The Enterprise's Willingness to Use Remote Monitoring Technology Under the Background of Green Operation and Service-Oriented Manufacturing

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ABSTRACT

The current development of remote monitoring technology (RMT) has become increasingly mature. The key to implementing this technology lies in the user's willingness to use it. In order to study the influencing factors of using RMT in green operation and service-oriented manufacturing enterprises, based on organizational behavior, this exploration discusses the reasons that affect the introduction of new technologies into enterprises from the perspectives of perceived risk, conformity and technology acceptance. Moreover, a series of data is obtained through the questionnaire and the results are obtained by analyzing the data. Suggestions to improve the use of RMT in enterprises are put forward. The results show that technology itself, external environment and organizational characteristics can all affect the decision-making of enterprises on new technology.

KEYWORDS

decision making, green operation, organizational behavior, remote monitoring technology, service-oriented manufacturing enterprises, technology, willingness to use

INTRODUCTION

Nowadays, information technology is developing on a large scale worldwide, and every country is deepening information reform. Since 1990, remote monitoring technology (RMT) has attracted attention because it integrates Internet technology, automation technology, and sensing technology (Sun & Zhang, 2021). RMT promotes the informatization process of enterprises and the transformation of manufacturing enterprises' enterprises' green operation and services. Hence, RMT is widely used in enterprises. Organizational behavior is constantly changing, developing, and infiltrating various fields. The willingness of enterprises to use remote monitoring can be studied from more perspectives through organizational behavior.

Unlike traditional monitoring technology, RMT seems to be relatively new technology, but scholars have been studying it for some time. Kanade et al. (2021) used RMT to remotely monitor the patients' status during the coronavirus period and provide security for patients at any time. Ng et al. (2020) used RMT to innovate the community self-help detection method of insulin-dependent diabetes, so that patients could obtain independent functions earlier and become their own nursing experts. Sapci and Sapci (2019) studied the ubiquitous home monitoring and intelligent technology in elder care under the background of the aging society, and found that remote monitoring could increase the available medical care services for the elderly and improve the medical care results of the frail elderly. However, the current research on RMT is only conducted from a certain angle or a certain level, and there is little overall consideration.

In this context, this research study will explore the factors that affect the use of RMT in green operation and service-oriented manufacturing enterprises based on organizational behavior and actual situations. Data were collected by questionnaire, then sorted and analyzed, and research conclusions were drawn. This research will analyze the influencing factors of RMT from multiple perspectives. The root causes affecting enterprises are explored, and the factors affecting the use intention of enterprises are inferred. This study provides a basis for the adopted decision of green operation and service-oriented manufacturing enterprises for RMT.

METHOD

Analysis and Application of Organizational Behavior in Green Operation and Service-Oriented Manufacturing Enterprises

Analysis of the Basic Theory of Organizational Behavior in Enterprises

Organizational behavior is a discipline that systematically studies the psychological and behavioral activities of people in an organization (Urinov, 2020). Based on the research achievements in management, psychology, sociology, and anthropology, it finally formed its own discipline system. In essence, organizational behavior is concerned with the behavior of individuals in the organization and what performance this behavior will bring to the organization (Stewart et al., 2019). The purpose of organizational behavior is to describe, understand, predict, and control the behavior of organizational members (Li et al., 2019).

The definition of organizational behavior clearly shows that organizational behavior is interdisciplinary, systematic, scientific, and applicability (Zhang, 2020). First, relating to interdisciplinary, organizational behavior is based on the concepts, theories, methods, and models of management, psychology, sociology, and anthropology. It also absorbs the contents of human behavior in economics, history, politics, and other disciplines to study the behavior of organizational members. Second, it is systematic. Although organizational behavior has absorbed the contents of different disciplines, it also has its own basic theories and concepts, which systematically and hierarchically study the psychology and behavior of individuals, groups, and organizations within organizations. Third, it is scientific. Although some intuitive judgment and speculation exists in organizational behavior, the results are obtained through scientific reasoning, calculation, and analysis. Fourth, it has applicability. In real life, organizational behavior can help managers understand, predict, and control the behavior of organizational members, so that organizational members can work in the direction that the organization needs and is conducive to the development of the organization.

Application of Organizational Behavior in Green Operation and Service-Oriented Manufacturing Enterprises

In enterprises, organizational behavior is mainly reflected in the study of the relationship between employees and enterprises. With organizational behavior, the research object can be divided into three aspects: individual, group, and organization (Lee et al., 2019). In an enterprise, an individual is an

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