Abstract

Reliability is a broad term that focuses on the ability of a product to perform its intended function. Mathematically speaking, assuming that an item is performing its intended function at time equals zero, the term reliability can be defined as the probability that an item will continue to perform its intended function without failure for a specified period of time under stated conditions. (The product defined here could be an electronic or mechanical hardware product, a software product, a manufacturing process, or even a service). In most systems humans and machines are linked in one System. The system that require operation by a human, who thereby becomes an integral part of the system and can have significant effect on system
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reliability. Accidents and malfunctions occur in most systems; and therefore there are the procedures for reporting them. In such reporting, a large proportion of the incidents are often erroneously assigned to “Human Error”. Recently, the emphasis has been on developing techniques for predicting human reliability. Present effort is focused on developing a more academic methodology which applies to practical Human – Machine systems, like the same as, a life cycle approach to predicting and evaluating human – machine reliability was developed under US Navy sponsorship. As humans being involved in systems, their abilities and limitations are manifested in their performance of mission tasks, all organizations have to plan their strategies in such a way that human potential is optimally utilized and how personnel can improve upon their stress level. Since humans are essential to the operation of such systems, it is important to measure the effect of human performance on the system reliability. There is evident that the human component is responsible for 20-30 percent of the failures in many systems depending upon the degree of human involvement in the system. This paper intends to calculate the human error probability rate (category wise as well as overall), to find the correlation between manual (i.e. Human) errors and the stress level of the respondents, to study human reliability of liquid medicine manufacturing process and its analysis with respect to human behavior and human error. Also, what is strategic management’s role in improving the underlying problems that increase the stress level of employees? This study is conducted on the employees of Ind – Swift Industries (Baddi, Himachal Pradesh, Plant).

References

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Index Terms

Computer Science

Communication and Networks
Keywords
Reliability  Human Error  Human Machine Interface