

The relationship between culture and traffic technology development and the effect of culture on reducing the road accidents

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Abstract: The increasing growth of modern technology with the fundamental changes in international system during past fifty years has changed the view of modern world completely. These changes in addition to social and cultural transitions cause to make the critical different rates of challenges in different areas of human community and this is a ground to occur the knowledge crisis in describing the living conditions and human compatibility. In this condition, the system experts know that the social security needs a dynamic, flexible and conclusive program and also a strong will. This study tries to explain every effective factor in improving the common culture of road users and its effect on reducing road accidents. The correct and regulation based driving lead to increase transportation security. The hasty drivers who break the safe speed will cause the accidents. So, it is important to train the principals of how to use roads correctly because it is the effective factor to reduce accidents and cost of them and finally, it cause to satisfy countrymen and also traffic officers.

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1. Introduction

According to W.H.O studies, about 1,170,000 people will die because of road accident in world each year and also about 50 million will losses partly or full of their physical abilities because of accident injuries. Due to statistical comparison of the injured and dead ones, it can be said that the ratio of the dead to injured ones is 1:42 unfortunately, this ratio has increased to 1:12 in Iran and this represents the accident severity. It is obvious that the speed is main reason of accidents, so it is necessary to find a solution by national willpower. Culture is an entity of material and spiritual specifications, as a social group and the origin of social identity which it can be transformed by different transitions (social, political, economic and technological). But, what can influence societies especially developing societies is anti-culture and its effect. Anti – culture is micro culture that rejects social values and norms and it is looking for an alternative life style. It is common in adults.

2. Definitions of culture and cultural dimensions

"Culture" has been defined in many ways. My own preferred definition is that culture is the collective programming of the mind which distinguishes the members of one group or society from those of another. Culture consists of the patterns of thinking that parents transfer to their children, teachers to their students, friends to their friends, leaders to their followers, and followers to their

leaders. Culture is reflected in the meanings people attach to various aspects of life; their way of looking at the world and their role in it; in their values, that is, in what they consider as "good" and as "evil"; in their collective beliefs, what they consider as "true" and as "false"; in their artistic expressions, what they consider as "beautiful" and as "ugly." Culture is a fundamental determinant of ethical decision making. It directly affects how an individual perceives ethical problems, alternatives, and consequences (Hunt and Vitell, 1986, 1992). Organizational culture is a collection of the beliefs, values and norms that exist in an organization. They are expressed in various ways such as symbols, ceremonies, myths, rituals, language and stories, which influence the behavior of employees (Schein, 1992). This culture, showing the correct way to think, act and do things within the organization, is passed on to new employees (Sankar, 1988; Vecchio et al. 1996).

Research of organizational culture changes is possible only within a consistent theoretical framework, since acceptance of some theoretical perspective leads and frames any empirical research and presents framework for discussion and interpretation of research findings. For an organizational culture change analysis theoretical approach to organizational culture research is especially important, since different perspectives in various ways define organizational culture, its sources,

content and structure, its roles within an organization and the potential for its change. However, any classification of theoretical perspectives must be accepted conditionally, since different authors suggest different categorizations, although often with different names for the same things. In order to provide for a deeper understanding of organizational culture research, we present some of them, since differences between various perspectives may explain for sources of contradictoriness of different statements and results offered in the relevant literature. Schultz (1994) also identifies three theoretical perspectives. Rationalism assumes that culture is an instrument for efficient achievement of defined goals. Culture is only one among many organizational variables which significantly influence organizational efficiency and performance. Functionalism studies functions of the culture in dealing with problems that an organization is facing with through the processes of internal integration and external adaptation. Having established that organizational culture comprises a range of complex social phenomena, it is not surprising that scholars have identified corporate culture as a multi-layered construct which can be divided into layers according to these phenomena's observability and accessibility. Organizational culture has been defined as patterns of shared values and beliefs over time which produces behavioral norms that are adopted in solving problems (Schein, 1990). Organizational Culture manifested in beliefs and assumptions, values, attitudes and behaviors of its members is a valuable source of firm's competitive advantage (Hall, 1993) since it shapes organizational procedures, unifies organizational capabilities into a cohesive whole, provides solutions to the problems faced by the organization, and, thereby, hindering or facilitating the organization's achievement of its goals (Yilmaz, 2008).

3. Definition of Technology

Technology is widely accepted as necessary for improving development programs to achieve higher living standards, especially in developing countries where industrial growth plays a very significant role. The word "technology" originates from the Greek words 'techne' and 'logos', "techne" meaning the skill of hand or technique, and "logos" meaning a knowledge or science (Willoughby, 1990). From these two words, technology may be defined as the knowledge or science of skill or technique. Technology, from a very broad perspective, is defined as the capability of human society to transform natural resources into useful products for human consumption (Storper and Walker, 1989). The implementation of technology in businesses is commonly associated with the automation of bulk processes of data management (e.g. invoice transfers). The application of information

technology is an important driving force behind many socioeconomic changes. In trade and industry, the application of IT stimulates innovation in all possible fields. Companies can thus offer their customers a faster, more individual and reliable product or service on a more regular basis. Often the entire internal labor and organizational structure of a company has to be transformed into a flatter and more flexible organization in order to realize such innovations. This leads to new forms of labor such as teleworking and freelance work, and new forms of independent work

4. History of technology

The history of technology is the history of the invention of tools and techniques, and is similar in many ways to the history of humanity. Background knowledge has enabled people to create new things, and conversely, many scientific endeavors have become possible through technologies which assist humans to travel to places we could not otherwise go, and probe the nature of the universe in more detail than our natural senses allow. The TT process is a complex matter that includes legal issues, technical complexities, financial calculations, and marketing. Institutions of higher learning have developed a number of approaches. Some authors suggest a purely linear model of TT. The linear model of TT suggests a process from discovery, disclosure, evaluation, patent, market, negotiation and then license. However, Minutolo and Lipinski (2006) suggest that the linear model of TT is outdated and that a network theory approach is more appropriate. A general overview of the steps of the network theory approach is presented below as discreet units; however, we acknowledge that the process is not as isolated as this process suggests.

5. Technology transfer

Technology and knowledge accumulation, transfer, application, and diffusion are key to sustainable economic prosperity in the emerging global economy of the 21st century. Rapid advances in Information and Communication Technologies (ICT) and declining costs of producing, processing and diffusing knowledge are transforming social and economic activities worldwide. Rapid advances in Information Technologies (IT) and declining costs of producing, processing and diffusing knowledge and technologies are transforming social and economic activities worldwide. Technology revolution is critically different from the past industrial ones in that it is based upon a shift of wealth creating assets from physical things to intangible resources based on technologies. Thus, effective management and transfer of technologies are believed to be increasingly critical for individuals, organizations, and nations in the globalized knowledge society of the 21st century.

Technology transfer is the process in which technology is moved from one source that developed it to another that uses it (Karlsson, 2004; Rouach, 2003; Martyniuk, Jain & Stone, 2003). Using technology transfer as a business strategy has had positive effects on business operation. Some businesses had experimented with technology transfer to increase their potential revenue; at the same time, technology providers or developers in the public sector and the academia which engage in technology transfer have also made increasing profits.

6. Technology Transfer Process

Technology transfer in different countries and organizations with various levels of technical knowledge covers limitations and problems for the less developed recipient. Technology transfer is a complex and challenging processes which needs deep and all out study. In case of overlooking of different aspects of the technology transfer; it may lead to weaknesses of the national technology. Technology transfer process includes some preventive scales, which should be addressed, before selecting the technology transfer method. Included in these factors (Malekifar, 1999) are:

- Awareness of fundamental and important factors required for technology transfer.
- Awareness of failure factors of technology transfer.
- Effort to acquisition of the appropriate technology for achieving organizational appropriate position.
- Consideration of existing and old technologies.

7. Promotion the society culture in stressing on transportation field

In transportation area, we will face to human factors, automobiles, road and regulation and traffic rules. Since human is the producer, designer, road performing and rule enactment, so, the human factor plays main role to solve problems. Thus it can be said that if roads are designed and performed in standard way, automobiles designed and produced standard and regulation and rules performed strictly but human factor doesn't considered well, the problem will be continued. So, it is important to consider the improvement of human behaviors (teaching and correcting the behavior culture). We can divide the effective elements on teaching people and correcting the behavioral culture in three classes:

- 1-effective educational places environmentally
- 2-effective educational tools in regard to mass media
- 3-effective educational organizations and institutions in regard to education development and growth
- 4-effective educational methods

1-effective teaching places environmentally: the teaching places can be effective on human organizational behavior because of its inclusiveness on human behavior and mutual effect between environments and individual. It can be mentioned the following environments:

- 1-1 family
- 1-2 kindergarten
- 1-3 schools (elementary schools, high schools)
- 1-4 universities and colleges

2-effective educational tools in regard to mass media: today, there are many different effective teaching tools in mass media area, and each of them have many effects on people such as:

- 2-1 radio
- 2-2 TV
- 2-3 cell mobile phone
- 2-4 newspapers, magazines, brushers and textbooks.

3-effective educational organizations and institutions in regard to education development and growth: there are some effective and efficient organizations in studying and finding the new educational ways as followings:

- 3-1 Cultural Revolution supreme council
- 3-2 education
- 3-3 technology ministries, medical teaching, treatment and health, university jihad, Islamic Azad University
- 3-4 TV and radio organization
- 3-5 municipalities
- 3-6 traffic organization

4-effective educational methods: the most important factor to improve the behavioral culture is to use education in different methods. The more different human labor teaching methods will influence on more people.

8. Conclusion

The summation and relationship between sufficient technology transfer in order to produce different automobiles and to improve the dominance culture in using transportation tools is referred as following:

1-improve the general culture by classic direct and indirect teachings (modeling and avoidance incorrect behaviors and broadening the correct behaviors)

2-traffic teaching in all education levels and between families

3- Find the reason of rule avoidance and incorrect behaviors by psychologists and traffic experts, then the approving strict traffic rules and regulations against the lawbreakers

4-the continued correction and reviewing of traffic rules in all education levels and driving license, then encounter with lawbreakers.

5- Correct structure and engineering of police force in order to attract people thrust to cooperate with police completely.

6-establish special radio and TV networks to report accidents and its costs, the necessary measures to prevent it, informing about outcomes of incorrect driving and explain driving advantages in regard to traffic laws.

7-More cooperate of transportation ministry and municipality to remove accident susceptible intersections and points, the continued repair of road asphalt, improving and maintaining the traffic signs and road signals.

8-perform research studies in universities about how to improve the general culture, especially in departments related human behaviors

9- Effort of decision making institutions such as Cultural Revolution council to find cultural reasons of current conditions and necessary procedures.

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