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# Developing an Instrument to Measure Trust in Organizations

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# 30F. Developing an Instrument to Measure Trust in Organizations

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## ***Abstract***

This research is an attempt to develop a survey instrument to assess the level of trust in an organization and its role in fostering learning and collaboration as a way of enhancing organizational performance. We discuss the development of the survey instrument and present preliminary results from two pilot studies.

## ***Keywords***

Trust, Measurement, Organization Performance, Learning, Collaboration, Survey Instrument

## **1. Introduction**

In Michael Porter's classic model of competition (Porter 1985), it is argued that in order for a business to prosper and survive it must develop and implement competitive strategies that enable it to successfully deal with the five forces that threaten all businesses: rivalry with existing competitors, the bargaining power of suppliers, the bargaining power of customers, the threat of new entrants into the market, and the threat posed by the introduction of substitution products into the market space. Competitive strategies that have proven successful in addressing these forces include cost leadership, differentiation, innovation, growth, and alliance. Using these strategies firms have successfully locked in customers and suppliers, created switching costs, and raised barriers to entry which in turn have enabled them to achieve a greater than normal advantage over the competition for a sustained period of time. This is what can be thought of as competitive advantage.

A study by Ernst and Young and the Wharton Research group concluded that the number one source of competitive advantage in innovation (Baum e. al., 2000). Innovation can be thought of in terms of two very different processes, incremental and radical. Incremental innovations usually emphasize cost or feature improvements in existing products or services, and are dependent upon exploitation competencies whereas radical innovations concern the development of new businesses or product lines based on new technologies or substantial cost reductions that transform the economics of business. Radical innovations require exploration competencies.

Yet another way to think about the innovation process is to consider it in terms of a simple but effective business model consisting of three entities, the value chain, the value inherent in the product or service offered, and the customer. This perspective requires that managers ask

three very important questions: Who are my target customers? What value do I want to deliver to them? And how will I create it?

Each of these questions in essence is designed to close what Zack (2000) has described as the strategic gap, or the difference between what the company does and what it should be doing. This gap exists because of the difference between what the company knows and what it needs to know in order to come up with innovative products and processes that customers' value. This latter difference is called the knowledge gap.

How then do we go about creating a process of closing the knowledge gap? We submit that the great German philosopher Kant would argue that in order to close the knowledge gap we must engage in a rigorous process of learning. Kant proposed that we learn in one of three ways, by experimentation, by speculation, and by what other sources of knowledge can communicate to us (Infield 1963). In the following sections we will focus on the latter means of learning and the enabling role that trust plays.

## **2. Trust and its Role in Ensuring Learning and Collaboration**

Kant (Infield 1963) reminds us that since one third of our ability to learn results from what others tell us, our ability to learn will be seriously affected if we cannot trust others to tell us the truth. He said: "If a man spreads false news though he does no wrong to anyone in particular, he offends against mankind because if such practices were universal, mans desire for knowledge would be frustrated. For apart from speculation there are only two ways I can increase my fund of knowledge, by experience, and by what other people tell me."

Levin, D., et al (2005) note: "Fostering knowledge sharing is more than simply putting people together in a conference room or sending them on experiential learning programs. It is about creating an environment in which people are able to discern whether their colleagues are both knowledgeable and willing to extend their knowledge to the benefit of others. Without building a sense of competence and benevolence based trust between the knowledge seekers and sources, firms will find it difficult to take advantage of perhaps their most valuable resource—their employees know how. Managers play a substantial role creating the conditions through which trust is developed and fostered."

## **3. How important to business is trust?**

Students of business have been taught, that perhaps the two most important questions that business leaders must find answers to are: What business should we be in, and what must we do in order to prosper and survive in this business? The first question is about doing the right thing or being effective. The second question is about doing that thing in such a way as to be better than the competition. This is about efficiency. Many authors have written about these questions, but Francis Fukuyama and Magda Ratajski have succinctly captured the importance of trust in ensuring these two major concerns of all businesses.

In his book "Trust: The Social Virtues and the Creation of Prosperity" Francis Fukuyama (1995) showed, as a result of his analysis of firms in various countries, that low trust cultures are very inefficient. He argued that without trust, society and, by extension, organizations would not be able to build institutions that create wealth.

In a speech on individual and corporate ethics, Magda Ratajski (1994) concluded that if everyone cheated, trust would not exist. She stated that: "Every party to every transaction

would be suspicious of everyone else, and in such a system, business people would spend valuable time, energy, and resources on self protection and retaliation. In such a system there would be little incentive to take risks and to innovate.”

#### **4. Creating trust within and between organizations**

What is trust, and how do we establish it within and between organizations? We can begin by describing trust in terms of what it is intended to accomplish, namely, to get people to collaborate.

Trust, it has been argued, is one of the essential conditions necessary for happiness (Beauchamp & Bowie, 1979). Establishing a climate of trust within an organization, however, is difficult since it must be built up over time, and may be influenced by a variety of factors. Bayles (1989) identified seven factors that he felt were necessary to ensure trust: honesty, candor, competence, diligence, loyalty, fairness, and discipline. Others, in describing values essential to interpersonal relationships, add factors such as caring and pursuit of excellence (Barry, 1979). Factors such as loyalty and candor are difficult to quantify and are not easily measured. Nevertheless, these obligations are extremely important. Modern organizations, characterized by constantly changing relationships, require a culture of trust that is less dependent on individual relationships. We contend that such a culture can be achieved only by an ethical organization; the ethics literature provides some clues on how to identify, measure, and operationalize trust.

Each ethical system consists of a collection of values that when practiced and supported by the participants ensures certain rights; life, liberty, or freedom from unjust physical and economic harm. As noted above, trust is essential to the efficient and effective operation of all organizations. The framers of these ethical systems understood that people would not take the risks needed to build institutions that create wealth if they did not trust in the guarantees inherent in these ethical systems.

As anyone who has studied management and organizational development will confirm, it is critically important to focus on both the means and the ends. Studies confirm that managers who focus on either production or on people exclusively will not be as successful as those who consider both simultaneously. Likewise, it is essential that, in order to create an ethical organization that will ensure trust, managers must be cognizant of both goals. For example, while teleological systems that focus on ends would emphasize individual learning, deontological, means-oriented systems would emphasize community-based learning. As Senge (1990) noted, both are essential to organizational learning, and, we might add, to efficient and effective knowledge management. With this in mind, we have identified four values that are common to both types of ethical systems, values that, we believe, are essential to establishing the practices that will ensure a culture of trust.

Among the features that describe and distinguish the various ethical systems are four values that each system has in common with the others. They are: (1) the extent to which they focus on the individual or on the broader society; (2) the extent to which complete and accurate information/knowledge is shared; (3) the extent to which rules that guide behavior are universally enforced; (4) the extent to which duty determines behavior.

The first element, we contend, concerns engagement. It's about where we get our data, information and knowledge, and whom we include in our decision-making and problem-solving efforts. In the area of knowledge management it is critically important whom we

listen to. We believe the underlying value here is inclusiveness. To exclude data or knowledge from our deliberations because we strongly disagree with the source is not only foolish but can, ultimately, prove disastrous.

The second element is about the extent to which we can depend upon data and information that we request to be accurate, complete, timely, etc. It is about the importance of being able to rely on the quality of the data and knowledge we are soliciting. We define the underlying value here as one of truth-telling. Truth-telling is a two-way street, so to speak. If we want to acquire high quality knowledge, we have to provide high quality knowledge in exchange. Unless we can depend upon others with whom we interact to provide us with high quality knowledge, we will not be able to learn and compete in the knowledge economy. It is essential that firms collaborate in order to build knowledge, as in the fields of HIV and Cancer research.

The third element deals with the extent to which rules and laws are universally practiced and enforced. It is about treating everyone equally. We describe this third value as consistency. Alienation and disaffection ensue when employees begin to think that fellow workers have been given special treatment. Inconsistent behavior on the part of both individuals and organizations is a sure way to thwart collaboration.

Finally, the fourth value that we have been able to divine from our analysis of the ethics literature is discipline. In order for managers to be consistent and listen to individuals with dissenting opinions, and for workers to be forthcoming, regardless of how they feel about a particular individual or situation requires discipline.

## **5. Can we assess an organization's trust level: Building a Survey Instrument**

We have created an instrument that we have titled the: "Ethical Organization Quotient" (EOQ) that we contend can be used to assess the level of trust in organizations. The instrument consists of three parts. The first part consists of seven demographic questions. The second part consists of a set of twenty questions designed to assess the level of trust in the organization (organized into four segments: inclusiveness, truth-telling, consistency and discipline), while the third part of the instrument consists of sixteen questions designed to assess organizational performance. In the following we will discuss the second part of the instrument designed to assess the extent to which the organization practices the four values discussed above. Each question in the last two sections is rated on a scale of one to five.

### **5.1. Inclusiveness**

Relevant to the principle of Inclusiveness, are questions designed to assess the extent to which the organization solicits the views of key stakeholders and elicits and values employee input.

Salary differentials provide evidence of the value that the organization places on the contributions of key, value-adding personnel. We are reminded of Plato's dictate that no man receive more than five times the salary of those he supervises (Buchanan 1948). We have seen a dramatic increase in the difference in income between CEO's and the average worker in recent years. In 1990 the average large company CEO made 150 times more than the average worker (Akst 1991), while in the last few years, the ratio has climbed to well over 500 to 1. One survey question that can help assess the extent to which the organization

practices inclusiveness is: Does your organization invest in programs such as laboratory learning or other team building programs?

## **5.2. Truth-telling**

Business requires public acceptance; if the public does not view business as acting in its best interest, then the public will force government controls in order to encourage moral behavior.

Movements in the health care industry (requiring health care delivery entities to publish quality and performance standards) and in banking (truth in lending laws) resulted from public concern over the products and services delivered by each of these business sectors.

Questions under the heading: Truth-telling attempt to measure the extent to which truth-telling exists between the organizations and its customers as well as between employers and employees. One question designed to assess truth-telling is: Does your organization fully and unconditionally support those who call attention to unethical practices (e.g., an individual sometimes referred to as a whistleblower)?

## **5.3. Consistency**

Consistency is essential in building trust between the organization and key stakeholders, including customers and employees. One question under this heading is designed to determine whether the organization has a company credo and, if so, the extent to which it is followed. Companies such as Johnson and Johnson should be viewed as a standard or Benchmark against which all other companies can compare themselves. Questions under the heading Consistency attempt to determine whether the organization has settled on a standard, or set of standards, by which it can ensure the consistency of products, processes (manufacturing and business), and services. One such question is: How would you describe your company's approach to standards?

## **5.4. Discipline**

The questions under the value heading Discipline are designed to determine the extent, to which the organization promotes learning, independence, and responsible behavior on the part of its employees. Participative management, a crucial element in an ethical organization, requires that senior managers must examine their approach to managing, and where appropriate change. Managers for example cannot simply dictate what employees are expected to do. They must be able to tell employees why they are requested to perform certain activities, not just command them to do so. In this way the employees are able to better evaluate their performance. As anyone familiar with total quality management will recognize the importance of this value. In an ethical organization, employees also have a responsibility to become more professional in performing their jobs. Questions under the heading Discipline include several found in the professional ethics literature. The following is a version of one such question: Please describe the extent to which your organization has effectively established and implemented a working Ethics Committee. An answer of 1 should be used if no such entity exists, or if such a committee exists but people do not abide by its tenets.

## **5.5. Does a high EOQ Result in Improved Operational Performance?**

The last part of the survey instrument deals with Operational Performance (OP). While most managers believe as Peter Huber Managing Director of Vibro-Meter in Switzerland contends that "Trust is the essence in our businesses and the absence thereof the root cause of most of

the problems we deal with,” very few managers have been able to assess the extent to which trust influences organizational performance.

To measure OP we first engaged in an extensive literature review. As a result, we were able to generate 16 non-financial performance-related items. We excluded financial measures not only because financial performance measures are difficult to obtain, but also because non-financial measures have been recognized as good indicators of performance (Dess and Robinson, 1984, Asoh, Belardo and Crnkovic 2007). Performance measures were drawn from four dimensions: goal achievement (cost reduction, improved speed), enhancing agility (flexibility, responsiveness, proficiency, and adaptability), and employees’ development (e.g. reward, evaluation, communication, hiring) and customer services (feedback, communication). The items are measured on the same 5-point scale, as was the rest of the survey.

## 6. Preliminary results are encouraging

Our instrument was tested with a group of 51 managers from Switzerland, Germany and Italy attending a Zurich based MBA program. The majority of these participants (45) were from private or publicly traded companies, while 6 were from the governmental organizations. The quality of survey data was very good. In only 4 cases were there missing answers, and in these instances no more than two questions went unanswered. The missing answers may be the result of a cultural or language translation problem in spite of the fact that all participants are fluent in English. We are working to improve the instrument. These issues will be addressed in subsequent analyses. Initial relationships are presented in the Table 1.

As can be seen from this abbreviated table of descriptive statistics, the pilot test results are encouraging. There appears to be a high degree of correlation between the Level of Trust and Organizational performance, (the correlation coefficient is slightly smaller  $r=0.74$  for only private organizations). Comparing the segments inside the area of EOQ, however, suggests that more work needs to be done. For example, the poor degree of correlation among values such as discipline and inclusiveness and between consistency and truth-telling suggest that the questions associated with each value need to be reconstructed. Our next step is to run a second pilot with slightly modified questions. The Calculated EOQ (EOQ=3.32) may be used for comparisons between demographic categories, departments within the organization, between organizations and inside the peer group. There are many more options to be considered including the conduct of longitudinal studies. While the preliminary results are encouraging, it remains for us to validate this instrument. This will require more surveys especially if we elect to use SEM.

Relationship	Coefficient of linear correlation
Performance = Linear function(level of trust)	0.76
Truth-telling=Linear function of (Inclusiveness)	0.64
Consistency =Linear function of (Inclusiveness)	0.63
Discipline=Linear function of (Inclusiveness)	0.37
Consistency =Linear function of (Truth-telling)	0.34
Discipline =Linear function of (Truth-telling)	0.47
Discipline =Linear function of (Consistency)	0.41

**Table 1:** Preliminary descriptive statistics

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