

Assignment Topic

“While many areas of contemporary life have changed significantly in the 21st century, management has remained largely unchanged and rooted in 19th century theories and paradigms.” Critically examine this assertion detailing the development of management theory and the contribution of contemporary management theorists and their theories to tackling contemporary management challenges.

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Abstract

This report critically examines the assertion that contemporary management remains largely unchanged and rooted in nineteenth-century management theories, evaluating the continuing relevance of Taylor's scientific management, Fayol's administrative principles and Weber's bureaucracy alongside contemporary perspectives on organisational learning, employee participation, digital transformation and artificial intelligence. The analysis focuses on three dimensions of management — objectives, methods and underlying assumptions — finding that while organisational objectives such as coordination, accountability and performance remain relatively stable, the methods used to achieve them have changed substantially in response to technological development, distributed knowledge and changing forms of work. Drawing on the literature and organisational illustrations including Toyota, algorithmic management and Microsoft, the report finds that classical management principles have not disappeared but have been selectively adapted to contemporary conditions: standardisation, measurement, formalisation, planning and coordination remain valuable where work is structured and predictable, but their limitations become more evident where organisational performance depends on employee judgement, creativity, distributed knowledge and technological interdependence. Contemporary management therefore represents neither a complete break from classical theory nor its simple continuation. The report reaches a qualified rejection of the assignment statement: management retains important classical foundations, but its methods and underlying assumptions have evolved significantly, and effective contemporary management depends on balancing established organisational discipline with agility, trust, learning, employee participation and human judgement. The relevance of management principles is therefore increasingly determined by the organisational conditions in which they are applied, rather than by whether those principles are traditionally classified as classical or contemporary.

Chapter 1: Introduction

1.1 Interpreting the Topic Statement

The evolution of management theory is closely connected to changes in how organisations understand work, authority, coordination and organisational performance. Ideas about planning, coordination, efficiency and control developed by early management thinkers such as Taylor (1911), Fayol (1949) and Weber (1947) continue to influence organisational practice. At the same time, the context in which managers operate has changed substantially: artificial intelligence, digital transformation, hybrid working, platform-based work and sustainability pressures have introduced new forms of work and new expectations of organisations (Schwab, 2016; Raisch and Krakowski, 2021).

The assignment statement itself makes two related but analytically distinct claims: that management has remained “largely unchanged”, and that it is “rooted in 19th century theories and paradigms”. These claims should not necessarily be treated as inseparable. It is possible for management to remain rooted in classical ideas while its practice has changed considerably, and equally possible for familiar practices to persist while the theoretical foundations attributed to them have shifted. This report treats continuity of practice and continuity of theoretical roots as separate questions and returns to this distinction throughout. It is also necessary to be precise about the historical categorisation implied by the assignment wording. Although Weber's foundational sociological work originated in the late nineteenth century, Taylor's *Principles of Scientific Management* was published in 1911 and Fayol's major statement of administrative theory belongs to the early twentieth century; strictly speaking, classical management theory is therefore best described as an early twentieth-century development building on nineteenth-century industrial conditions, rather than as a body of nineteenth-century theory as such. Where this report refers to “19th century theories”, it does so to reflect the wording of the assignment statement rather than the precise chronology of the theorists examined.

The continued use of concepts associated with classical management could suggest that management has changed less substantially than other aspects of organisational life. However, the presence of familiar concepts does not necessarily mean the ideas behind them remain unchanged: planning may still be essential, for example, yet the way organisations plan, coordinate knowledge and make decisions has been transformed by technology, distributed expertise and changing patterns of work. The key issue is therefore not simply whether classical management ideas are still visible, but how their underlying assumptions have developed in response to changing organisational conditions.

This report therefore examines management theory as an evolving body of thought rather than a collection of theories that simply replaced one another, giving particular attention to assumptions about work, authority, knowledge, control and human behaviour: why classical theories were influential in their original contexts, which elements remain relevant, and how later theorists have extended or challenged them in response to technological change, organisational complexity, employee expectations and the changing nature of work.

1.2 Purpose, Aim and Objectives

The purpose of this report is to critically examine the extent to which contemporary management remains rooted in classical management thinking and to assess how management theory has adapted to changing organisational conditions. The aim is to develop a justified judgement on the assignment statement by evaluating the continuing relevance of classical principles alongside the contribution and limitations of contemporary management approaches in addressing twenty-first-century challenges.

To achieve this aim, the report will:

- Examine the historical development of management theory and the organisational conditions that shaped its emergence;
- Identify the key assumptions underlying classical management perspectives and assess their continuing relevance;
- Examine how contemporary management theories have extended or challenged earlier approaches;
- Evaluate competing perspectives and evidence concerning the continuity, adaptation and transformation of management practice; and
- Reach a justified judgement on the assignment statement and its implications for contemporary management practice.

1.3 Structure of the Report

The report is organised into six chapters. Chapter Two establishes the historical and organisational context in which classical management theories emerged and traces the subsequent development of management thought. Chapter Three critically reviews the literature, comparing classical and contemporary perspectives and examining the assumptions underlying different approaches. Chapter

Four provides the central critical analysis, testing where traditional management principles remain relevant and where contemporary conditions require different approaches. Chapter Five translates these findings into managerial implications, and Chapter Six brings the discussion together, answers the topic directly, and identifies implications for future management practice and research.

Chapter 2: Background and Context

2.1 The Organisational Context of Classical Management Theory

Classical management theory emerged in response to major changes in the scale and organisation of work during industrialisation. The growth of large-scale manufacturing created organisations in which managers had to coordinate increasing numbers of employees, production activities and resources. Questions of productivity, organisational structure, authority and coordination therefore became central to management practice. The theories developed by Taylor, Fayol and Weber provided different responses to these emerging organisational challenges and established ideas that have continued to influence management thinking.

Taylor's (1911) Scientific Management focused primarily on improving efficiency at the level of individual tasks. His approach sought to identify systematic methods for performing work, standardise processes and separate the planning of work from its execution. The underlying assumption was that systematic observation and measurement could identify more efficient ways of organising tasks. Management consequently assumed responsibility for designing work processes, while employees were expected to follow established procedures.

Fayol (1949) addressed management from a broader administrative perspective. Rather than concentrating primarily on individual tasks, he examined how managers could coordinate organisational activities through functions including planning, organising, commanding, coordinating and controlling. His work contributed to the development of management as a distinct organisational activity and emphasised the importance of coordination and administrative structure.

Weber (1947) approached organisational management through the concept of bureaucracy. His concern was primarily with authority, legitimacy and predictability within large organisations. Bureaucratic organisation relied on formal rules, defined responsibilities, hierarchical relationships and impersonal procedures. These characteristics were intended to reduce arbitrary decision-making and create greater consistency in organisational administration. Although Taylor, Fayol and Weber addressed different organisational problems, their approaches shared an emphasis on structure, coordination, predictability and managerial authority. These characteristics were particularly relevant to industrial organisations where managers had to coordinate large numbers of employees, physical resources and relatively structured forms of work.

2.2 The Development of Management Thinking

The limitations of classical approaches became increasingly apparent as organisations and the nature of work changed. By the mid-twentieth century, management scholars began paying greater attention to the social and psychological dimensions of organisational life. Mayo's (1933) work, for example, contributed to a growing recognition that employee behaviour could not be understood solely through financial incentives and physical working conditions. Maslow (1943), McGregor (1960) and Herzberg (1968) subsequently placed greater emphasis on human needs, motivation, participation and job satisfaction.

These developments did not simply eliminate classical management but broadened the understanding of what influences organisational performance: classical approaches continued to provide useful principles for structure and coordination, while behavioural perspectives highlighted relationships, motivation and employee involvement, so organisational effectiveness increasingly came to be understood as involving both structural and human factors. This illustrates that management thought evolved through the accumulation and modification of different perspectives rather than straightforward theoretical replacement: questions of efficiency and control remained important, but were supplemented by concerns relating to human behaviour, organisational systems and environmental change.

This broadening of management thinking was not limited to the behavioural dimension. From around the 1960s, systems and contingency perspectives made a further contribution by treating organisations as open systems that must adapt their structure to remain compatible with a changing environment, rather than assuming that a single set of principles could apply universally (Katz and Kahn, 1978; Lawrence and Lorsch, 1967; Donaldson, 2001). Where classical theory sought one best way of organising and behavioural theory extended attention to human motivation, systems and contingency thinking introduced the idea that the appropriateness of any managerial approach depends on organisational and environmental conditions. This contingent logic becomes important later through Morgan's organism metaphor. It represents a further stage in the development of management thought and supports the argument that the relevance of management theory depends on the conditions in which it is applied.

2.3 Contemporary Organisational Context

The organisational environment of the twenty-first century has introduced further changes to the way work is organised and managed. Digital technologies have transformed communication, decision-making and business models, while AI increasingly supports or performs activities previously undertaken

by human employees. Hybrid working has altered conventional assumptions about physical presence and direct supervision, while platform-based organisations have created new forms of employment and algorithmic coordination. At the same time, organisations face growing expectations concerning sustainability, employee wellbeing and responsible business practice.

These developments have increased the importance of knowledge, adaptability, collaboration and technological capability within organisational management. Managers are now required to coordinate not only physical resources and clearly defined tasks but also distributed knowledge, digital systems and increasingly diverse forms of work. This does not make earlier management principles irrelevant. Planning, coordination, accountability and organisational structure remain necessary. However, their application increasingly occurs within organisational environments that differ substantially from those in which classical management theories emerged.

This changing context raises the question of whether established management principles remain sufficient on their own or require adaptation when applied to new forms of work. This provides the basis for the critical literature review that follows.

Chapter 3: Critical Literature Review

3.1 A Framework for Understanding Management Theories: Morgan's Metaphors

Before examining the continuing relevance of individual management theories, it is useful to consider how organisational theories can be evaluated. Morgan's *Images of Organization* (2006) provides a useful perspective because it treats theories as metaphors: each highlights particular aspects of organisational life while making other aspects less visible. This is particularly relevant to this work because it suggests that the continuing relevance of a management theory depends on the organisational conditions to which its assumptions are applied.

The machine metaphor provides a useful way of understanding Taylor's, Fayol's and Weber's approaches. It emphasises efficiency, structure, predictability and formal authority, which remain valuable where organisations require standardised processes and clear accountability. However, a strongly mechanistic view gives less attention to learning, creativity and informal relationships. By contrast, the organism metaphor, associated with systems and contingency perspectives, treats organisations as open systems that must adjust their structure to remain compatible with their environment, with no single structure being appropriate for every setting (Katz and Kahn, 1978; Lawrence and Lorsch, 1967; Donaldson, 2001). This places greater emphasis on organisational adaptation to environmental conditions; however, it can also give greater weight to external constraints while giving less attention to managerial agency (Child, 1972; Cornelissen and Kafouros, 2008). Morgan's other metaphors, particularly those concerned with the brain and culture, draw attention to learning, knowledge and shared meaning, themes that are increasingly important in contemporary organisations (Senge, 1990; Edmondson, 2019).

Morgan's approach therefore provides a useful basis for understanding management theory as contextual rather than universally applicable. The continued usefulness of a classical principle does not necessarily demonstrate that the theory has remained unchanged; equally, the emergence of a contemporary theory does not automatically make earlier principles irrelevant. The important issue is how well the assumptions of each approach fit the organisational conditions in which it is applied.

This framework can therefore be used to examine the assumptions underlying different management theories rather than simply to classify them. Taylor's approach assumes that work can be systematically observed, measured and improved; Weber emphasises formal rules and legitimate authority as foundations for predictable coordination; while Fayol assumes that general management principles can

guide organisational activity. Contemporary perspectives place greater emphasis on distributed knowledge, organisational learning and adaptation to context, so the relevance of each approach depends not only on whether its techniques remain visible, but on whether their assumptions continue to fit contemporary organisational conditions. Morgan's metaphors are used as an analytical framework throughout this report, applied explicitly to the organisational illustrations in Chapter Four: Toyota is interpreted as a combination of machine and organism assumptions, algorithmic management as a technologically intensified version of the machine metaphor, and Microsoft's "learn-it-all" culture as more closely resembling the brain and culture metaphors.

3.2 Taylor and the Changing Nature of Work

Taylor's (1911) Scientific Management was built around the belief that work could be analysed systematically, divided into measurable activities and organised according to the most efficient method. Management was given primary responsibility for studying work and establishing procedures, while employees were expected to perform tasks according to those methods. Financial incentives were also central to Taylor's approach, reflecting the importance he placed on economic rewards as a means of encouraging performance.

There are organisational settings in which these principles remain useful. Manufacturing, logistics and other repetitive activities often involve processes that can be measured and standardised, and contemporary approaches such as Lean production, Six Sigma and digital performance monitoring continue to draw on principles of process measurement and efficiency (Netland and Powell, 2021), indicating that Taylor's principles retain contextual value rather than being simply obsolete. Some caution is needed, however: Lean, particularly in the Toyota tradition examined later in this report, also depends on employee knowledge, problem-solving and continuous improvement in a way Taylor's original approach did not, so it should not be treated as simply a contemporary restatement of Scientific Management — the overlap lies in process improvement and measurement, not in the assumption that management alone determines the correct method.

The limitations become more apparent in knowledge-intensive work, where it is difficult to identify a single optimal method in advance because organisational value depends on judgement, creativity, problem-solving or the generation of new ideas; standardisation may improve consistency, but excessive control can also restrict the autonomy and flexibility required for innovation (Cunha, Clegg, Rego and Berti, 2021). Algorithmic management adds a further dimension: Raisch and Krakowski (2021) show how

artificial intelligence can extend Taylor's principles by enabling organisations to monitor and coordinate work at a scale traditional supervision could not achieve. This is significant because it challenges the assumption that technological modernisation necessarily produces post-classical forms of management — a twenty-first-century algorithm can potentially embody a very old management philosophy, simply executed with far greater precision and reach than Taylor himself could have achieved, though greater measurability does not mean knowledge work has become suitable for complete standardisation.

Taylor's continuing influence is therefore conditional. His emphasis on measurement and efficiency remains relevant for particular categories of work, but its assumptions become less convincing where organisational performance depends heavily on human judgement and creativity. The contemporary development is not the disappearance of Taylorism but its adaptation through new technologies and its more selective application to different forms of work.

3.3 Weber and the Changing Role of Formalisation

Weber's (1947) bureaucratic model placed formal rules, defined responsibilities and hierarchical authority at the centre of organisational coordination. The underlying rationale was that impersonal procedures could provide greater consistency, predictability and legitimacy than decisions based primarily on personal discretion. These principles remain significant in organisations where accountability and regulatory compliance are particularly important.

Adler (2012) argues that bureaucracy should not automatically be treated as an organisational weakness. In sectors such as healthcare, finance and public administration, formal procedures can reduce inconsistency and make responsibilities more transparent. In these contexts, Weber's emphasis on rules continues to have practical value because the consequences of arbitrary or inconsistent decisions can be substantial.

Formalisation can nonetheless become restrictive where organisations need rapid adaptation and cross-functional collaboration: highly procedural environments may discourage experimentation and learning when compliance becomes more important than questioning established practices (Morgan, 2006; Cunha, Clegg, Rego and Berti, 2021), creating a tension between reliability and flexibility that is particularly significant in digital and knowledge-intensive organisations.

Technology has also changed the way bureaucratic principles are implemented. Digital workflows, electronic records and automated compliance systems can reproduce rule-based coordination without relying entirely on traditional layers of human supervision. De Boer and Raaphorst (2023) illustrate this

tension in the context of street-level bureaucracy, showing how automation can narrow the discretion available to frontline decision-makers. The issue is therefore no longer simply whether organisations should have rules, but how formal rules should interact with human judgement. This raises an accountability question that Weber's original framework did not need to address: when an automated system makes or recommends a decision, responsibility for that decision may reside with the employee who acts on it, the manager who oversees the process, the designer who built the system, or the organisation that deployed it, and formal rules do not by themselves specify which of these parties should be held accountable when outcomes are contested. This connects Weber's original concern with authority and legitimacy directly to contemporary debates about AI governance, since resolving who is answerable for an algorithmic decision is, in effect, a modern version of the question Weber asked about the legitimate basis of bureaucratic authority.

Weber's contribution remains important, since contemporary organisations still require accountability, consistency and clearly defined responsibilities, but the means through which these principles are achieved have changed, requiring management to balance automated control against human discretion — adaptation rather than simple continuity of Weberian bureaucracy.

3.4 Fayol and the Changing Content of Management

Fayol (1949) identified planning, organising, commanding, coordinating and controlling as central functions of management. His approach assumed that these functions were broadly applicable across organisational settings and that general administrative principles could guide managers in organising collective effort. Unlike Taylor's focus on individual work processes, Fayol was concerned more directly with management at the organisational level.

The continuing presence of these functions provides some support for Fayol's approach. Managers in contemporary organisations still need to establish objectives, allocate resources, coordinate activities and monitor performance. Hatchuel and Segrestin (2019) also caution against interpreting Fayol's principles as rigid rules, arguing that they were intended to provide adaptable guidance. This helps explain why aspects of Fayol's thinking remain visible across very different organisations.

At the same time, the way these managerial functions are performed has changed considerably: contemporary managers may coordinate virtual and geographically dispersed teams, work across organisational boundaries and oversee technology-supported decisions, and digital transformation involves changes in leadership, organisational capabilities and culture rather than simply the introduction

of new technology (Verhoef et al., 2021). The basic function of coordination therefore remains, but the knowledge and capabilities required to perform it have expanded.

The implication becomes clear when assessing the continuing influence of Fayol: planning and coordination remain necessary, but contemporary planning may involve technological disruption, stakeholder expectations and environmental uncertainty largely absent from Fayol's original context, so Fayol remains useful as a broad framework for understanding managerial responsibilities even though the way those responsibilities are performed has evolved. Continuity of terminology should not be confused with continuity of practice, and commanding illustrates this most clearly among Fayol's five functions. It is retained here for conceptual consistency with the functions identified in Chapter Two, but its practical acceptability has arguably declined more than the other functions in knowledge-intensive environments, where direct instruction is increasingly supplemented, and in some cases displaced, by consultation, negotiated authority and expertise-based influence. Commanding therefore reinforces the report's broader argument: the function has persisted, but the assumptions legitimising its use have changed.

3.5 Contemporary Theorists and Contemporary Management Challenges

As organisations have become more dependent on knowledge, technology and continuous adaptation, management theory has increasingly addressed problems that cannot be explained by efficiency and formal control alone. Senge (1990) and Edmondson (2019) provide established theoretical perspectives on organisational learning and employee participation. Verhoef et al. (2021) and Raisch and Krakowski (2021), by contrast, provide contemporary empirical and conceptual evidence on digital transformation and AI rather than named theoretical frameworks of their own. They are therefore used here as evidence on contemporary management challenges rather than as direct theoretical equivalents to Senge's learning organisation.

Senge's (1990) concept of the learning organisation emphasises the ability of organisations to develop and share knowledge, understand interdependencies and adapt to changing conditions — an important extension of classical thinking, since knowledge is treated as a distributed organisational resource rather than something that can simply be concentrated within management. Learning nonetheless requires time and organisational capacity, and where immediate action is necessary, extended reflection and participation may compete with the need for rapid coordination; Senge's approach is therefore particularly valuable where organisations have sufficient capacity to learn and adapt, but should not be treated as a universal replacement for directive management.

Edmondson's (2019) work on psychological safety similarly shifts attention towards employee voice and learning: employees who feel able to raise concerns and question established practices can contribute to error reporting, organisational learning and innovation, which is especially relevant where managers depend on knowledge held by employees rather than being able to observe every aspect of the work themselves. Psychological safety should not, however, be interpreted as requiring continuous consultation — Edmondson and Bransby (2023) show that research in this area has developed around several themes, including learning behaviours, employee experience, leadership and getting work done, rather than treating it as a simple prescription for openness, and in time-critical situations clear authority and rapid decision-making may still be necessary. Its contribution is better understood as improving the quality of information available to managers while retaining appropriate decision structures.

Verhoef et al. (2021) provide a broader perspective on digital transformation by treating it as an organisational and strategic process rather than simply a technological project, highlighting the importance of leadership, organisational capabilities and culture in determining whether digital investment produces meaningful change — significant because technology can be introduced without fundamentally changing how an organisation operates. The resources required for organisation-wide transformation are nonetheless not equally available across organisations, particularly those with limited financial, technological or human capabilities, so digital transformation involves organisational capacity as much as technological capability.

Raisch and Krakowski (2021) add a further dimension through their discussion of the relationship between automation and augmentation, suggesting the organisational value of AI depends partly on how technology is combined with human judgement — challenging the assumption that greater automation automatically produces better performance. Managers nonetheless face competitive and financial pressures that make extensive automation attractive even where human involvement could produce longer-term benefits, so the choice between automation and augmentation is influenced by organisational context rather than managerial preference alone.

3.6 Different Views of the Human Contribution to Organisations

A significant difference between classical and contemporary approaches concerns how employees are viewed within the organisation. Classical theories tended to place greater emphasis on structured tasks, managerial control and measurable performance (Taylor, 1911; Fayol, 1949). Contemporary perspectives give greater attention to employees as sources of knowledge, judgement and learning. Senge

(1990), for example, views knowledge development as an organisational process, while Edmondson (2019) emphasises the importance of employee participation, learning and the ability to raise concerns. These perspectives reflect changes in work where managers may not possess all the knowledge required to make effective decisions and therefore depend increasingly on the expertise of employees.

This does not mean, however, that contemporary organisations can simply replace control and structure with greater employee autonomy: standardisation and clear responsibilities remain important where consistency, safety or accountability are required, while autonomy and participation become more valuable where work depends on creativity, problem-solving and professional judgement. The significance of this shift is not that one view of employees has replaced another, but that effective management increasingly requires balancing structure, control, employee knowledge and autonomy according to the nature of the work — classical management remains relevant where its assumptions fit particular conditions, but contemporary approaches recognise that organisational knowledge cannot always be concentrated within management. This can be made more theoretically precise by distinguishing three things classical theory tended to treat as a single package: managerial authority, the formal right to direct and be obeyed; managerial knowledge, the possession of superior technical or operational understanding; and decision rights, the actual entitlement to determine a course of action. Across classical management perspectives, these three elements were often closely associated with managerial authority and organisational hierarchy, although the relationship differed between Taylor, Fayol and Weber; contemporary conditions increasingly separate them, since a manager may retain formal authority without possessing superior technical knowledge, and decision rights may in practice be exercised by employees, algorithms or specialists even where formal authority remains with management. Understood this way, contemporary management involves not the disappearance of management, but a change in the relationship between authority and expertise — an idea made explicit here because it becomes central to the analysis in Chapter Four.

3.7 Literature Synthesis and Analytical Framework

The literature indicates that management has developed through adaptation rather than straightforward replacement: classical principles of efficiency, coordination and accountability remain relevant, while behavioural, systems, contingency and contemporary approaches have expanded management thinking to include motivation, learning, environmental uncertainty, digital transformation and human–technology relationships. Contemporary approaches also have limitations, however — learning and participation require time and organisational capacity, digital transformation requires

resources and capabilities, and the effective use of AI depends partly on managerial discretion that competitive pressures may constrain — so the literature supports neither the complete rejection nor the unchanged continuation of earlier management principles.

How classical and contemporary approaches interact under different organisational conditions is therefore the analytical question this report investigates, framed by the literature reviewed above rather than as a claim that the academic literature has left this question unaddressed — substantiating a genuine research gap would require a more comprehensive review than is possible here. The central issue is not whether a theory is simply old or new, but which principles remain useful, which require adaptation, and why, including whether management has changed simply by adopting new techniques or whether the distribution of organisational knowledge has also altered the assumptions underlying practice: classical approaches placed greater emphasis on managerial expertise, formal rules and measurable performance, whereas contemporary perspectives give greater recognition to employee knowledge, organisational learning and technology-enabled decision-making. This provides the analytical framework for the critical analysis developed in the next chapter.

Chapter 4: Critical Analysis

4.1 Continuity and Change in Management

The extent to which contemporary management remains rooted in nineteenth-century theories can be examined at three levels: objectives, methods and underlying assumptions. Management objectives, including coordination, accountability and organisational performance, have remained relatively stable; the methods used to achieve them have changed considerably through technological development, new organisational structures and changing forms of work; and there has been a more significant shift in assumptions about the role of people, particularly in knowledge-intensive work where autonomy, creativity and judgement have become increasingly important. Classical principles continue to influence coordination and accountability, but increasingly operate alongside approaches that recognise employee knowledge, organisational learning, technological interdependence and adaptability.

The distinction is significant: the continued use of planning, budgeting and performance measurement demonstrates the persistence of familiar managerial practices, but does not indicate their underlying assumptions have remained unchanged. Technologies such as artificial intelligence and digital performance systems similarly demonstrate significant changes in managerial methods without necessarily representing a fundamental shift in how organisations understand and manage people; their meaning and application have instead expanded as organisations have become more technologically enabled, knowledge-intensive and interconnected. The relationship between classical and contemporary management is therefore better understood as continuity combined with adaptation and transformation, rather than either complete stability or complete replacement.

4.2 Why Contemporary Challenges Expose Classical Assumptions

AI, hybrid work, platform organisations and sustainability pressures can be viewed simply as new managerial concerns added to an otherwise stable classical foundation. However, each development also challenges assumptions underlying traditional approaches. The significance of these changes lies not simply in the emergence of new management issues, but in how they alter the conditions under which established principles operate.

Artificial intelligence and algorithmic decision-making challenge Taylor's assumption that management holds superior knowledge of the most efficient way to perform work: AI systems can identify patterns and generate recommendations not accessible through conventional managerial observation,

shifting some expertise from managers towards technological systems (Krakowski, Luger and Raisch, 2023). This does not necessarily weaken Taylorist principles but can reproduce them through a different mechanism — standardisation, measurement and optimisation remain central, but algorithmic systems increasingly perform functions that previously depended on managerial analysis. Platform organisations and gig work similarly complicate Weber's model of formal authority (Kellogg, Valentine and Christin, 2020), exercising extensive rule-based control through algorithms, performance thresholds and automated decisions without reproducing the stable employment hierarchy and direct accountability of traditional bureaucracy.

Hybrid and remote working also challenge conventional assumptions about coordination. Fayol's emphasis on planning, organising and controlling remains relevant, but coordination can increasingly occur across dispersed teams without continuous physical supervision, placing greater importance on communication, trust and distributed judgement over physical co-presence (Gratton, 2021), a pattern also reflected in field-experiment evidence on structured hybrid schedules (Bloom, Han and Liang, 2024). Sustainability and stakeholder governance create a further, more fundamental challenge. Efficiency and output remain important, but environmental and social outcomes increasingly form part of how organisations are evaluated by regulators, investors, employees and the public, and recent governance literature shows that accountability itself is being reframed around both compliance and legitimacy rather than compliance alone (Prencipe, 2025). This challenge operates at a different level from AI and platform organisation: where those primarily challenge assumptions about where knowledge and control reside, sustainability pressures challenge the definition of organisational performance itself. Classical management perspectives generally prioritised efficiency, predictability, coordination and internal organisational performance, although the relative emphasis differed considerably between Taylor, Fayol and Weber; sustainability instead requires performance to be defined in terms extending to environmental and social outcomes assessed by external stakeholders. Classical measurement and control are therefore not simply being applied to new objects, as in algorithmic management, but pursued for objectives largely absent from their original formulation — arguably a more significant challenge than technological change alone.

A reasonable counterargument should nevertheless be considered before reaching a final judgement: AI, hybrid work and platform organisation could be viewed simply as new operating conditions to which classical principles are being applied, much as Fayol's functions were once applied to factories and Weber's rules to civil administrations, with the vocabulary of planning, coordination and control

unchanged in substance, only in setting. This argument has some force, since managers in AI-enabled and platform organisations still plan, coordinate and control in recognisable ways. It weakens, however, once the source of managerial authority is examined rather than its vocabulary: classical theory assumed authority followed from position, expertise or formal rule, whereas in algorithmic and knowledge-intensive settings it increasingly follows from access to data, technical capability or specialist knowledge management may not itself possess. Familiar managerial language therefore does not settle whether classical assumptions still hold; what matters is whether the basis of managerial authority has shifted, which the evidence considered in this chapter suggests has occurred, at least partially and unevenly across different types of work.

The shift is particularly evident in the changing relationship between management and organisational knowledge: classical approaches placed responsibility for designing and controlling work primarily with management, whereas contemporary organisations increasingly depend on knowledge distributed across employees, technologies and external stakeholders, so managers are no longer the sole or consistently dominant source of organisational knowledge and control. Taken together, this points to adaptation rather than simple continuity. Classical principles remain present, but contemporary organisational conditions have changed the assumptions, mechanisms and relationships through which those principles operate.

4.3 Organisational Illustrations: Testing Assumptions in Practice

Three organisational illustrations provide a useful comparison across manufacturing, platform work and knowledge-intensive technology, showing how classical management principles can be retained while their underlying assumptions are modified, reinforced or challenged. These cases illustrate how classical assumptions can be adapted in practice rather than provide a representative sample from which general causal claims can be drawn; their evidential limits are discussed as they arise and revisited at the end of this section.

Toyota's production system illustrates how Taylorist methods can be adapted rather than simply retained. Standardised work, waste reduction and performance measurement remain central, but management alone no longer determines the most efficient method: through kaizen, frontline employees identify problems and contribute to process improvements through structured experimentation rather than simply following fixed instruction (Spear and Bowen, 1999), so worker knowledge becomes part of continuous improvement rather than being separated from managerial expertise — classical techniques

remain, while the assumption about where organisational knowledge resides has been substantially revised. In Morgan's terms, Toyota is a combination of machine and organism assumptions: the standardised, measurable structure of the machine metaphor is retained, while the organism metaphor's emphasis on adaptation and learning operates within it through kaizen.

Algorithmic management in platform and logistics work provides a contrasting example: digital systems can monitor performance, allocate tasks and enforce targets with a consistency traditional supervision could not achieve, but where workers have limited influence over how these systems operate, the resulting control can reduce autonomy and intensify work. Cameron's (2024) study of ride-hail drivers shows algorithmic systems constraining choice while creating the appearance of autonomy — technological sophistication does not necessarily overcome the limitations of Taylorist control where measurement is prioritised over worker judgement, since the algorithm inherits the role Taylor assigned to management while workers retain the role of executing it. Read through Morgan's framework, algorithmic management is a technologically intensified machine metaphor rather than a departure from it — the mechanistic emphasis on efficiency and control is preserved, and in some respects sharpened, even though the supervisory role once performed by a human manager is now performed by a system.

Microsoft provides a further illustration from knowledge-intensive technology work. Its cultural transformation under Satya Nadella has been associated with a deliberate shift from a "know-it-all" culture, based on internal competition and knowledge protection, towards a "learn-it-all" culture built on collaboration and organisational learning (Nadella, 2017). Independent academic analysis broadly corroborates the mechanics of this change, identifying leadership actions, employee involvement, aligned reward structures and human-resource realignment as the specific levers used (O'Reilly, 2024), suggesting the change was substantive rather than rhetorical. The case suggests that improving coordination in knowledge-intensive environments may depend less on strengthening hierarchy and more on creating conditions for knowledge sharing, without abandoning accountability or performance management. A critical caveat nonetheless applies: Microsoft's improved performance cannot be attributed to cultural change alone, since cloud strategy, market conditions and other strategic decisions taken alongside the leadership transition are also plausible contributing factors, so the case illustrates a change in managerial assumptions rather than proving that the change caused the performance outcome. The shift from "know-it-all" to "learn-it-all" also maps onto Morgan's framework more closely than the machine metaphor: it emphasises shared meaning, organisational learning and the treatment of knowledge as a collective

resource, characteristics more closely associated with the brain and culture metaphors than with the mechanistic assumptions underlying Taylor's and Weber's approaches.

The comparison reveals an important distinction. Measurement and organisational structure have not disappeared; what has changed is how knowledge and decision-making are distributed within those structures. Toyota combines standardisation with employee participation, platform organisations can combine sophisticated measurement with highly centralised control, while Microsoft illustrates the potential value of collaborative knowledge-sharing. The key issue is therefore not whether organisations retain classical management techniques, but how they determine who has the authority to interpret information, improve processes and make decisions.

Alternative explanations should also be considered: Toyota's outcomes may partly reflect its long history of organisational learning and sector-specific conditions, platform organisations operate within different regulatory and competitive environments, and Microsoft's performance may likewise reflect factors beyond cultural change. These differences limit the extent to which any single case can establish causality, but the comparison remains useful, since the cases demonstrate different ways of combining structure, measurement, technology and employee judgement. Taken together, they support a qualified conclusion: classical management techniques can remain effective when their underlying assumptions are adapted to contemporary work, but unmodified application can create significant limitations.

4.4 Overall Judgement: Continuity, Adaptation and Change

The evidence indicates that continuity is strongest at the level of management's fundamental objectives: coordination, accountability and organisational performance remain central concerns, and organisations such as Toyota demonstrate that classical techniques can remain effective when appropriately adapted. The assumptions that originally supported these techniques are less secure, however — the belief that work can readily be decomposed and measured, that managerial knowledge is superior to worker knowledge, that formal hierarchy provides the primary basis for accountability, and the Taylorist emphasis on economic incentives as a central mechanism of motivation, all become increasingly problematic in knowledge-intensive and platform-based work, as the organisational illustrations above demonstrate.

The most useful basis for evaluating management theory is therefore not whether it has survived, but which of its assumptions remain appropriate under particular organisational conditions: the same principle can produce different outcomes depending on application, with standardisation supporting

efficiency in one setting while restricting innovation in another. This supports a qualified rejection of the idea that contemporary management remains essentially unchanged: classical principles continue to provide useful mechanisms for coordination, accountability and performance where work is structured and predictable, but their limitations become more evident where performance depends on creativity, distributed knowledge and technological interdependence, and contemporary theories have responded by extending management thinking rather than replacing its earlier foundations. The practical question that follows is not whether managers should choose classical or contemporary approaches, but how they should manage the tension between retained principles and revised assumptions in day-to-day practice — the question taken up directly in Chapter Five.

4.5 Future Implications

The changing relationship between human judgement, technology and organisational control has important implications for the future of management. As AI and platform-based work expand, organisations will increasingly need to determine how decision-making authority should be shared between managers, employees and technological systems; neither the assumption that managers possess superior knowledge nor the idea that algorithms should operate without meaningful human oversight provides an adequate basis. Toyota's experience with distributed improvement offers one possible direction, though its application to human–AI collaboration remains relatively underdeveloped.

Platform and gig work also raise questions about how formal rules and accountability should operate when organisational control is increasingly exercised through algorithms rather than conventional managerial hierarchies: digital systems can provide consistency and monitoring, but may also restrict discretion and blur responsibility for decisions. The sustainability challenge discussed above compounds this further, since organisational performance will need to be assessed against a wider set of stakeholder outcomes, not efficiency and output alone.

Overall, the future of management is unlikely to involve the complete abandonment of classical principles; more plausibly, established ideas about coordination, accountability and performance will continue to be combined with new approaches to knowledge, technology, participation and organisational responsibility, with the challenge being to integrate these without allowing either traditional control or technological capability to override the judgement contemporary organisations require.

Chapter 5: Managerial Implications — Paradoxes Rather Than Prescriptions

The practical implications of contemporary management are better understood as tensions that managers must continually balance rather than as simple prescriptions: classical management provides important foundations for coordination, accountability and performance, while contemporary approaches place greater emphasis on agility, trust, learning and human judgement.

5.1 The Agility–Stability Paradox

The most direct managerial implication is not simply to "become more agile". The evidence instead reveals a genuine paradox: excessive reliance on classical stability can produce the poor outcomes associated with highly controlled algorithmic management, while excessive agility without operational discipline risks the coordination problems that classical theory was originally designed to address. Toyota is instructive because it does not resolve this tension by choosing one side. Instead, it redistributes responsibility for maintaining and improving standards, allowing workers to exercise interpretive authority while retaining clear organisational processes.

Managers therefore face a balancing challenge when deciding how much authority to retain and how much to distribute: the question is not simply whether a new standard improves measurable output, but who has the authority to review and revise it once operational experience accumulates. Where that authority rests exclusively with management or an algorithm, there is a risk of reproducing the narrower limitations of Taylorist control; where it is shared with those performing the work, the approach is more consistent with the continuous improvement principles demonstrated by Toyota. In practice, this means specifying that authority in advance rather than leaving it undefined by default.

5.2 The Measurement–Trust Paradox

Measurement remains necessary for accountability and improvement, reflecting Taylor's original insight. However, measurement imposed without corresponding attention to trust and employee voice can create the same problems associated with highly controlled forms of algorithmic management. Digital performance tools should therefore be evaluated not only according to their ability to measure activity, but also according to how employees are able to interpret and respond to the information produced.

This creates a practical tension for managers. Performance data can support learning when employees contribute to its interpretation, but it can become a mechanism of surveillance when used

primarily for management-initiated control. The kaizen principle provides a useful alternative by treating measurement as a basis for identifying and improving problems rather than simply monitoring compliance. As one plausible implication of this analysis, rather than a recommendation directly demonstrated by the cited research, a potential response is pairing AI-enabled performance monitoring with a formal employee review channel through which staff can contest inaccurate metrics and periodically help revise the indicators tracked, so measurement functions as a shared diagnostic tool rather than one-directional surveillance.

5.3 The Career and Capability Paradox

Traditional organisational structures were generally associated with relatively stable divisions of labour and structured career hierarchies. Contemporary knowledge organisations face a different challenge: employees increasingly require continuous capability development as technologies, roles and organisational requirements change, yet organisations still need predictable structures for allocating responsibility and rewarding contribution.

Career development that abandons structure entirely can create uncertainty and weaken coordination, while a rigid hierarchical model can restrict lateral development and make it harder to retain employees whose contribution depends on continuous learning (Noe and Kodwani, 2018). As an implication of this analysis rather than a solution established in the literature reviewed above, a more balanced approach would be dual-track progression frameworks that formally recognise lateral movement, cross-functional project work and skills accreditation as legitimate routes to advancement alongside the conventional hierarchical ladder.

Capability development should not, therefore, be treated simply as preparation for the next position in a fixed hierarchy: in knowledge-intensive organisations, developing and retaining expertise is itself an important organisational capability, so career systems need sufficient structure to support fairness while remaining flexible enough to reflect changing skills and organisational needs.

5.4 The Leadership Philosophy Paradox

Research on emotional intelligence, psychological safety and contemporary leadership capabilities points towards a broader change in leadership requirements (Goleman, 1998; Edmondson, 2019; Gerhardt, Bauwens and van Woerkom, 2025). If contemporary organisational performance increasingly

depends on employees as sources of judgement and knowledge, leadership development based primarily on planning and control may be insufficient for knowledge-intensive work.

This does not mean planning and control competencies should be abandoned — they remain necessary for establishing direction, coordinating activity and maintaining accountability — but leadership focused entirely on control can undermine the psychological safety and trust required for employees to contribute knowledge, question existing practices and identify problems.

The paradox is that these competencies cannot simply be added together without changing the underlying approach to leadership. Adding emotional-intelligence training to an otherwise unchanged control-oriented model would not resolve the underlying tension. As one plausible practical implication, rather than a mechanism the reviewed research has itself tested, managers could therefore consider scenario-based leadership development that pairs each planning and control competency with an appropriate participative competency, asking managers to select and justify an approach for specific, time-pressured situations.

Leadership development should consequently prepare managers to move between these approaches according to the nature of the work, developing the ability to apply both rather than replacing one with the other.

5.5 Implications for Management Education

If contemporary organisations increasingly depend on employee judgement, collaboration and technological capability, managers require skills that extend beyond traditional planning and control. Classical management competencies remain relevant, particularly for establishing structure, accountability and operational discipline, but they are unlikely to be sufficient on their own. Future management education will therefore need to combine these enduring foundations with capabilities in digital decision-making, organisational learning, stakeholder management and human–technology collaboration, an emphasis consistent with recent reviews of digital leadership that identify strategic, technical and human-centred capabilities as jointly necessary rather than substitutable (Lin, 2024).

This implication connects directly to the leadership philosophy paradox discussed above: neither unconditional managerial superiority nor uncritical algorithmic authority offers an adequate future model, so management education needs to prepare managers to judge, case by case, which decisions warrant traditional managerial authority, which benefit from algorithmic support, and which should rest primarily

with employee or specialist judgement, consistent with the distinction between managerial authority, managerial knowledge and decision rights introduced in Chapter Three.

5.6 Implementation Risk

The greatest implementation risk lies not in choosing the wrong side of any individual paradox, but in addressing one while ignoring the others: introducing agile structures without appropriate measurement and accountability can create coordination problems, implementing performance technology without addressing trust can increase resistance, and promoting psychological safety without operational discipline can weaken clarity around responsibility.

A related risk concerns sequencing: organisations may introduce the technological or measurement component of a change — an AI performance dashboard, a hybrid working policy — before establishing the corresponding trust, capabilities and organisational support, so employees experience new control or expectations before they can understand or influence how the change will operate, and building trust afterwards is harder than addressing these concerns at the design stage. Managers should therefore examine underlying assumptions about employee knowledge, autonomy and decision-making before implementation, ensuring structural change is supported by appropriate capabilities, communication and opportunities for employee involvement.

Overall, the managerial implication is not to abandon classical management or adopt contemporary approaches uncritically, but to manage the tensions between agility and stability, measurement and trust, structure and capability development, and control and emotional intelligence. These tensions are unlikely to have permanent solutions; they require managers to continually adjust the balance between established organisational discipline and the flexibility demanded by contemporary work.

Chapter 6: Conclusion

6.1 Judgement

Taken together, the analysis supports a qualified rejection of the assertion that contemporary management has remained largely unchanged and rooted in nineteenth-century theories. Its fundamental objectives — coordination, accountability and organisational performance — have remained relatively stable, while the methods used to achieve them have adapted considerably. More importantly, assumptions concerning human motivation, how organisational knowledge is distributed and the meaning of organisational performance have changed as the nature of work has evolved.

Taylor's, Fayol's and Weber's approaches therefore retain value where the conditions they were designed to address remain present: standardisation supports efficiency in predictable work, formal rules strengthen accountability in regulated environments, and planning and coordination remain essential to organisational functioning. As the organisational illustrations in Chapter Four show, however, these principles become less adequate for knowledge-intensive, technologically mediated and highly interconnected work without corresponding adaptation to who holds knowledge and discretion. Classical management has therefore not disappeared, but neither has it remained essentially intact; contemporary theories have expanded rather than replaced it, extending management thinking to address learning, employee participation, digital transformation, artificial intelligence and changing stakeholder expectations.

6.2 Contribution and Limitations

The main analytical contribution of the report is the distinction between management objectives, methods and underlying assumptions. This provides a more precise way of understanding why classical and contemporary perspectives can appear to reach conflicting conclusions. Classical principles may remain visible in organisational practice even when the assumptions supporting their original application have changed.

The analysis is limited by its reliance on secondary literature and three illustrative organisational cases rather than primary empirical research. The cases provide contrasting examples but cannot establish statistical generalisability or causal relationships. Further empirical research would therefore be useful to examine whether the patterns identified here apply consistently across different sectors and

organisational contexts. The focus on general management theory also means that some implications remain context-dependent.

6.3 Implications for Future Research

Future research could examine more directly how organisations revise classical management assumptions as AI, algorithmic management, hybrid work and platform-based organisation continue to develop, particularly whether changes occur primarily in management methods or also in underlying assumptions about knowledge, authority and employee discretion. Longitudinal research comparing organisations that distribute decision-making and employee knowledge with those that retain highly centralised forms of control could provide stronger evidence about the relationship between management assumptions and organisational outcomes.

Such research would move beyond the simple question of whether management has changed, towards examining which classical assumptions remain effective, which require modification, and under what organisational conditions — providing a stronger basis for understanding how established management principles can remain useful while adapting to contemporary work, rather than treating classical and contemporary management as mutually exclusive alternatives.

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