token, group norms advocating cooperation may hinder individual entrepreneurship and information brokering as well as impose ordered-consensus and neutrality [7]. High closure and group solidarity may reduce rational strategic thinking especially when external influences threaten the embedded interests of individuals and sub-units. For the larger collectivity, the strong social capital of a sub-group presents a risk of concentration of information in gate-keepers and sub-units with closer ties and differentiated interests from the broader collectivity. These externalities influence usually the power balance within previously inclusive network leading into a collection of exclusive communities.

In such a fragmented whole multiple and conflicting ethical codes, plots, conspiracies, backbiting, and individual rent-seeking activity can be abundant leading to the failure in attaining collective goals and to the degeneration of organizational relations [8]. It can be proposed that exchange of information will be easier when the exchange in general contributes to the attainment of collective aims without alienating the power and interests of focal groups and individuals. This requires a strong set of incentives and disincentives, combining individual and collective rewards in order to facilitate collective exchange and flow of information.

Ehin stipulates that market competition is counterproductive in an age of knowledge [9]. However, if we imagine such an organization in which members assist each other or solve each others problems, one can see that in this organization there is little incentive to acquire new skills because whenever there is a problem there is a particular person who can solve it. Therefore the need for self-improvement and to exchange knowledge are affiliated by asking for help. This type of relationship helps mostly the poorly skilled persons while the skilled people, seeing less opportunity for self development and individual recognition, will leave the organization whenever a beneficial "exit option" becomes available, leading into a collective brain-drain.

IV.2. Market Relations

Information sharing is critical for organizations for the reason that the value of knowledge and skills held by an individual is a benefit with a cost but when it is shared and learned by others it becomes a corporate asset. The importance of networks, communication, and trust becomes evident at this point. Communication theory suggests that the potential benefits of a collectivity of individuals can be released and grow exponentially if

members, as the nodes in the network, successfully interconnect with each other. In doing so, they mutually gain information and expertise as well as feedback to amplify and modify the information and knowledge they hold. However the difficulty in assigning credit for individual intellectual contributions inhibit sharing and causes slow response to collaborative demands unless strong inducements are introduced [10].

Even in close-nit communities there need to be an internal *market* in which people can exchange their intellectual assets at a meaningful (but not necessarily a monetary market) price. There is no social context that sustain itself without underlying acting selves, rules and norms of reciprocity, goals, and incentives. Voluntary collaboration is not priceless. Any approach that ignores the microeconomics of human action and the political aspects of an organization, -especially the fact that knowledge is power- is incomplete.

The most important problem in making an organization intellectual is the fact that people's jobs and roles in organizations become designed by the unique information, skill, and expertise they hold. Thus, as Davenport and Prusak argue, they may be less likely to share that unique information viewing it as a source of power and indispensability [11].

Furthermore, Pierce et al. argued that the psychology of ownership exists in much broader realm of the human condition that cannot be confined to material world [12]. Ownership can be felt toward non-physical entities, such as ideas, information, issues, and other creative works. Ownership can be perceived as a familiarity with a place or thing, being in control of it, and extensions of the self and identity. Organizations must provide their members with a number of opportunities to associate themselves with and must create a feeling of ownership towards the work, job, team, and projects they deal with. Pierce et al. also suggests that instead of excessive ownership and feeling of control, the feeling of association, identity, and internalization of organizational values need to be satisfied in an effective social environment.

People share information when it is rational to do so, that is, when the expected return is imminent or certain. People hold implicit knowledge as well as implicit interests. Unless those interests are revealed and satisfied properly, information sharing will be difficult. Hierarchy through centralization and formalization and community through shared ownership tend to minimize the amount of control of one's self identity and creations. Exchange networks (ties) have a positive effect on the organization as a whole if there is a "fit" between organizational goals and the network features [7].

IV.3. Hierarchical Relations

There is also a need for a central management or *hierarchical* structural units to search, plan, decide, implement, monitor, and report during the formation and evolution of a organization's intellectual assets. Hierarchy has been the blind target as a social coordination model without identifying specific aspects of a given social structure and its environment. Hierarchical structures are needed to "get things done", but when it comes to "create things" their strengths are questionable [13]. Some believe that voluntary behavior springs from a social concept which is unmanaged [9]. Yet as Coleman argued in *Foundations,* even voluntary collective action occurs by the transfer of authority onto others, bringing about a semi-hierarchy in social structures [2]. Management is not a concept to be understood simply as "control". Instead, "Management Today", or more preferred, "Governance"- is about setting up structures, incentives, relations, coordination, and developing a collective purpose. The danger of hierarchy appears when the conflict between the interests of subsumed groups and central authority can diminish the central authority as it cannot make informed decisions when divisions do not disclose and dispense information. Similarly, hierarchy (management) may uphold information necessary for employees to make informed decision for strategic reasons. This type of conflict, when becomes intensive and extensive throughout the organization, will obviously make central management look impotent and untrustworthy.

V.   IMPORTANCE OF CONTEXT AND CONTENT OF INFORMATION

For some groups individual contribution and autonomy can be critical while for others cooperation and group contribution can be critical. Social capital through internalization of group norms and rules reduce the need for hierarchical and formal control and thus reduce bureaucratic formalities blockading the exchange of information and other resources. Trust and solidarity decrease avoidance of the transmission of sensitive, subjective, and rich information [14]. Therefore, there must be a balance between formality as a connection between creativity and business goals to turn ideas into marketable products and openness in communication to conceive unique products and services to seize new opportunities quickly [15].

Certain social institutions regulating relations in certain situations may have negative externalities for organizational communication and task accomplishments. Social institutions and managerial habitual practices survive as long as they are seen valuable by the participants −not necessarily by the hierarchical foundation of the organization. They are entities with a potential in determining incentives and shaping human interactions. According to North, institutions can be

persistent due to the lack of knowledge owned by agents about changing situations, the prohibitive cost of replacing or changing them, and the interests of dominant actors. They will be replaced by the new practices and choices if the above constraints are overcome and people see value in new ones. Institutions that enable exchange produce more growth and change relative to those that fail to realize this potential [16]. Strong social ties may result in parochialism and inertia if they constrict the flow of new information and ideas [17].

The most cited benefit of social capital is its facilitating role in accessing broader sources of information with features of quality, timeliness, and relevance. Social institutions are necessary for the reason that individual rationality and competition alone may create negative externalities and not promote organizationally rational outcomes. The intensity of social capital within a network affects the diffusion of information, knowledge, and skills among members contributing to intellectual capital of organization. Weak links, for example, are better at spreading information widely while strong links are better at locally creating the common knowledge and membership participation [18]. Explicit knowledge of individual can be transmitted through the formal systemic structures and tools yet tacit knowledge, as it is difficult to articulate can be transmitted through personal, context-specific relations [15] (consider the transfer of knowledge through imitation between the master and apprentice as happened in the guild system). Hansen for example argues that weak ties in the network facilitate cost effective search of new information while strong ties facilitate the transfer of complex information and tacit knowledge [19].

Chesbrough and Teece provide us with an insight about why we need to manage networks by conceptually separating systemic innovation from autonomous innovation [20]. The former requires an integrated organization with a strong center to make interrelated changes in product design, supplier management, and complex information technology. The transfer and learning of tacit knowledge also requires a hierarchical, integrated, community-like organization model. The disadvantage of being an integrated company is being slower to adapt to changing market conditions, thus, this type of organization can be more effective in stable markets using heavy technology but periodically making residual improvements to keep up with the competitors.

Autonomous innovation, on the other hand, requires a decentralized, virtual organization which can outsource their changing needs quite well. This type of organization model can be more effective in markets where products can be easily duplicated, knowledge and skills are widely available, and organization can be competitive simply by ongoing product designing and flexible connections with suppliers and buyers. This is also a strategic choice as well as a decision determined simply by market conditions. Firms by developing their own capabilities can outperform those that rely too heavily on networks of external relations and coordination of markets and alliances to build their business. Being too much dependent on outsourcing can result in the capturing of business to suppliers or distributors since the ties of trust and reciprocity are weaker. Firms can choose the strategy of making major internal investments to shape the market. This strategy gives scale and scope to make ongoing complementary innovation in processes and products that are difficult to be duplicated by close competitors [20].

Bringing in intellectual people is easier than making an organization intellectual. The transition from intellectual man to intellectual organization occurs through turning dispersed private intellectual goods into collective intellectual goods. For this goal organizations are devising strategies and initiatives to capture and disseminate what organizational members learn overtime, to leverage best practices, and to facilitate the creating and sharing of new ideas and experiences across functional and organizational boundaries. Such an agenda requires a commensurate combination of company assets –people, processes, incentives, technology and so on- and company strategies, culture, and capabilities. In accordance with our overall argument, David Klein argues that this can be done through, for example [5];

• Incentives or reward systems must be consistent with attitudes and behaviors necessary to abdicate personnel to lay an active role in the conversion of his personal assets to corporate assets; a performance measurement system designed to reward the creation and exchange of ideas to enhance the firm's decision-making and innovation; and an internal market for intellectual capital where the buyers and sellers can exchange it at fair market prices. (Market structure);

• An infrastructure that create and link communities of knowledge workers (practitioners) with similar interests and tasks. (Hierarchical and communitarian structure);

• An infrastructure (information management system) designed to facilitate the capture of knowledge in context and to deliver knowledge directly to the point of execution. (Technological structure).

VI. CONCLUSIONS

People involved in social settings may adopt a wide range of roles including passive participants, experts, leaders, entrepreneurs, and alike. It must be noted that this article does not see social capital simply as informal relations within organizations but as purposeful

interrelations embedded in all types of social coordination and interaction models (hierarchy, market, and community). Neither it adheres one type of coordination model as the best while rejecting the others since business organizations are highly *hierarchical* entities operating in competitive *markets* and interacting with *communities* they are embedded in. There is neither a designed nor a spontaneously formed set of social capitals that assures a best set of incentives for competition and cooperation while prevents monopoly and rent-seeking type of exchange.

Improvements and interventions in SC require a continuous reorganization, reinvestment and sometimes divestment with discretion to facilitate change in a competitive environment requiring the ventures to be more responsive. That means managing SC needs strategic thinking, as in a game situation, and decision-making models. So, continuous search for new rules, incentives, roles, norms and information becomes necessary. The administrative cadres ought to ask themselves whether it is profitable to invest in alternative forms of SC in order to change a problematic organization. A desire to build a new SC in most cases means fighting the established one. It is an inescapable fact that, whether the decision-maker wants it or not, social institutions emerge within and between organizations as a result of repeated interaction among actors, in some cases, as symptoms of organizational failure (failure of formal institutions) or market failure (individualistic rationality). The healthiest approach to the social capital within a particular organization requires a clear definition of management objectives and exploring the context and the content of information requirements and to decide what combination of coordination models suits to management objectives.

REFERENCES

[1] Putnam, R.D. (1995). Bowling Alone: America's Declining Social Capital. *Journal of Democracy*, 6(1), 65-78.

[2] Coleman, J.S. (1990). *Foundations of Social Theory*. Cambridge: The Belknap Press of Harvard University Press.

[3] O'donnell, D.; O'regan, P.; Coates, B. & Kennedy, T. (2003). Human Interaction: The Critical Source of Intangible Value. *Journal of Intellectual Capital*, 4(1), 82-99.

[4] Steward, T. A. (1998). *Intellectual Capital: The New Wealth of Organizations*. New York: Currency/Doubleday.

[5] Klein, A.D. (1998). The Strategic Management of Intellectual Capital: An Introduction. (Ed.: Klein, A.D.). *The Strategic Management of Intellectual Capital*. Boston: Butterworth-Heinemann.

[6] Florida, R.; Cushing, R. & Gates, G. (2002). When Social capital Stifles Innovation. *Harvard Business Review, Special Issue Published in August: The Innovative Enterprise*, 80(8), 20-23.

[7] Adler, P.S. & Kwon, S. (2002). Social Capital: Prospects for a New Concept. *The Academy of Management Review*, 21(1), 17-40.

[8] Foley, M.W. & Edwards, B. (1996). The Paradox of Civil Society. *Journal of Democracy*, 7(3), 38-52.

[9] Ehin, C. (2000). *Unleashing Intellectual Capital*. Boston: Butterworth-Heinemann.

[10] Quinn, J.B.; Anderson, P. & Finkelstein, S. (1998). Managing Professional Intellect: Making the Most of the Best. (Ed.: Klein, A.D.). *The Strategic Management of Intellectual Capital*. Boston: Butterworth-Heinemann.

[11] Davenport, T.H. & Prusak, L. (2001). *Working Knowledge*. (Çev.: Günay, G.). İstanbul: Rota.

[12] Pierce, J. L.; Kostova, T. & Dirks, K. T. (2001). Toward a Theory of Psychological Ownership in Organizations. *Academy of Management Review*, 26(2), 298-310.

[13] Shapira, Z. (2000). Governance in Organizations: A Cognitive Perspective. *Journal of Management and Organizations*, 4(1-2), 53-67.

[14] Krackhard, D. & Hanson J. R. (1993). Informal Networks: the Company behind the Chart. *Harvard Business Review*, 71(4), 104-111.

[15] Graham, A.B. & Pizzo, V.G. (1998). A Question of Balance: Case Studies in Strategic Knowledge Management. (Ed.: Klein, A.D.). *The Strategic Management of Intellectual Capital*. Boston: Butterworth-Heinemann.

[16] North, D.C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

[17] Gargiulo, M. & Bernassi, M. (1999). The Dark Side of Social Capital. (Eds.: Leenders, A.J. & Gabbay, S.M.). *Corporate Social Capital and Liability*. Boston: Kluwer.

[18] Suk, M. & Chwe, Y. (1999). Structure and Strategy in Collective Action. *American Journal of Sociology*, 105(1), 128-156.

[19] Hansen, M.T. (1999). The Search-Transfer Problem: The Role of Weak Ties in Sharing Knowledge across Organizational Subunits. *Administrative Science Quarterly*, 44(1), 82-111.

[20] Chesbrough, H.W. & Teece, D.J. (1998). When is Virtual Virtuous? Organizing for Innovation. (Ed.: Klein, A.D.). *The Strategic Management of Intellectual Capital*. Boston: Butterworth-Heinemann.

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