# Chapter 11 A Study on Management Information Systems and Its Role in Decision Making

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### ABSTRACT

The management information system deals with processes going through computer data and is integrated with other methods to deliver information faster and more efficient way to support decision-making and other administrative tasks. The function of MIS in organizational decision-making is the primary subject of this chapter. How decisions are made in an organization utilizing MIS, what problems the organization runs into throughout this process, and some suggestions to solve these problems are covered. It offers a concise explanation of how MIS enhances decision-making. The areas of health and customization have been affected by the rapid advancement of information technology and telecommunications. At all levels of management, from the top to the lowest, the highest quality judgments can be achieved with the best alignment of various technologies. The ability of information technology to organize accurate and pertinent data offers significant prospects for quick and effective fraud that improves the standard of decision-making.

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### 1. INTRODUCTION

A Management Information System (MIS) stands as a cornerstone in the realm of modern organizational management, revolutionizing the way businesses operate and strategize in an increasingly complex and data-driven world (Arslan et al., 2021). Rooted in the power of technology, MIS serves as a pivotal tool that empowers managers to navigate the intricacies of organizational functioning with efficiency, precision and informed decision-making (Ogunmola et al., 2021). In this era of digitization and information proliferation, MIS emerges as a comprehensive and computerized framework that orchestrates the collection, processing, storage, and dissemination of data, metamorphosing raw information into actionable insights that fuel decision-making across diverse echelons of an organization (Figure 1).

### Figure 1. Management information systems



At its core, the fundamental essence of an MIS is to furnish managers with the requisite tools and resources to seamlessly orchestrate, evaluate, and direct multifarious facets of an organization's operations (Sharma et al., 2021). Whether it pertains to financial intricacies, human resources dynamics, sales and marketing strategies, or intricacies of inventory management, MIS adroitly aligns itself to the distinct functional areas within an organizational ecosystem, underscoring its adaptive and versatile nature (Sharma et al., 2021a). This agility grants organizations the dexterity to fine-tune their MIS to their specific operational needs, allowing for tailored and pertinent insights that drive effective and agile decision-making (Sharma et al., 2021b).

MIS plays a crucial role in training by providing the necessary data and insights to design targeted and effective training programs (Sharma et al., 2021c). Through MIS, organizations can identify skill gaps, performance trends, and areas requiring improvement (Gupta, 2021). This data-driven approach ensures that training efforts are aligned with actual organizational needs, optimizing the allocation of resources and maximizing the impact of training initiatives (Balasudarsun et al., 2022))

An organization's competitive edge is forged through the crucible of efficiency, productivity, and strategic acumen, and in this regard, MIS emerges as a catalyst for transformative change (Gupta, 2021a). By streamlining convoluted processes and engendering a culture of data-driven insights, MIS paves the way for heightened efficiency and a renewed competitive edge (Gupta, 2022). The dynamic interplay

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