# Comparison of sytems and scientific theories essay

Business, Industries

Comaprisonof Systems and Scientific Theories Theories of OrgComm 10/12/09 Introduction Organizations have evolved in many different ways throughout history. On one spectrum of the different theories that are to be examined is the Scientific Management theory, which has its roots in early forms of organizations and uses a theme that is based on efficiency. The other theory that will be used to compare and contrast with Scientific Management will be Systems theory. These two different perspectives are exactly that, different, however there may be certain types of organizations that would be more efficient using either of the theories as a backbone to the way their organization functions. My interest is based on the basic principles of these theories and the similarities and differences that arise within the core of what they represent.

And the different work environments that these two theories are being used and why that may be. Systems Theory System’s theory relies heavily on the theme: maintaining that a system is greater than the sum of its parts. It is defined as “ the trans-disciplinary study of the abstract organization of phenomena, independent of their substance, type, or spatial or temporal scale of existence. It investigates both the principles common to all complex entities, and the models which can be used to describe them. ”( Heylighen, 1992)In a system, interdependence is an aspect of System Theory that is essential. A person or employee is dependent on the company they work for, and the company is also dependant on the person to perform the tasks that they are required to.

In order for there to be satisfaction on both ends this communication must occur. Information flow is an essential part of this theory and the idea of

which direction information is being sent and the feedback that is received is a main aspect to this theory. This is shown with the sender, message, channel, and receiver model. Scientific Management Scientific Management which was mainly influenced by Frederick Taylor, makes different assumptions on what makes an organization function at its highest level.

It develops a science for each element of an individual's work in order to maximize efficiency. The method scientifically selects and then trains, teaches and develops the worker. There are three guidelines to Scientific Management according to learnmanagemnt2. com. The first of which is " Heartily cooperate with the workers so as to ensure that all work is done in accordance with the principles of the science that has been developed. " The second is " Divide work and responsibility almost equally between management and workers.

" And lastly " Management takes over all the work for which it is better fitted than the workers. " This theory implies hierarchical distinctions and became to be known as the " enemy of the working man". Efficiency is a major part of Taylors theory, an example of this in today's society would be a working mother who has her entire schedule planned and color coordinated, brings Taylors theory to life. (Nelson, 2002) Comparison When it comes to the differences in these two particular theories there are many. The themes of the two theories are interestingly different. On the Scientific Mangement side the theme is said to be a machine is the sum of its parts.

(Eisenberg, Goodall, Tretheway, 2007) Whereas the Systems Theory theme is one of complexity, as system is greater than the sum of its parts. This is an

interesting contrast. On the scientific side for example in a pizza delivery organization the machine metaphor being the company runs only as efficiently as its parts or people. If you remove one person from the scenario your machine will no longer function as it should. On the Systems theory side a system being greater than the sum of its parts, the organization itself is a greater form that just the people doing their assigned tasks. It comes back to equifinality, or the same goal may be reached in multiple ways. (Eisenberg, et al. 2007) This thought goes directly against the grain of what Taylor and Scientific management says.

When considering the differences you must take into account that in Scientific Management there is one best way to do something. The basis of the two different theories can be found in their goals. Scientific Management goals are central, both individuals and the organizations put their efforts and activities towards the goal attainment. Whereas on the open-systems perspective goals are negotiated among those involved in the organization and are also influenced by the environment. ( Eisenberg, et al.

2007) Contexts When these two theories are placed in a real time work environment it is difficult to place each in their “ respected places”. Although Scientific management with heavy influence from events such as the industrial revolution, could be used in organizations that do in fact use a science to determine the best, most efficient way to perform a particular task. For example, an auto factory has one best way to perform each job on the line. If you switched lenses to a systems approach the company may take into account the core process of what the goal is, not just the individual

employee, but rather use a collaborative process involving feedback, both positive and negative. Scientific Management would most likely be highly concerned with how long it took a competent worker to complete his/her section of the assembly of a car. I see similarities in both subtly. In Frederick Taylor’s views there is a high division of labor( Eisenberg, et al.

2007). I see a division of labor in Systems theory but one with much more openness. A manager in that auto plant using the Scientific methods would most likely be limited to giving orders and instruction.

Whereas on the opposite end Systems Theory has a more interchangeable flow of communication, which leads to more openness and possibly a more unpredictable work environment. Conclusion As time goes on, and the workplace changes, there will be new ideas as to how an organization and its employees need to function within that setting. These two theories although different, both have their places in the world of the workplace. Whether it be aN auto industry in Detroit, or a stay at home mom preparing her weekly schedule, there are aspects of each of these theories that are being brought to life in today’s workplace, and in the organizations of the past.