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THE SIX PRACTICE: INTEGRATING FLOW AND LEADERSHIP IN PRODUCTION PLANNING AND CONTROL

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ABSTRACT

Large construction projects are increasingly characterized by complexity, fragmented organizational structures, and dynamic boundary conditions. Despite the use of detailed schedules and established Lean planning methods, many projects experience persistent gaps between planned targets and actual execution. Deviations are often detected late, addressed locally, or escalated informally, limiting the ability of project organizations to respond effectively.

This paper presents a practice-based case study examining the development and application of an integrated flow and leadership approach, here referred to as The Six Practice. The Six Practice integrates project-level production planning and control with line-level execution and leadership systems through cascaded structures that link decisions about what should be delivered and when with decisions about who executes the work and how resources are mobilized. Rather than relying on stable standards, the approach addresses dynamic target states and treats deviations as signals for escalation, decision-making, and learning.

Using the Riyadh Metro project as the primary case, the study illustrates how The Six Practice supported early deviation detection, structured escalation, and coordinated action across organizational boundaries. The findings contribute to Lean Construction research by extending existing planning and control concepts toward an integrated, deviation-based and leadership-oriented approach suitable for complex project environments.

KEYWORDS

Complexity, flow, Last Planner® System, production planning and control, visual management.

INTRODUCTION

Large construction projects are increasingly characterized by high levels of complexity, organizational fragmentation, and dynamic boundary conditions. Multiple contractors and subcontractors operate within temporary project organizations, while key resources are often shared across a broader network of concurrent projects. Despite the widespread use of detailed master schedules and advanced planning tools, many projects experience substantial gaps between planned targets and actual execution. Day-to-day production on site is frequently driven by situational decisions, while deviations are detected late, addressed locally, or escalated informally, leading to reduced predictability and compromised flow performance.

Lean Construction research has advanced production planning and control by emphasizing collaboration, commitment, and flow-based thinking. Approaches such as the Last Planner®

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System demonstrate how short-term planning and reliable promising can improve plan reliability and learning at the operational level. However, in large and multi-organizational projects, planning reliability alone is often insufficient. Deviations frequently originate from systemic issues such as resource conflicts, interface dependencies, and competing priorities across multiple projects—issues that cannot be resolved at the level where they are first observed.

At the same time, shopfloor management and Lean leadership concepts have proven effective in manufacturing environments by supporting transparency, rapid response to deviations, and continuous improvement. Transferring these concepts directly to construction projects remains challenging, as project organizations do not operate with stable standards or repetitive processes. Instead, they rely on dynamic target states that evolve with project progress, design maturity, and changing resource availability.

This situation highlights a fundamental dilemma in project-based production systems: the tension between flow efficiency and resource efficiency. Efforts to optimize local resource utilization can undermine overall project flow, while measures aimed at protecting flow often require strategic trade-off decisions that exceed the authority of operational teams. Addressing this dilemma therefore requires not only improved planning techniques, but also explicit mechanisms for escalation, decision-making, and leadership across organizational and hierarchical boundaries.

This paper addresses this challenge through a practice-based case study of a large infrastructure project, focusing on the development and application of an integrated flow and leadership method, here referred to as The Six Practice. The approach integrates project-level planning and control with line-level execution and leadership systems through cascaded structures that link “what and when” decisions with “who and how” execution capabilities. Using the Riyadh Metro project as the primary case, the study examines how this integrated approach supported early deviation detection, structured escalation, and coordinated decision-making in a highly complex environment.

The study is guided by two research questions: (1) How can project-level planning and control be systematically coupled with line-level execution and leadership structures in large, multi-organizational construction projects? (2) What mechanisms support early deviation detection, structured escalation, and coordinated decision-making across organizational and hierarchical boundaries in such environments?

The remainder of the paper is structured as follows. Section 2 reviews relevant literature on complexity, flow, production planning and control, and Lean leadership. Section 3 outlines the research method. Section 4 introduces The Six Practice, followed by its application in the Riyadh Metro project in Section 5. Section 6 discusses the findings, and Section 7 concludes the paper.

LITERATURE REVIEW

COMPLEXITY, VARIABILITY, AND FLOW IN PROJECT-BASED PRODUCTION

Construction projects exhibit high levels of complexity and variability due to temporary organizational structures, fragmented authority, and continuously changing boundary conditions. Unlike repetitive manufacturing environments, interdependencies between tasks, trades, and organizations evolve throughout the project lifecycle, limiting the applicability of planning approaches that rely on stable standards and fixed target states.

From a production theory perspective, variability is a primary driver of reduced flow performance, leading to longer lead times, increased work-in-progress, and lower predictability (Hopp & Spearman, 2008). Lean thinking emphasizes flow efficiency as a central objective, often in tension with resource efficiency, particularly in project environments where resources

are shared across multiple value streams (Modig & Åhlström, 2013). Within Lean Construction, Koskela's transformation–flow–value (TFV) theory conceptualizes construction as a flow-oriented value creation system, highlighting the need for planning and control mechanisms that explicitly address variability rather than task completion alone (Koskela, 2000).

PRODUCTION PLANNING AND CONTROL IN LEAN CONSTRUCTION

Lean Construction research has developed planning and control approaches that emphasize collaboration, commitment, and reliability. The Last Planner® System (LPS) reframes planning as a process of making and keeping commitments rather than a purely technical scheduling exercise (Ballard, 2000). By structuring planning across multiple levels and systematically removing constraints before work is promised, LPS improves the reliability of commitments (Ballard & Howell, 1998). Recent research suggests that LPS is often underutilized when treated primarily as a planning tool rather than as part of a broader control and governance system. Daniel emphasizes the need to link planning routines with decision-making authority and escalation mechanisms, particularly in large, multi-organizational projects where many deviations cannot be resolved at the level where they are first observed (Daniel, Pasquire, & Dickens, 2020).

VISUAL MANAGEMENT, SHOPFLOOR PRACTICES, AND LEAN LEADERSHIP

Visual management supports transparency, coordination, and learning by making targets, status, and deviations visible. In construction, it is often implemented as a collection of tools rather than as an integrated socio-technical system that shapes behavior and decision-making (Tezel, Koskela, & Tzortzopoulos, 2020). This limitation is particularly relevant in project environments characterized by dynamic target states.

Lean leadership literature highlights the importance of routines such as regular communication, Go & See practices, process confirmation, and structured problem-solving in responding to deviations and sustaining continuous improvement (Mann, 2014). Complementing this perspective, Toyota Kata frames improvement as iterative learning toward target conditions rather than compliance with fixed standards (Rother, 2009). Together, these concepts support the adaptation of shopfloor principles to project contexts by emphasizing learning- and deviation-oriented control.

RESEARCH GAP AND POSITIONING OF THE STUDY

While significant advances have been made in production planning, leadership, and visual management, limited research explains how these elements can be systematically integrated in large, multi-organizational project environments characterized by dynamic target states and shared resources. Existing studies often address planning, leadership, and shopfloor practices as partially separate domains. In particular, the role of cascaded escalation and feedback mechanisms in aligning flow objectives with organizational decision-making remains underexplored.

This study addresses this gap through a practice-based case study of the Riyadh Metro project, examining how an integrated flow and leadership approach supports early deviation detection, structured escalation, and learning across organizational boundaries.

RESEARCH METHOD

RESEARCH DESIGN

This study adopts a practice-based case study research design to investigate how production planning, control, and leadership practices can be adapted to large-scale, multi-organizational construction projects with dynamic target states. Practice-based case studies are particularly suitable for examining complex socio-technical systems, where planning, execution, and

decision-making are deeply embedded in organizational routines and cannot be isolated from their context.

The research focuses on an in-depth examination of a single large infrastructure project, enabling detailed analysis of planning routines, communication structures, escalation mechanisms, and leadership behaviors as they unfolded during execution. Rather than testing predefined hypotheses, the study aims to generate empirically grounded insights by identifying mechanisms that support production flow and coordinated decision-making.

CASE STUDY CONTEXT

The empirical basis of this study is a large-scale infrastructure project executed in a highly complex and dynamic environment. The project involved multiple contractors and subcontractors, deep hierarchical structures, and shared resources distributed across a broader network of concurrent projects.

Key characteristics of the case include a temporary project organization with distributed decision-making authority, frequent changes in boundary conditions such as design status and interface readiness, significant gaps between formal project schedules and actual site execution, and limited transparency regarding deviations across organizational levels. These characteristics make the case particularly suitable for examining limitations of traditional planning approaches and alternative mechanisms for deviation handling and escalation.

ROLE OF THE RESEARCHER

The researcher acted as an external advisor commissioned by one of three executing consortia over approximately two years of active project execution. The mandate covered the design and implementation of the Project Cascade (interdisciplinary integrated planning) and the Line Cascade (shopfloor management and linked communication routines). This engagement was on the consortium's side: "planning and control" refers to consortium-level coordination of delivery commitments across its contractors, subcontractors, and suppliers; "shopfloor" refers to their execution-level operations. Flow efficiency was the consortium's concern as integrator (aligning rolling stock delivery, depot completion, and commissioning), while resource efficiency was the concern of individual contractors managing their workforce across concurrent projects. To mitigate embedded-researcher bias, the study relied on systematic observation documentation, triangulation across multiple data sources, and explicit differentiation between observed practices and interpretative conclusions.

DATA COLLECTION

Data were collected over an extended period during project execution and include both qualitative and quantitative sources. The primary data sources are:

- Direct observations of planning meetings, coordination routines, and shopfloor communication across hierarchical levels.
- Project documentation, including planning artifacts, visual management boards, escalation logs, and performance reports.
- Key performance indicators, such as reliability of commitments, progress development, and deviations from planned targets.

These sources enabled a comprehensive understanding of how planning intentions were translated into execution and how deviations were identified and addressed.

DATA ANALYSIS

Data analysis followed an iterative and abductive process. The primary units of analysis were deviation episodes: instances in which a gap between a planned target and actual status was identified, discussed, and either resolved locally or escalated. Over the two-year engagement,

approximately 80 weekly planning meetings and more than 40 escalation-level sessions were directly observed, alongside review of planning artifacts, visual management boards, and performance reports.

Each episode was coded along four dimensions: (1) identification level; (2) escalation path; (3) decision or action type; (4) observable effect on subsequent planning. Patterns were validated by cross-referencing observations with planning documents and KPI trends. Triangulation compared researcher observations with planning artifacts and reports from the consortium's project controls function. Counter-evidence was actively sought by examining episodes in which escalation did not produce effective resolution.

VALIDITY AND LIMITATIONS

As a single case study, the findings are not statistically generalizable. Instead, the study aims for analytical generalization by linking observed practices to established theory and by making underlying mechanisms explicit. Limitations include the context-specific nature of the case and the researcher's embedded role; these are partly offset by the depth of access, the longitudinal data, and systematic reflection applied throughout the analysis.

THE SIX PRACTICE: AN INTEGRATED FLOW AND LEADERSHIP APPROACH

CONCEPTUAL OVERVIEW

The integrated flow and leadership method developed in this study is here referred to as The Six Practice[4]. The Six Practice was developed in response to limitations of conventional production planning and control approaches in large, multi-organizational project environments. The approach is based on the premise that effective production control requires the explicit coupling of two interdependent logics: a project-oriented planning and control logic defining what should be delivered by when, and a line-oriented execution and leadership logic determining who performs the work and how resources are mobilized.

Rather than attempting to resolve the tension between flow efficiency and resource efficiency, The Six Practice treats this tension as a structural condition of project-based production systems. The approach therefore focuses on making deviations visible, escalating them deliberately, and activating decision-making authority at appropriate organizational levels.

[4] The term The Six Practice reflects the six interconnected practice domains that emerge from combining three project-level planning and control structures with three line-level execution and leadership structures.

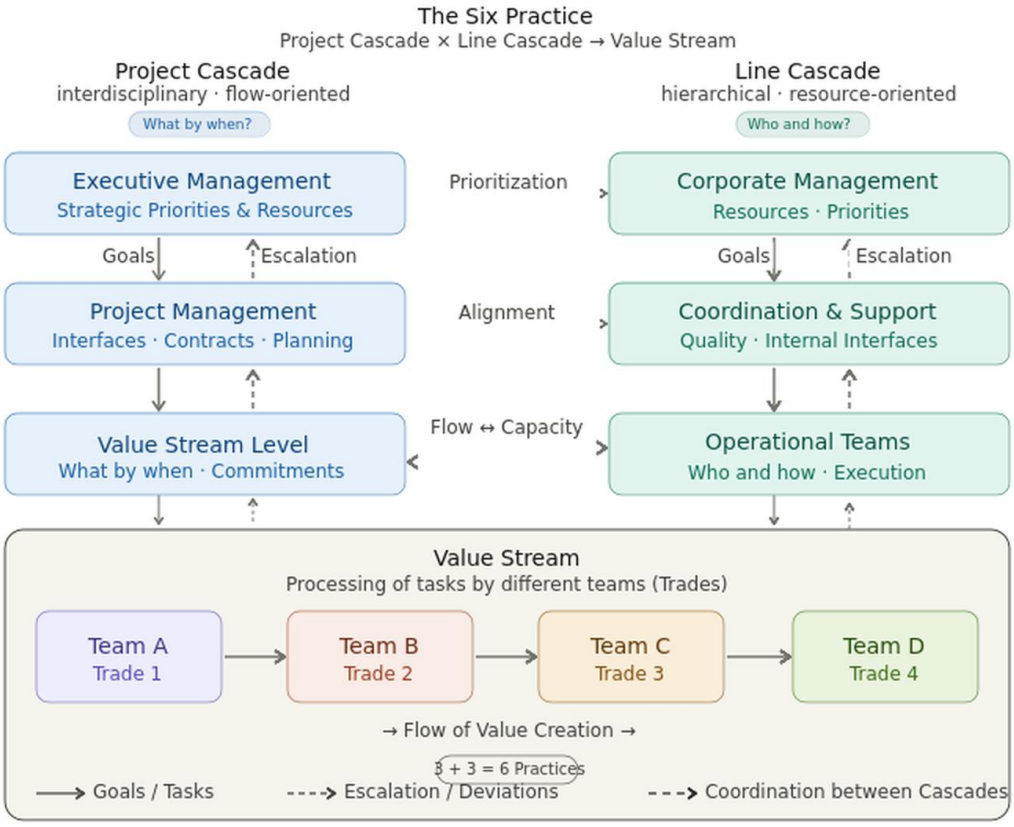

Figure 1: The Six Practice: integration of Project Cascade (left, flow-oriented) and Line Cascade (right, resource-oriented) through the Value Stream. Solid arrows indicate goals; dashed arrows indicate escalation; faint dashed arrows indicate cross-cascade coordination.

PROJECT CASCADE: DEFINING AND MANAGING "WHAT AND WHEN"

The project cascade represents the planning and control structure responsible for defining project targets and managing deviations over time. It builds on principles of the Last Planner® System while extending them through explicit escalation and decision routines.

Structure of the Project Cascade

The project cascade consists of three interconnected levels. At the value stream level, interdisciplinary teams coordinate short-term planning, manage interfaces, and make reliable commitments regarding executable work. At the project management level, construction managers, project managers, site supervisors, and planners address escalated deviations related to interfaces, contracts, and downstream effects. At the executive management level, senior representatives resolve conflicts involving strategic priorities and cross-project resource allocation.

Function of the Project Cascade

The primary function of the project cascade within The Six Practice is to define what should happen by when and to provide reference points for detecting deviations. Deviations are treated as signals that trigger escalation rather than as exceptions to be absorbed locally, ensuring that issues are addressed by actors with appropriate authority and system-level perspective.

LINE AND SHOPFLOOR CASCADE: REALIZING "WHO AND HOW"

While the project cascade defines targets, the line and shopfloor cascade is responsible for realizing these targets within the organizational structures of participating companies. Within

The Six Practice, each organization operates its own internal cascade reflecting its hierarchy, decision rights, and resource management practices.

Translation of Project Targets into Execution

Within The Six Practice, project-level targets are translated into executable commitments through a rolling planning horizon. In the observed case, targets were visible within a six-week lookahead window and frozen as binding commitments within a two-week execution window.

Shopfloor Management Levels

The internal shopfloor cascade typically consists of three levels. Operational teams execute work, monitor progress, and address immediate disturbances. Coordination and support levels resolve quality and resource issues arising from internal interfaces. Management levels address escalated issues requiring prioritization decisions or strategic interventions.

DYNAMIC TARGET STATES AND DEVIATION-BASED CONTROL

A defining characteristic of The Six Practice is the explicit recognition that project organizations operate with dynamic target states rather than stable standards. Target conditions evolve as projects progress and boundary conditions change.

Accordingly, within The Six Practice, shopfloor management focuses on making deviations from current target states transparent, understanding systemic causes, and restoring flow through timely decisions and corrective actions. This deviation-based control logic enables adaptability while maintaining orientation across organizational levels.

LEADERSHIP ROUTINES AND COMMUNICATION STRUCTURE

Leadership within The Six Practice is operationalized through recurring routines that structure communication, decision-making, and learning. These include regular communication cycles with defined time horizons, separation of status communication from problem-solving, go-and-see practices, process confirmation, and structured problem-solving. Together, these routines establish discipline and reliability while fostering accountability and learning.

PERFORMANCE INDICATORS AND FEEDBACK

The Six Practice integrates a limited set of performance indicators focusing on reliability and flow, such as commitment reliability, progress relative to targets, and deviation trends. These indicators serve as inputs to reflection and decision-making rather than as reporting instruments, supporting learning and continuous improvement.

Table 1 provides a structured overview of the six practice domains that together constitute The Six Practice. The domains emerge from combining the three levels of the Project Cascade with the three levels of the Line Cascade, as also illustrated in Figure 1.

Table 1: The six practice domains of The Six Practice and their functions within the integrated cascade structure.

Cascade	Practice Domain	Purpose and Focus
Project Cascade	Executive Management	Resolve conflicts over strategic priorities and cross-project resource allocation; authorize decisions beyond project-level authority
Project Cascade	Project Management	Manage interfaces, contracts, and downstream planning; address escalated deviations with contractual and cross-organizational implications
Project Cascade	Value Stream Level	Coordinate short-term planning across trades and organizations; make and track reliable commitments about what will be delivered and when
Line Cascade	Corporate Management	Allocate resources and set priorities across concurrent projects; resolve conflicts between project commitments and organizational capacity
Line Cascade	Coordination and Support	Address quality and resource issues from internal interfaces; support operational teams with coordination decisions and technical expertise
Line Cascade	Operational Teams	Execute committed work, monitor progress, and detect and address immediate disturbances; report deviations exceeding local resolution capacity

SUMMARY OF THE METHOD

In summary, The Six Practice provides a structured practice-based approach to coupling project-level planning with line-level execution in complex construction projects. By combining cascaded planning, deviation-based control, and leadership routines, the method supports early problem detection, deliberate escalation, and learning-oriented resolution mechanisms.

CASE APPLICATION: RIYADH METRO PROJECT

PROJECT BACKGROUND AND INITIAL SITUATION

The Riyadh Metro project is one of the largest and most complex infrastructure programs globally, involving multiple international contractors, extensive subcontractor networks, and deep hierarchical structures. The project environment was characterized by high organizational fragmentation, numerous concurrent work fronts, and shared resources operating across a broader portfolio of projects.

Despite comprehensive master schedules, production control on site remained largely reactive. Daily execution was frequently driven by situational decisions, while persistent gaps between planned and actual progress accumulated over time. Deviations were often detected

late, addressed locally, or escalated informally, limiting the project organization's ability to respond in a coordinated and timely manner—particularly where resource conflicts and interface dependencies spanned multiple organizations.

INTRODUCING THE SIX PRACTICE IN THE RIYADH METRO PROJECT

The Six Practice was introduced and progressively refined during project execution in response to these challenges. Rather than being implemented as a predefined framework, the approach evolved iteratively to fit the project's context and organizational structures.

The initial implementation of The Six Practice focused on three objectives: increasing transparency of target states and deviations, establishing structured escalation paths aligned with decision-making authority, and linking planning, execution, and leadership routines into a coherent system through the project and line/shopfloor cascades.

APPLICATION OF THE PROJECT CASCADE IN RIYADH

At the project level, interdisciplinary planning routines aligned short- and medium-term targets across trades and organizations. Representatives with commitment authority participated in value stream–oriented planning sessions focused on executable work. In practice, these sessions exposed frequent misalignments between planned sequences, interface readiness, and resource availability that were not visible in the master schedule.

Within The Six Practice, deviations from agreed targets triggered structured escalation, enabling assessment of contractual implications, interface dependencies, and cross-project resource conflicts at appropriate decision levels. This facilitated timely decisions that addressed systemic constraints rather than local symptoms.

APPLICATION OF THE LINE AND SHOPFLOOR CASCADE

Within The Six Practice, project-level targets were translated into internal execution plans through company-specific shopfloor routines. In practice, this translation revealed recurring tensions between project commitments and organizational capacity, particularly where resources were shared across multiple projects.

Visual management and regular communication routines supported early detection of deviations and enabled local response where possible. When disturbances exceeded local resolution capacity, predefined escalation paths within The Six Practice ensured timely involvement of coordination and management levels, improving alignment between project priorities and organizational actions.

DYNAMIC TARGETS AND DEVIATION HANDLING IN PRACTICE

A defining feature of the Riyadh case, as addressed through The Six Practice, was the dynamic nature of project targets, which evolved continuously in response to progress, design maturity, and resource availability. The Six Practice addressed this environment by shifting control from standard compliance toward deviation-based learning.

Deviations were explicitly recorded and discussed within regular communication cycles. Rather than being interpreted as individual failures, they were treated as indicators of systemic misalignment. Recurring or high-impact deviations triggered structured problem-solving and adjustments to planning assumptions, resource allocation, and coordination routines.

Illustrative Episode: Rolling Stock Delivery and Depot Readiness

The following episode illustrates how the cascade structure operated in practice. The Riyadh Metro project required precise synchronization between three interdependent delivery streams managed by different organizations: the manufacture and delivery of rolling stock (trains), the construction and handover of depots providing weather-protected space for final assembly and commissioning, and the installation and activation of signaling systems and on-board software

enabling driverless operation. Each stream had its own organizational hierarchy and resource logic, yet all three had to converge at defined milestones to enable stepwise commissioning of the system.

Deviation detected (Value Stream Level): During a Value Stream Level planning session, representatives from the rolling stock manufacturer and the depot construction contractor made their short-term commitments visible on a shared planning board. It became apparent that the manufacturer's production schedule was running approximately six weeks ahead of the depot contractor's construction completion. Under the manufacturer's existing delivery plan, the first train sets would arrive on site before the depot could provide protected storage, requiring the erection of temporary hangars at significant additional cost.

Escalation (Project Management Level): Because resolving this misalignment involved contractual delivery obligations and cross-organizational cost implications that exceeded the authority of the Value Stream Level team, the deviation was escalated to the Project Management Level within the Project Cascade. At this level, representatives with contractual decision rights from both organizations, facilitated by the consortium's project management function, evaluated two options: accepting the cost of temporary hangars, or renegotiating the delivery schedule with the manufacturer.

Decision and resolution: The Project Management Level decided to negotiate a phased delivery adjustment with the manufacturer, deferring the first train set deliveries by eight weeks to align with actual depot readiness. This decision was formally documented and fed back into the Value Stream Level planning boards, where adjusted delivery milestones became the new commitment targets for both organizations. No temporary hangars were required, and the aligned delivery sequence additionally enabled the signalling contractor to schedule software integration tests in the correct facility without disruption to the commissioning plan.

This episode illustrates the core mechanism of The Six Practice: a deviation invisible in the master schedule became visible through the Value Stream Level commitment process; it was escalated because the authority to resolve it resided at a higher level; and the decision was fed back into the operational planning cycle across multiple organizations. The manufacturer's interest in maintaining production rhythm (resource efficiency) was explicitly traded off against the need for aligned delivery sequencing (flow efficiency) — a decision that could only be made at Project Management Level, not at the operational level where the misalignment was first observed.

OBSERVED EFFECTS AND PERFORMANCE INDICATORS

While the primary aim of this study is explanatory rather than evaluative, several observable effects emerged during the application of The Six Practice in the Riyadh project:

- improved transparency of project priorities and constraints,
- earlier detection and escalation of deviations,
- clearer linkage between decisions and observable actions in the value stream,
- increased reliability of short-term commitments.

Performance indicators such as commitment reliability, progress development, and deviation trends were used as inputs to reflection and decision-making rather than as standalone performance measures. This reinforced a learning-oriented culture and supported continuous refinement of planning and execution practices.

TRANSFERABILITY AND ADDITIONAL PROJECT EXPERIENCE

While this paper focuses on the Riyadh Metro project, the development of The Six Practice was informed by additional experiences in other large construction projects with similar characteristics. These parallel experiences supported the refinement of core principles such as

cascaded escalation and deviation-based control, suggesting that the underlying mechanisms address challenges common to large-scale project-based production systems.

DISCUSSION

REFRAMING PRODUCTION PLANNING AND CONTROL IN COMPLEX PROJECTS

The findings reinforce the view of production planning and control as a socio-technical system rather than a purely technical scheduling exercise. The Riyadh case demonstrates that effective control in complex projects requires mechanisms that connect planning, execution, and decision-making across organizational boundaries.

The Six Practice reframes production control as a dynamic alignment process, where target states are continuously adjusted in response to emerging conditions. This extends traditional interpretations of the Last Planner® System by emphasizing structured handling of deviations through cascaded escalation and leadership routines.

FLOW EFFICIENCY, RESOURCE EFFICIENCY, AND ESCALATION

A central contribution lies in the explicit treatment of the efficiency dilemma between flow efficiency and resource efficiency. In the Riyadh project, deviations frequently emerged from conflicts between project-specific flow requirements and organizational resource constraints.

By making such conflicts visible and escalating them deliberately, The Six Practice enabled informed trade-off decisions that balanced local execution needs with system-wide priorities. Escalation thus functioned as a governance mechanism rather than as a failure of planning.

DYNAMIC TARGET STATES AND SHOPFLOOR ADAPTATION

Traditional shopfloor management relies on stable standards, which are rarely present in project environments. The Riyadh case illustrates how adapting shopfloor principles to dynamic target states supports transparency, situational awareness, and coordinated action.

Visual management and regular communication were used not to enforce fixed norms, but to align understanding of current priorities and constraints, enabling timely response while maintaining coherence with project-level objectives.

LEADERSHIP, COMMITMENT, AND LEARNING

Leadership behaviors proved critical in sustaining production control under uncertainty. In the Riyadh project, leadership was enacted through consistent communication and escalation routines rather than directive control. This supported commitment, clarified decision rights, and framed deviations as learning opportunities, contributing to continuous improvement across organizational boundaries.

CONTRIBUTIONS AND LIMITATIONS

The study contributes to Lean Construction research by integrating planning, shopfloor management, and leadership into a coherent, deviation-based control system. Limitations include the single-case design and the researcher's embedded role, which constrain statistical generalization but are offset by longitudinal access and analytical depth.

CONCLUSIONS

This paper presented a practice-based case study examining how production planning, control, and leadership practices can be integrated in large, multi-organizational construction projects characterized by dynamic target states and shared resources. Using the Riyadh Metro project as the primary case, the study analyzed the development and application of The Six Practice, an integrated flow and leadership approach.

The findings indicate that effective production control in complex project environments requires more than reliable short-term planning. By coupling project-oriented planning with line-oriented execution and leadership cascades, The Six Practice aligns decisions about what should be delivered and when with decisions about who executes the work and how resources are mobilized.

While centered on the Riyadh case, additional project experience suggests that the underlying mechanisms of The Six Practice address challenges common to large-scale project-based production systems. Future research should examine the transferability of practice-based integrated flow and leadership approaches, such as The Six Practice, across different project contexts and organizational settings.

This paper does not claim general validity of The Six Practice, but contributes a practice-based conceptualization that may inform further research and application in comparable project environments.

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