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Management Control System:

Modern Concepts and Practices

This book is equipped with:

- Exercise
- Case Examples
- Power-Point Presentation

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FOREWORD

In an era marked by rapid transformation, complexity, and digital acceleration, the importances of robust and forward-thinking management control systems has never been more vital. As organizations strive to remain agile, accountable, and sustainable, the demand for control mechanisms that are not only strategically aligned but also technologically adaptive continues to grow. It is within this evolving landscape that *Management Control System: Modern Concepts and Practices* emerges as a critical and timely contribution to the field of management education and practice.

This book is not just a textbook—it is a comprehensive guide and authoritative reference that bridges the foundational theories of management control with the dynamic realities of the contemporary business environment. Structured around five essential pillars Planning, Organizing, Actuating, Controlling, and Modern/Future Concepts it offers a systematic and integrated exploration of topics that range from strategic planning, budgeting, and performance appraisal to leadership, risk management, sustainability, and cutting-edge technologies such as AI, blockchain, and big data.

For students, this book offers a structured path to understanding how control systems operate within the broader management framework. For educators, it provides a rich, pedagogically sound resource that aligns with both academic rigor and practical relevance. For professionals, it serves as a touchstone for designing, evaluating, and enhancing control systems in complex organizational contexts.

One of the most commendable strengths of this work lies in its ability to synthesize classical management principles with emerging trends. It does not merely dwell in the past or present; it looks to the future. By dedicating an entire section to modern technologies and sustainability, the book invites readers to reimagine control systems as dynamic, integrative, and transformative forces in shaping organizational resilience and ethical accountability.

As an educator, I wholeheartedly endorse this book not only for its academic merit but also for its visionary orientation. It challenges us to think deeply about the role of control not merely as oversight, but as a catalyst for strategic alignment, innovation, and purpose-driven leadership.

Let this book be your compass in navigating the evolving terrain of management control. Whether you are a student charting your academic journey, a lecturer shaping future leaders, or a practitioner steering real-world decisions, *Management Control System: Modern Concepts and Practices* will be an indispensable companion—grounded in theory, enriched by practice, and inspired by the future.

*Profound control is not about restraint, but direction;
not about rigidity, but purpose.*

[Hisar Pangaribuan]

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PART I

PLANNING

*“Today knowledge has power.
It controls access to opportunity and advancement”
— Peter Drucker —*

A. INTRODUCTION TO STRATEGIC PLANNING

Strategic planning is a systematic, goal-oriented process that involves making fundamental decisions about the direction of an organization. It aims to define what the organization is, what it strives to achieve, and the reasons behind these pursuits. The purpose of strategic planning is to establish a framework that guides decision-making and directs actions toward the achievement of long-term objectives. This structured approach serves as a tool for organizational leaders to foster strategic thinking, acting, and learning, ensuring that these capabilities are enhanced, rather than replaced. By developing a clear, structured method for attaining goals, strategic planning helps managers and employees focus their efforts, establish measurable milestones, and continuously monitor progress toward the organization’s aspirations.

Strategic planning plays an essential role in ensuring an organization’s growth and success. It offers numerous advantages that contribute to effective management and organizational performance. First, it provides direction and structure by articulating a clear roadmap for pursuing organizational goals and objectives, which helps align resources and efforts toward common targets. Second, strategic planning promotes coordination and alignment among personnel by ensuring that individual behaviours and actions are aligned with the overall objectives of the organization. This alignment is crucial for ensuring the validity of the strategic plan and its successful implementation. Third, by setting quality indicators and measurable targets, strategic planning enhances organizational efficiency and enables real-time implementation and control, allowing managers to track progress and make necessary adjustments. Lastly, strategic planning supports adaptability by fostering an environment where organizations can respond

“Setting goals is the first step in turning the invisible into the visible.”

— Tony Robbins—

A. DEFINITION OF ORGANIZATIONAL OBJECTIVES

Defining clear organizational objectives is a critical component of effective management control systems (MCS). This process involves setting specific, measurable, achievable, relevant, and time-bound (SMART) goals that align with the overall strategy of the organization. Here are some key insights and practices from the literature:

- **Alignment with Strategy:** Organizational objectives must be closely aligned with the strategic goals of the company. This ensures that all efforts contribute towards the broader mission and vision. Management control tools are essential in this alignment, helping to monitor performance and ensure that individual indicators flow towards fulfilling the organizational strategy.
- **Formal Managerial Controls:** These controls involve officially defining performance goals and standards, measuring and monitoring employee conduct and output, and linking rewards and sanctions to goal attainment. This approach helps solve the cooperation problem, where individual goals may conflict with organizational goals, by ensuring that all members work towards common objectives.
- **Strategic Dialogue:** A well-functioning MCS facilitates an internal strategic dialogue between managers and employees. This dialogue is crucial for planning, following up, and evaluating the objectives and strategies of the organization. It helps ensure that the chosen strategies are implemented effectively throughout the organization.
- **Performance Measurement Systems (PMS):** PMS are used to express the values and beliefs of organizational members, which can generate energy and commitment towards achieving organizational objectives. These systems should integrate both quantitative and qualitative measures to provide a comprehensive view of performance.

*“Money is only a tool. It will take you wherever you wish,
but it will not replace you as the driver.”*

— Ayn Rand —

A. THE BUDGETING PROCESS: DEFINITION AND IMPORTANCE

Budgeting is a systematic process that involves planning, allocating, and controlling financial resources within an organization. It is a cornerstone of the management control system, essential for implementing strategies and achieving organizational goals. Budgeting encompasses various activities, including creating budget tables, scheduling, and planning instructions, which are carried out by employees across different departments.

Importance of Budgeting

Strategic Implementation. Budgeting plays a pivotal role in the implementation of an organization’s strategic plans. It serves as the financial blueprint through which long-term strategies are translated into actionable and measurable objectives. By allocating financial resources in accordance with strategic priorities, budgeting ensures that every department and operational unit contributes meaningfully toward achieving overarching organizational goals. This alignment fosters coherence and consistency in decision-making across all levels of the enterprise.

Financial Performance. A well-structured budgeting process is instrumental in promoting sound financial performance. It enables organizations to forecast revenues and expenses with a degree of precision that facilitates effective cost control and resource optimization. By comparing actual outcomes with budgeted figures, managers can assess variances and implement corrective actions promptly. Consequently, budgeting becomes not merely a planning tool, but a continuous mechanism for enhancing financial health and sustainability.

Decision Making. Budgeting provides a systematic framework for informed and timely managerial decision-making. By offering a forward-looking perspective on resource availability and financial constraints, it allows

PART II

ORGANIZING

“He who has never learned to obey cannot be a good commander”
— Aristotle—

A. ORGANIZATIONAL STRUCTURE AND ITS INFLUENCE ON CONTROL SYSTEMS

The relationship between organizational structure and management control systems (MCS) is inherently interdependent and dynamic. Any modification in an organization’s structural configuration—whether related to hierarchy, departmentalization, or workflow—inevitably necessitates corresponding changes in its control systems. This interdependence ensures that managerial oversight, decision-making processes, and performance evaluations remain aligned with the organization’s strategic direction. Without appropriate adjustments in MCS, changes in structure can lead to inefficiencies, role ambiguity, and weakened accountability mechanisms.

A key structural consideration in modern organizations is the tension between centralization and decentralization. While many contemporary firms adopt decentralized structures to enhance responsiveness, innovation, and local autonomy, their control systems often remain heavily centralized to maintain consistency and coordination across units. This strategic misfit between structural design and control logic can result in reduced organizational effectiveness, as control mechanisms may not support the autonomy granted to lower-level managers. Hence, reconciling this tension requires a deliberate reconfiguration of MCS to ensure congruence with the intended decentralization strategy.

Organizational and cultural dimensions further complicate the interaction between structure and control. The case of a parent company influencing the MCS of its subsidiary illustrates how cultural values, norms, and expectations shape control practices. A parent company’s strong cultural imprint can either empower or constrain a subsidiary’s decision-making processes, depending on the degree of alignment between both entities. When cultural and organizational axes are mismatched, subsidiaries may experience reduced

“Integration is a basic law of life; when we resist it, disintegration is the natural result, both inside and outside of us. Thus, we come to the concept of harmony through integration”

— Norman Cousins—

A. THE NEED FOR INTEGRATED CONTROL SYSTEMS

In the landscape of contemporary organizational management, Integrated Control Systems (ICS) have emerged as a foundational requirement for achieving operational coherence, strategic consistency, and organizational agility. These systems function by unifying various control mechanisms—such as financial, operational, environmental, and quality controls—into a cohesive framework. This integration enables managers to streamline workflows, reduce informational silos, and promote data-driven decision-making across different levels and functions. The rationale for adopting ICS is rooted in the increasing complexity of organizational operations, where isolated systems no longer suffice in maintaining competitiveness and regulatory compliance.

Operational Efficiency and Cost Reduction

One of the primary drivers for integrating control systems is the pursuit of operational efficiency and cost-effectiveness. By eliminating redundancies and fostering resource sharing, integrated systems help reduce administrative overhead and streamline control processes. For example, in facility or building management, centralized systems reduce both installation and operational expenditures by allowing shared use of control infrastructure and unified access points. Furthermore, integration facilitates power management strategies, such as ensuring that only essential systems remain operational during power outages, thereby reducing unnecessary energy consumption and associated costs.

*“Human resources isn’t a thing we do.
It’s the thing that runs our business.”*
— Steve Wynn—

A. THE ROLE OF HUMAN RESOURCES IN MANAGEMENT CONTROL SYSTEMS

Human Resources (HR) serve as a cornerstone within the framework of management control systems (MCS), providing the structural and strategic mechanisms necessary for managing human capital. The effectiveness of HR functions significantly influences an organization's capacity to achieve its goals and respond to environmental changes. From recruitment and training to performance evaluation and strategic integration, HR's role extends beyond administrative support to being a strategic partner in organizational success. By aligning human resource initiatives with broader organizational objectives, HR contributes to both operational efficiency and long-term sustainability.

Key Functions of HR in Management Control Systems

1. Recruitment and Selection

Recruitment and selection are foundational elements of HR's contribution to management control systems. These processes ensure that the organization attracts, evaluates, and appoints candidates whose qualifications and values align with the company's strategic goals. Effective recruitment minimizes skill gaps, reduces turnover costs, and promotes high performance from the onset of employment. Furthermore, the use of competency-based selection models enhances the predictive validity of hiring decisions, contributing to workforce readiness and operational excellence.

2. Training and Development

Ongoing employee development is vital to maintain organizational adaptability in a fast-evolving business environment. HR facilitates

PART III
ACTUATING

*“The key to successful leadership today is influence, not authority”
— Kenneth Blanchard—*

A. THE ROLE OF LEADERSHIP IN MANAGEMENT CONTROL

Leadership plays a pivotal role in shaping the structure and effectiveness of Management Control Systems (MCS) within organizations. As stewards of vision, strategy, and decision-making, leaders not only influence the design of these systems but also govern how they are implemented and sustained across all organizational levels. The interaction between leadership behaviour and control mechanisms determines how performance is measured, monitored, and rewarded. Effective leadership thereby becomes a critical success factor in ensuring that MCS align with organizational goals and foster continuous improvement in performance.

The style and behaviour of leaders greatly influence how management control systems are utilized, especially in regard to planning, monitoring, and performance evaluation. Research has demonstrated that transformational leadership—characterized by charisma, intellectual stimulation, and individualized consideration—significantly enhances the adoption of comprehensive performance measurement tools. Such leaders are more likely to encourage the use of broad-scope accounting information, enabling a deeper understanding of both financial and non-financial aspects of organizational performance. This, in turn, leads to more informed decision-making and improved managerial outcomes. On the other hand, transactional leadership, which emphasizes clear structures, rewards, and penalties, is more aligned with diagnostic control systems and can contribute effectively to performance improvements when goals are stable and measurable.

In highly dynamic and complex organizational environments, leaders must function less as controllers and more as enablers of change and innovation. Rather than strictly enforcing procedures, enabling leaders challenge the status quo, promote new ways of thinking, and support adaptive learning among team members. This capacity to disrupt existing patterns is essential for navigating uncertainty, as it helps organizational members reframe their understanding of emerging situations. Leadership in

*“We have two ears and one mouth so that
we can listen twice as much as we speak”*

— Epictetus—

A. THE ROLE OF COMMUNICATION IN MANAGEMENT CONTROL

Communication constitutes a foundational element in the functioning of management control systems (MCS). Its role extends far beyond mere information transmission; it is integral to the implementation of strategic plans, the monitoring of performance, and the alignment of organizational behaviour with predetermined objectives. Within an MCS framework, communication supports the execution of control mechanisms by ensuring that expectations, responsibilities, and feedback are clearly articulated and shared across hierarchical levels. Whether formal or informal, verbal or non-verbal, the communication process shapes how effectively a control system operates within an organization.

Communication within management control systems can be classified into three main types: organizational, interpersonal, and managerial communication. Organizational communication refers to the structured flow of information throughout the organization, ensuring that employees at all levels are informed, synchronized, and moving toward common strategic goals. Interpersonal communication, on the other hand, plays a key role in understanding employee behaviour, fostering engagement, and translating managerial intentions into actionable employee behaviour. Managerial communication supports core management functions such as planning, organizing, controlling, and evaluating, by enabling managers to disseminate goals, provide direction, offer feedback, and motivate subordinates.

The effectiveness of MCS also depends on the communication modes employed within the organization. The communicative mode prioritizes the efficiency and clarity of message transmission to facilitate cooperation and minimize misunderstandings. The relational mode emphasizes the cultivation of trust and interpersonal bonds, which is critical for fostering a culture of openness and mutual respect—conditions necessary for sustainable control.

*“Your success in life isn't based on your ability to simply change.
It is based on your ability to change faster than your competition,
customers and business”*

— Mark Sanborn —

A. UNDERSTANDING CHANGE MANAGEMENT

Change management is a structured and methodical approach aimed at guiding organizations through a transition from a current state to a future desired state. It is not merely a series of steps, but rather a comprehensive framework that addresses both the technical and human aspects of organizational transformation. The primary objective of change management is to enable individuals within an organization to adopt new behaviors, processes, technologies, or strategies in a way that enhances organizational performance and competitiveness. Whether driven by internal innovation or external pressures, change must be managed deliberately to ensure a smooth, sustainable transition and to mitigate the risk of failure.

Effective change management seeks to align organizational capability with environmental demands through either proactive initiatives or reactive adjustments. Proactive change involves anticipating future trends and acting in advance, while reactive change responds to shifts that have already occurred. Both approaches require intentional planning, execution, and follow-up. The essence of change management lies in equipping leaders and employees with the tools, training, and support needed to embrace change and contribute positively to its success. Thus, it is not just about managing tasks—it is about managing people through change. To support our understanding of change management, see Figure 9.1.

Key Elements of Change Management

Change management comprises several critical components that work together to support the overall process of organizational adaptation. The first component involves the tasks, measures, and activities required to implement change. This includes redefining missions and visions, realigning

PART IV

CONTROLLING

“If you can't measure it, you can't improve it”

— Peter Drucker —

A. INTRODUCTION TO PERFORMANCE MEASUREMENT

Performance Measurement Systems (PMS) play a foundational role in contemporary management control systems. These systems function as structured mechanisms that aid organizations in evaluating their performance across multiple dimensions. By providing objective and timely feedback, PMS help managers monitor progress, correct deviations from plans, and ensure that day-to-day operations remain aligned with strategic objectives. In doing so, PMS not only facilitate internal accountability but also enhance organizational responsiveness in dynamic business environments.

A well-designed PMS utilizes a collection of quantitative and qualitative indicators to assess the current status of an organization in relation to its predetermined strategic targets. This process of comparison and analysis serves to bridge the gap between strategic planning and operational execution. More than just tools for assessment, PMS provide a coherent framework for translating strategy into action. As such, they represent an essential element in the broader ecosystem of management control, enabling effective governance, strategic coordination, and continuous improvement.

Key Functions of Performance Measurement Systems

One of the primary functions of PMS is to serve as instruments for control and monitoring. Through the establishment of performance benchmarks and key performance indicators (KPIs), organizations can systematically track their progress toward strategic and operational goals. This ongoing monitoring process ensures that any deviation from the desired trajectory is promptly identified and corrected, thereby supporting management oversight and reinforcing strategic discipline.

Another critical function is strategic alignment. PMS facilitate the alignment of departmental and individual performance with organizational strategy by cascading goals and expectations throughout all levels of the enterprise. This alignment is crucial for maintaining coherence between long-

*"I was talking about no nukes, the farm crisis.
People said that wasn't stuff that a state auditor
was supposed to be talking about. Maybe they were right"*
— Paul Wellstone—

A. TYPES OF AUDITS: INTERNAL VS. EXTERNAL

Internal Audit

Internal audits are conducted by professionals within the organization who are tasked with evaluating and improving the effectiveness of risk management, internal control, and governance processes. Their primary aim is to help ensure compliance with internal policies, enhance operational efficiency, and provide objective assurance to both management and the audit committee. These audits contribute significantly to organizational learning by identifying inefficiencies and recommending corrective actions. By focusing inward, internal audits help foster a culture of accountability, transparency, and continuous improvement.

The internal audit function typically concentrates on key areas such as risk identification, internal control effectiveness, and compliance with both internal and external regulatory requirements. A major responsibility includes assessing whether organizational operations are aligned with strategic goals and identifying weaknesses that could expose the firm to unnecessary risks. Additionally, internal audits are instrumental in detecting and preventing fraudulent activities, thereby safeguarding assets and upholding ethical standards. These focus areas ensure that internal audits not only identify operational lapses but also support strategic resilience.

Internal auditors often adopt a risk-based approach, which prioritizes audit activities according to the level of risk associated with different business areas. This means they begin by identifying and evaluating the organization's most significant risks and then designing audit plans that directly address those vulnerabilities. This strategic methodology allows auditors to align their work with the organization's objectives and deliver the highest value in terms of control improvements. The use of risk-based auditing has become an

“The key to risk management is never putting yourself in a position where you cannot live to fight another day”

— Richard S. Fuld, Jr. —

A. THE ROLE OF RISK MANAGEMENT IN MANAGEMENT CONTROL

Risk management is a fundamental component of modern management control systems, designed to safeguard organizations against uncertainties that could hinder the attainment of strategic objectives. It involves a systematic process of identifying, assessing, and responding to both internal and external risks that may threaten business continuity, performance, or reputation. By embedding risk management into the broader control framework, organizations enhance their capacity to make informed decisions under uncertainty, ensuring a more resilient and adaptive managerial structure. This integration is increasingly essential in dynamic business environments characterized by volatility, complexity, and global interdependencies. Here are the key aspects of how risk management integrates with management control:

1. Identification and Assessment of Risks

The first critical function of risk management within a control system is the identification and assessment of risks. Organizations must systematically scan their internal operations and external environments to detect potential events or conditions that could cause harm or disrupt activities. Risk identification involves both qualitative and quantitative analyses, aiming to understand the nature, source, and scope of possible threats. Once identified, risks are evaluated in terms of their likelihood of occurrence and the magnitude of their potential impact, allowing management to prioritize risks based on severity and urgency.

2. Strategic Alignment

Risk management must be closely aligned with an organization’s strategic planning processes to ensure coherent and effective control mechanisms. This alignment ensures that strategic decisions are made with a comprehensive understanding of associated risks, and that contingency

PART V
MODERN AND FUTURE CONCEPTS

“Success in creating AI would be the biggest event in human history. Unfortunately, it might also be the last, unless we learn how to avoid the risks”

— Stephen Hawking—

A. THE ROLE OF TECHNOLOGY IN MODERN MANAGEMENT CONTROL

Some roles of technology in modern management control are:

1. Enhancing Efficiency and Decision-Making

Information and Communication Technologies (ICTs) have become integral to modern management control systems by significantly enhancing how organizations collect, process, and analyse information. These technologies facilitate the real-time acquisition and interpretation of data, enabling managers to make more informed and timely decisions. Empirical studies, such as those conducted on a major Italian dairy company, demonstrate a dynamic, bidirectional relationship between ICT adoption and evolving management control practices. This suggests that as ICTs develop, they not only support existing control frameworks but also reshape and redefine them, fostering a more adaptive and responsive control environment.

Management Information Systems (MIS) further contribute to the effectiveness of management control by integrating disparate data sources into coherent, actionable insights. These systems encompass a range of tools such as Executive Information Systems (EIS), Decision Support Systems (DSS), and Transaction Processing Systems (TPS), each tailored to support various managerial functions. Through these tools, organizations gain the ability to monitor performance metrics, evaluate operational outcomes, and simulate decision-making scenarios. Consequently, MIS enhances both the accuracy and speed of decision-making, aligning organizational behaviour more closely with strategic objectives.

*“Do not wait for extraordinary circumstances
to do good action; try to use ordinary situations”*

— Jean-Paul Richter —

A. SUSTAINABLE BUSINESS PRACTICES AND CONTROL SYSTEMS

In the contemporary business landscape, sustainability has emerged as a strategic imperative that extends beyond regulatory compliance to encompass long-term value creation. Within the framework of Management Control Systems (MCS), sustainability refers to the integration of environmental, social, and economic dimensions into the core strategic and operational processes of an organization. This integration is not merely an ethical or reputational concern, but a deliberate managerial choice aimed at preserving resources, fostering stakeholder trust, and ensuring organizational resilience over time. MCS that embed sustainability principles help organizations navigate complexities in their external environments while supporting internal coherence and accountability.

Frameworks and Models Supporting Sustainability Control

Malmi and Brown’s Management Control Package Framework. Malmi and Brown (2008) offer a comprehensive framework that categorizes management control systems into several interrelated types, including planning, cybernetic controls, reward systems, administrative controls, and cultural controls. Their "control package" approach underscores the importance of designing complementary controls that collectively support strategic objectives, including sustainability. This perspective is particularly useful for understanding how formal reporting structures and informal cultural mechanisms can be harmonized to reinforce sustainable behaviour across all organizational levels. The framework encourages a systemic view of control, recognizing that isolated instruments are insufficient to drive lasting sustainability outcomes.

Simons’ Levers of Control. Robert Simons’ Levers of Control model provides another valuable perspective on how sustainability can be integrated into MCS. His framework distinguishes between diagnostic

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn”

— Alvin Toffler —

A. THE FUTURE OF CONTROL SYSTEMS IN A GLOBALIZED ECONOMY

Globalization and Management Control Systems (MCS)

The globalization of business operations has introduced unprecedented levels of complexity and uncertainty into organizational environments. As companies expand across borders, they encounter a wide spectrum of legal systems, cultural norms, market dynamics, and political risks. These multifaceted environments challenge traditional management control systems (MCS), which must now be more robust, agile, and context-sensitive. The effectiveness of MCS in this global context depends on their ability to accommodate diverse regulatory frameworks and varying stakeholder expectations, requiring managers to rethink how control is defined, implemented, and evaluated on an international scale.

In response to these shifts, management control systems are increasingly expected to incorporate broader responsibilities beyond financial oversight. One of the most prominent trends is the integration of sustainability principles—covering environmental stewardship and social responsibility—into control mechanisms. This evolution aligns MCS with global efforts to achieve sustainable development, particularly through compliance with environmental, social, and governance (ESG) metrics. Organizations that embed sustainability into their control systems can better navigate global pressures related to climate change, ethical labour practices, and community impact, thereby enhancing both legitimacy and long-term viability.

Technological Advancements in MCS

Rapid technological advancements are also reshaping the design and functionality of management control systems. Digital tools and Big Data analytics have become pivotal in enhancing organizational oversight by enabling real-time performance monitoring, predictive analytics, and scenario

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Management Control System

Modern Concepts and Practices

This book offers a comprehensive exploration of modern management control systems, blending strategic planning, organizational design, leadership, and performance measurement. It provides practical frameworks, case studies, and emerging insights on technology, sustainability, and risk management. Designed for scholars and practitioners alike, the book equips readers with the tools to align strategy with operations and adapt to future challenges in a dynamic business environment. The material in this book consists of five parts, fifteen chapters with the following structure:

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Chapter 2: Objective Setting and Performance Standards

Chapter 3: Budgeting and Resource Allocation

Part II: Organizing

Chapter 4: Structural Design and Management Control

Chapter 5: Integration of Control Systems

Chapter 6: Human Resources Management and Control

Part III: Actuating

Chapter 7: Leadership and Management Control

Chapter 8: Communication and Control

Chapter 9: Change Management and Control

Part IV: Controlling

Chapter 10: Performance Measurement Systems

Chapter 11: Auditing and Monitoring

Chapter 12: Risk Management and Control

Part V: Modern and Future Concepts

Chapter 13: Technology and Management Control

Chapter 14: Sustainability as a Strategic Control Issue

Chapter 15: Future Trends in Management Control Systems



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