

What are the socio-psychological sources of information restriction within an organization?

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Abstract

This paper describes the socio-psychological sources of information restriction within an organization as identified by the current literature and provide a theoretical framework for the forces that contributing to restriction. The interrelation between the resistant forces are described as to support a hypothesized formula that the total resistance experienced within an information sharing system is that of the sum of all resistant forces at work.

The pendulum has reached the opposite apex on the prosperity curve for many organizations. The 1980's were a time when most US organizations employed large numbers of employees and had many tiers of management. With the onset of the 1990's, large numbers of organizations opted to drastically reduce their workforce, surgically and systematically removing the layers of management and job that performed redundant tasks. Corporate anorexia set in and organizational competency became the norm.

Top managers now wave the banner of empowerment, but more often than not, that translates to more work with less people. What is left of management and the so called empowered workforce, cripples the organization by restricting information flow among the workforce.

A recent Ernest & Young LLP survey of employees and managers indicated that only 15% of employees are aware of the cost to provide the company's product. In contrast less than 16% of the managers polled believe that their employees know the same information (Romano 1996) . This evidence points to obvious restrictions within the system. One might ask, "what are the barriers that restrict individuals from freely sharing information and why do they exist?"

More attention is being given by organizations to knowledge management and intellectual capital (Rogers 1996). Knowledge created through research and development, as well that which is intrinsic to individuals, is being perceived as an organizational asset. The problem of gathering and distributing the knowledge throughout the organization perplexes individuals who are cognizant of the dilemma. Are individuals within an organization reluctant to share information because they perceive it as an asset and sharing would be a personal loss?

The theoretical framework proposed in this article distinguishes between three resistant forces at work within an organization that have both social and psychological effects; *trust, organizational controls, and social environment*. Assuming that all three are present in all organizations, the *hypothesis* is that trust, organizational controls, and social environment are interdependent upon one another and the restriction of information sharing within an organization is the sum of the three forces.

$$\Sigma (RF_t, RF_{oc}, RF_{se}) = IR_t$$

Whereas: RF_t = Resistant Force of Trust
 RF_{oc} = Resistant Force of Organizational Control
 RF_{se} = Resistant Force of Social Environment
 IR_t = Total Resistant Force of Information Restriction

A relational model of information restriction is described later in this paper after an analysis of the forces at work.

Trust

A phenomenon that occurs between parties at the individual and organizational level, trust is an integral part of social interaction. For the purposes of discussion in this paper, trust is defined as the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control the other party (Mayer, Davis and Schorman 1995).

This definition implies that for an individual to trust another, a certain amount of risk must be taken on the part of the trustor. Individuals analyze the cost/profit factors of the relationship before taking the risk (Iyler and Kanekar 1991). Three factors taken into account by the trustor, when evaluating the risk, are cooperation, confidence and predictability (Mayer, et al. 1995). Cooperation and trust are related but trust does not need to exist for cooperation to occur. Cooperation can occur without risk. For example, an individual may cooperate with another but not trust them. This example illustrates a potential barrier to information sharing when there is a lack of trust between parties. Another illustration is when an individual lacks confidence in a party. An employee may want to share information with a supervisor, but lacks confidence that the information will be used to improve a process. Predictability plays an integral role in the assessment of risk. When one decides whether to trust a party, often past experiences are a deciding factor. Synonymous with predictability is reliability. The influence of uncertainty or unreliability is examined as a part of the social environment. Each of these factors are interrelated in an individual's evaluation of the trustworthiness of a party, but can act independently.

Often individuals provide a higher level of trust to groups with whom they associate. Groups of individuals that share the same characteristics such as ethnic, gender, or professional backgrounds tend to establish and maintain trusting working relationships (Jeanquart-Barone and Sekaran 1994; McAllister 1995; Mumby 1996). In addition groups may be formed based on organizational relationships such as proximity (physical and structural), work assignments and values.

Concerning the first set of group characteristics as natural cohesion influences, one must consider organizational composition at two points in time; present and future. If an individual's natural tendency is to associate with and trust with like characteristics, it can be assumed that certain percentages of present workforce populations are not trusted based upon group affiliation, and therefore restricted from access to certain information.

It is projected by the year 2000 that 25% of the workforce will be comprised of minority workers, up from 17% in the 1980's (Jamieson and O'Mara 1991). Working with the same assumption, restriction to information will continue to grow in the future based upon group affiliations.

Bridging the first set of group characteristics is that of association by proximity, work assignments and values. Individuals demonstrate a tendency to develop an affect-based trust base upon a common perspective. McAllister (1995) noted in a study that individuals that expressed a high affect-based trust were shown to be more inclined to seek opportunities to assist peers in work related needs and engage in production intervention. Therefore, groups founded on affect-based trust and not ethnic or gender biases will share information across traditional social group barriers.

Organizational Controls

Information sharing is also restricted by the nature and frequency of organizational controls. Traditional forms of organizational hierarchy impose a management bureaucracy with rules and procedures to control the behavior of individuals within the organization (Alder and Borys 1996). Controls may be placed in the organization in the form of budgetary restrictions or in the name of standardization. They are all forms of mechanisms for the purpose of maintaining power over individuals.

Many organizations have re-examined their control structure. They have realized that some controls are necessary to provide a framework for process, but rigid organizational controls have a negative impact on information sharing. Rousseau (1978) studied an electronics firm and a radio station and found that formalization (rules and regulations) had a positive correlation to employee absences, propensity to leave and physical and psychological stress, and were negatively related to job satisfaction and innovation. Adler and Borys (1996) note that it can also be said that formalization limits innovation because employees have little motivation to contribute to the improvement of work processes or quality because of the perception of disempowerment. They quote an example of a company using the ISO9000 standards to conform work processes and quality.

Engineers wrote the procedures and then handed them to the employees. The result was a procedure that was neither designed nor implemented as an aid for the employee. Instead the employees view it as a control mechanism because they were not allowed to provide information to its development. What is produced is a lack of trust (low cooperation and low confidence) and the resultant behavior was resistance to the procedures. The results of this case study are reinforced by other empirical research identifying the perception of an innovation by individuals whom did not share in developmental information as negative (Lucas 1981; Rice and Shook 1990; Rice and Aydin 1991).

Adler and Borys (1996) use the terms coercive and enabling to describe formalization. A coercive approach uses rules and procedures to minimize the risk of employees in a work process. Procedures are to be strictly adhered to and rules spell out the consequences for those who display deviant behavior. Conversely, an enabling approach uses procedures to provide employees with a wide range of information to aid them in interacting creatively with processes and the organizational environment. The later approach empowers the employee, creating trust and positively affecting attitudes and perceptions of the work environment.

Reward systems are also used by organizations to modify behavior. Many are studying the model of the learning organization as a means to capture and share knowledge amongst individuals. Hughes Space and Communications has realized a need to identify resources contributing to its intellectual capital. Arian Ward, Leader of Learning and Change at Hughes realized that their previous reward systems had created a company of islands of knowledge that were not connected. Subsidiaries and individuals were rewarded based upon individual accomplishments. Hughes now realizes a need to quantify their knowledge, reward for sharing and acquire additional resources (Ward and Leo 1996).

Social Environment

Many authors have addressed the influence of social environment on individual information processing (Bradley, Holm, Steere and Strömquist, 1993; Meyer, 1994; Shani and Sena, 1994; Burkhardt, 1994; Bar-Tal, 1994; Crammer and Buckland, 1995; Bill, 1996). Individuals gather and process information from internal sources such as their work environment, peers, supervisors and organizational culture (Meyer, 1994). Information gathered by the individual is processed and analyzed to form a perception of reality as it relates to the social norms of the organization.

Recent trends in restructuring and downsizing of organizations have caused the redefining of traditional roles. Individuals that once had a well defined role found a great deal of certainty in relating to their hierarchical position within the social context of their organization. Innovative movements by organizations to empower individuals have interjected a great deal of role ambiguity which has caused a feeling of uncertainty.

Individuals faced with uncertainty are naturally predisposed to reconstruct their reality to reduce the affect of this condition (Kruglanski and Freund, 1983; Kruglanski and Klar, 1987; Roney and Sorrentino, 1987; Smock, 1955). The need for certainty does vary among individuals as does the ability to achieve certainty (Bar-Tal, 1994). Feelings of uncertainty tend to cause individuals to engage in defensive routines (Argyris, 1985; Argyris, 1990). These defensive routines prohibit the sharing of information and learning from the social environment if the individual withdraws from others or the issue that is perceived to be threatening. Often there are undiscussable issues that provoke the defense mechanism, therefore making information gathering to correct the environment difficult.

Social support is often called upon as a source of information for the individual facing uncertainty. Individuals that possess a high need for certainty are able to achieve a perception of acceptance through a supportive social environment. Ironically, individuals that possess a high ability to achieve certainty tend to view social support positively as compared to low ability individuals who perceive it negatively. (Bar-Tal, 1994).

One source of support within an organization is sociopolitical support. It can be defined as the endorsement, approval and legitimacy from various parties and is typically gained through membership of organizational political networks (Kanter, 1983). These networks or groups, as discussed previously, tend to be formed based upon aptitudes, skills, attitudes, beliefs and relationships between and among groups (Shani and Sena, 1994). Through these networks, social information is communicated. Insiders experience acceptances while outsiders experience a feeling of exclusion. Schein (1995) describes the social norming practice of "saving face". This is where information is withheld by an individual so not to rock the proverbial boat.

Face saving may account for the social norming difficulties traditionally experienced by women and minorities. Information that is often beneficial to the organizational system goes untapped because the source providing the input is from outside of the normal channels. Often a feeling of exclusion is experienced and spawns a resistance to established networks which results in counter networks being formed (Helgesen, 1995; Mumby, 1996). In these networks, information is more freely shared because members are acknowledged for their worth (Schein 1995).

Little research has been focused in the area of social-political support access to information and its effect on an individual's perception of empowerment. Spreitzer (1995), in a study of 324 middle managers of Fortune 50 organizations, hypothesized that individuals who perceive greater access to information and sociopolitical support tend to experience a stronger sense of empowerment than those who perceive less support. She could not prove that access and support were predictors of empowered behavior, but neither could she disprove a relationship. Other studies indicate a relationship between access to information and empowerment. The premise being that access to resources enhances an individual's perception of control over the environment (Zimmerman, 1995).

Yet another source of information stems from social proximity. Generally accepted are three types of proximity; relational, positional and spatial. Relational proximity is a communication network through which an actor repeatedly interacts with for the purposes of resource retrieval and information processing. Typically, these networks are comprised of individuals with whom the actors share the same values and beliefs (Rice and Aydin, 1991). Positional proximity is a network formed by individuals who are hierarchically equal in the organizational structure (Burt 1980). They perform roughly the same role and perform equal tasks. Finally, spatial proximity is the physical or geographical relationship to others.

Individuals whose proximity to others is reduced by any of the three types may experience a barrier to social information sharing. For example, a common barrier to information access is the one experienced by subordinates in relation to positional proximity within the organization. Decentralized organizations may experience a high level of information sharing resistance due to geographical locations of employees. Communication is a central component of the social work environment (Bradley, et al. 1993.) therefore spatial proximity may create a substantial barrier in decentralized organizations.

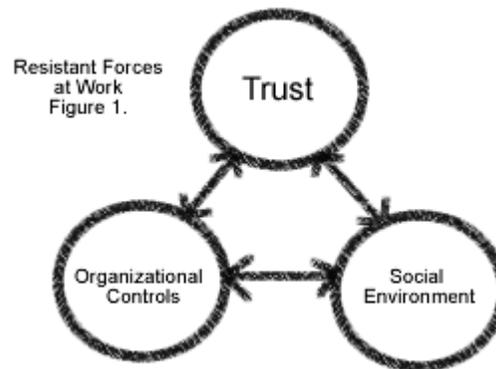
Many organizations are turning to electronic media as forms of communication to close spatial proximity, but the technology may create a new barrier to information sharing. Issues such as unfamiliarity and lack of knowledge or skill may foster a less than favorable perception of a technology (Bill, 1996), thus rendering the effort ineffective.

Model of Information Restriction and Discussion

Senge (1990) has popularized the theory of organizational systems thinking, a construct originally introduced by Kurt Lewin (1935). In his book, Senge discusses forces at work within an organizational system. Within any system, the force components have a relationship to one another, but their values may vary independently of one another. For example, in a simple electric circuit, the total value of the resistance is equal to the sum of all resistance in the system.

$$R_1 + R_2 + R_3 = R_T$$

As in the electric circuit, the total resistant force affects the entire system. As described in this paper, the resistance forces within an organization are relational to one another yet vary independently within the entire system. They are all present within an organization at various levels. For example, if trust is low, the management may seek to tighten organizational controls. Low trust would also affect the social environment.



$$\sum (RF_t, RF_{oc}, RF_{se}) = Ir_t$$

To effectively reduce the total resistance to information sharing, all three sources must be addressed within the system. Reducing the resistance level of any one or two of the sources, would still impact the system by the residual force.

An area for future research would be to quantify the resistance value of the forces present in a system, and measure the impact of an intervention on the values. Questions such as “What significant socio-psychological events need to occur in order to maximize information sharing?” and “Can technology reduce or bridge the resistant forces at work?”

This paper has identified three primary resistant forces at work against information sharing within an organization. The model introduced will provide a theoretical framework for future research for quantifying socio-psychological sources of information restriction within an organization. As more research is conducted pertaining to organizational learning and systems thinking, new forces may be identified.

The composition of the average workforce is becoming more diverse, as is the economy in which organizations must compete. No longer can information be viewed as a treasure in the coffers of the privileged few. Information is the toolbox of the modern knowledge worker. To deprive workers of knowledge and information is to condemn the organization to a slow death.

Empirical References of Force Constructs (Table 1.)

Author	Variables	Method of Analysis	Conclusions
Jeanquart-Barone, Sandy; Sekaran, Uma (1994)	Gender of Individual; Gender of Supervisor	Causal Comparative; Questionnaire	Women trust male supervisors more than female supervisors.
Bar-Tal, Yoram (1994)	Need for Certainty; Ability to Achieve Certainty	Causal Comparative; Questionnaire	Individuals with a high ability to achieve certainty view social support than their low ability counterparts regardless of their need for certainty.
Crammer, Duncan; Buckland, Natalie (1995)	Rational and irrational statements	2 x 5 factorial design	Subjecting individuals to irrational statements, as compared to rational, has no affect on task anxiety.
Muter, Paul; Furedy, John; Vincent, Alex; Pelcowitz (1993)	User-hostile software; User friendly software; age	2 x 2 factorial design	User-hostile software created a psychological barrier to task completion.
Iyler, Nirmla; Kannekar, Suresh (1991)	Gender; Same-Sex; Cross-Sex Help seeker; cost of helping; Context of help seeking	2 x 2 x 2 x 3 factorial design	Female subjects displayed a greater willingness to help than did male counterparts. Males considered cost/profit relationships more than females. Cross-sex helping was higher for both genders as compared to same-sex help.
Rice, Ronald; Aydin, Carolyn (1991)	Computer Use; Occupational Membership; Organizational Level	Causal Comparative; Questionnaire	Social information processing influences individual attitude more so than experiential data. Effects of social information processing changes a one's proximity changes from spatial to positional.
Burkhardt, Maralene (1994)	Interaction Distance; Structural equivalence; frequency of use; Attitude; self-efficacy beliefs; self-monitoring.	Causal Comparative; Questionnaire	Social context influences an individual when the level of uncertainty is high pertaining to the work environment. Individuals who interact directly are more similar in behavior than those who interact via an intermediary.

Author	Variables	Method of Analysis	Conclusions
McAllister, Daniel (1995)	control-based monitoring; defensive behavior; need-based monitoring; citizenship behavior	Causal Comparative; Questionnaire	Cognition-based trust was found not to be significantly influenced by: reliable role performance, similar cultural-ethnic backgrounds, strong professional credentials. Affect-based trust is high among individuals whom interact frequently.

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About Liquid Knowledge Group, Ltd.

The Liquid Knowledge Group is a consulting firm that partners with clients to design and implement strategies to curb knowledge loss. Their solutions help clients to capture the knowledge, leverage it and even grow it when there is employee turn over. In addition, they help clients identify the critical skills needed to provide the services and products that customers expect, and then design programs and solutions that leverage an organization's knowledge assets to develop employees.