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Research on the Practice of "Project" Management Competencies and Process-Oriented Management

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Abstract

As the core role connecting strategic goals and execution, project supervisors' competencies and management models directly determine project progress efficiency, outcome quality, and team cohesion. Based on project management practices and process-oriented theories, this paper systematically sorts out the seven core competencies required for project supervisors, deeply elaborates the key value of process-oriented management in standardizing execution, inheriting experience, and optimizing collaboration. Combined with the practical path of "first rigid implementation, then optimization, and finally solidification", it constructs a "capability-process" dual-drive project management system. Through case studies of typical enterprises such as Huawei, McDonald's, and a Shenzhen-based enterprise, and drawing on practical experiences from the "Voice of Customer" industry-university-research project of Chery Information Technology Co., Ltd. and the social practice project "Full Process for Quality Optimization of Alternator Products" of Wuhu Genrui Automotive Electrical System Co., Ltd., this paper provides actionable capability improvement plans and process-oriented implementation guidelines for university faculty development, talent cultivation, research projects, and project R&D. It assists in the transition from "people-dependent management" to "process-based governance", ultimately achieving continuous improvement of project and management efficiency.

Keywords

Project Management, Competencies, Process-Oriented Management, Project Efficiency, Team Collaboration

1. Introduction

In the complex and ever-changing "business environment" and "faculty system", project supervisors are the "primary responsible persons" for project success: they must coordinate resources, control progress,

resolve conflicts, solve problems, align demands, and ensure the value of outcomes. According to the 2024 report by PMI (Project Management Institute), only 58% of projects worldwide are delivered on schedule, and 37% of projects are delayed or exceed budgets due to "insufficient management capabilities". Among the main causes are "chaotic task decomposition", "inefficient communication", and "ambiguous processes". In traditional cognition, project supervisors are often positioned as "task assigners", but their core value lies in "achieving goals through systematic management". Project supervisors need to balance multiple responsibilities such as "technical understanding, business connection, team motivation, and risk control". As a scientific method replacing "empiricism", process-oriented management can effectively solve problems such as "non-uniform standards, unclear responsibilities, and unstable efficiency". Meanwhile, the faculty team is a key resource for the long-term development and continuous progress of education. At present, some domestic universities are facing new requirements, situations, and tasks in teacher management and faculty team construction (Yang, 2022).

Taking project management as the core framework, combining classic theories in the field of project management with the author's practical cases, this paper integrates research project experience and project management practices. By expanding capability dimensions, refining process implementation, and supplementing practical cases, it forms a management guide with both theoretical depth and practical value, providing comprehensive capability improvement and process optimization solutions for all teachers and students in project development.

2. Core Competency System for Project Supervisors

(Stephen,1990) proposed a personal effectiveness system centered on character, consisting of seven habits: the first three habits (proactivity, beginning with the end in mind, putting first things first) focus on self-management; the last three (win-win thinking, seeking first to understand then to be understood, synergizing) emphasize interpersonal collaboration; and the seventh habit (sharpening the saw) achieves continuous improvement through four dimensions: physical, mental, spiritual, and social-emotional. For project supervisors, their capabilities need to integrate "hard management + soft coordination": they must possess hard skills such as "controlling progress, managing quality, and controlling costs", as well as soft skills such as "leading teams, promoting communication, and resolving conflicts". The following seven new core competencies support each other, collectively forming the "capability moat" for project supervisors.

2.1 Overall Project Control Capability: The "Steering Wheel" of Project Management

The core responsibility of project supervisors is to ensure that projects "do the right things" and "do things right", which requires them to have strong overall control capability—being able to anchor project goals while identifying deviations through details.

2.1.1 Three Core Dimensions of Overall Control

- Goal alignment capability: Project goals must be deeply bound to organizational strategies and

customer needs to avoid "doing projects for the sake of doing projects". For example, in an enterprise's "customer management system upgrade project", the supervisor not only focused on "system function launch" but also emphasized "whether it can increase customer repurchase rate by 15%". By aligning with business indicators at each stage, the goal was ultimately exceeded.

- Element balance capability: The core of project management is "finding the optimal solution within the triple constraints of time, quality, and cost". In a software development project, when the customer suddenly requested a 2-week advance launch, the supervisor adopted a plan of "prioritizing core function development + iteratively launching non-core functions", which met the time requirement without exceeding the cost limit, while maintaining a 98% quality compliance rate.
- Risk prediction capability: Potential risks (such as insufficient resources, demand changes, and external policy adjustments) must be identified in advance, with response plans formulated. A new energy project supervisor sorted out 7 types of risks (e.g., "supply chain delays", "technical verification failures") before project initiation. Through measures such as "reserving alternative suppliers" and "conducting small-scale tests in advance", three major delays were avoided.

2.1.2 Practical Tools for Enhancing Overall Control Capability

- Detailed project charter: In the project initiation phase, core elements such as "project background, goals, scope, key stakeholders, and success criteria" must be clarified to form a "project constitution" with full team consensus. For example, in an e-commerce promotion system project charter, the success criteria were clearly defined as "system stably supporting 100,000 concurrent users + 100% order processing accuracy + user complaint rate < 0.1%", avoiding later disputes.
- Milestone management: Decompose the project into 3-5 key milestones (e.g., "requirement confirmation", "prototype review", "testing completion", "official launch"), with each milestone setting "quantifiable deliverables + acceptance criteria". Regular reviews ensure no deviation from the direction.
- Overall visualization tools: Use "project dashboards" to display real-time data on progress, costs, and risks (e.g., Gantt charts marking delayed tasks, burndown charts reflecting remaining workload), making problems "visible and manageable".

2.2 Business Understanding Capability: The "Translator" of Project Value

The ultimate value of a project is to "solve business problems". If project supervisors do not understand the business, even perfect execution may "go astray".

2.2.1 Four-Level Progression of Business Understanding

- Understanding requirement documents: Accurately grasp explicit needs proposed by customers (e.g., "Chery's 'Voice of Customer' system needs to support 3 ways of collecting after-sales customer issues"), ensuring no key information is omitted.
- Understanding requirement logic: Penetrate "surface needs" to see "underlying reasons". For example, a system requirement for "doubling report generation speed" actually stemmed from the need to "obtain after-sales data by 8:00 a.m. daily for morning meeting decisions". The supervisor adjusted the solution to "automatically generate reports at midnight + push to mobile terminals", keeping abreast

of customer needs.

- Predicting business evolution: Predict demand changes based on industry trends and customer feedback. In the "Voice of Customer system", continuous collection of "customer feedback information" enabled functional expansion within 2 weeks after policy implementation 6 months later, while competitors took 3 months.
- Creating business increments: Empower business through project optimization. In an inventory management project for a retail enterprise, the supervisor not only solved the problem of "low inventory counting efficiency" but also helped the business department reduce slow-moving inventory by 30% through an "inventory warning model", creating direct economic benefits of 5 million yuan.

2.2.2 Practical Methods for Deepening Business Understanding

- Immersive research: Participate in departmental project work for at least 2 days per month (e.g., collecting feedback in 4S stores, answering after-sales calls) to obtain first-hand feedback. This avoids information deviations caused by multi-level feedback, prevents inconsistent information among members, and timely optimizes after-sales service efficiency by 20%.
- Establishing a business dictionary: Sort out core business terms involved in the project (e.g., "GMV", "repurchase rate" in e-commerce; "yield rate", "production capacity" in manufacturing), indicator calculation formulas, and business processes to ensure "frequency alignment" in team communication.
- Regular business review: Invite business representatives to participate in review meetings at each stage, reporting project value in "business language" (e.g., instead of saying "completed 3 function developments", say "helped the business reduce manual entry time by 50%").

2.3 Task Decomposition Capability: The "Scalpel" for Project Implementation

Complex projects often involve multi-link and multi-team collaboration. The granularity and rationality of task decomposition directly determine execution efficiency. Overly coarse decomposition leads to ambiguous responsibilities; overly fine decomposition increases management costs.

2.3.1 Golden Principles of Task Decomposition

- WBS (Work Breakdown Structure) core method: Take project goals as the top layer, decomposing layer by layer into subtasks that are "deliverable, quantifiable, and accountable", until "each task can be completed by one person within 1-8 hours". For example, a "new product launch event project" can be decomposed into 6 modules: "theme planning → guest invitation → venue arrangement → promotion → on-site execution → post-event review", with each module further split into specific actions (e.g., "guest invitation" split into "list confirmation → invitation sending → attendance confirmation → itinerary coordination").
- Unique responsibility principle: Each task must have a "unique responsible person" to avoid "multiple persons responsible = no one responsible". In an inter-departmental project, the task of "material procurement" was initially marked as "responsible by the procurement department + marketing department", leading to repeated inefficient communication. After clarifying "procurement department

as the main responsible (for ordering/delivery follow-up) + marketing department as support (for providing material specifications)", efficiency improved by 40%.

- Dependency explicitness principle: Sort out pre/post relationships between tasks (e.g., "design draft confirmation" is a pre-task of "production manufacturing") and mark key dependency nodes. Through a "dependency relationship diagram", an event project team discovered in advance that delayed "guest confirmation" would affect "venue arrangement" and adjusted timely to avoid chain delays.

2.3.2 Common Misunderstandings and Avoidance Guidelines for Task Decomposition

- Misunderstanding 1: Only decomposing "visible work" while ignoring "hidden work": For example, decomposing only "function development" but forgetting tasks such as "testing, training, and documentation". A software project missed "user training", leading to a large number of complaints after launch because users could not operate the system.
- Misunderstanding 2: Decomposing by "department" rather than "process": For example, splitting a "marketing campaign project" into "marketing department tasks, sales department tasks, design department tasks" while ignoring inter-departmental connection links. The correct approach is to decompose according to the process of "campaign planning → material production → channel promotion → effect tracking", clarifying the role of each department in each link.
- Avoidance tool: RACI matrix: Define responsibilities of participants in each task through roles: Responsible (R), Accountable (A), Consulted (C), and Informed (I). For example, in the "requirement review" task, the product manager is R, the project supervisor is A, the development team leader is C, and testers are I, avoiding ambiguous responsibilities.

2.4 Time Management Capability: The "Controller" of Project Progress

Project supervisors often face pressure from "multi-task parallelism + sudden demands". If time management is out of control, they easily fall into a passive situation of "being pushed by trivial matters", with core work (e.g., risk control, team coordination) severely squeezed.

2.4.1 Time Management Model in Project Scenarios

Advanced application of the four-quadrant method: Refine the classic "important/urgent" four-quadrant based on project characteristics.

Quadrant 1 (important and urgent): Such as "remedying key node delays" and "handling online faults", which require concentrated resources for priority resolution. The proportion of such tasks should be controlled within 20% (excessively high proportion indicates insufficient planning).

Quadrant 2 (important but not urgent): Such as "formulating risk plans" and "building team capabilities", which are the "vital few" determining project success. At least 50% of time should be invested. A project supervisor dedicated 3 morning sessions per week to "risk sorting and plan optimization", reducing the incidence of major project risks by 60%.

Quadrant 3 (urgent but not important): Such as "temporary meeting invitations" and "non-core demand consultations", which can be addressed by "authorizing team members to handle" or "batch replies (e.g., centralized processing at 15:00 daily)" to reduce time proportion.

Quadrant 4 (not urgent and not important): Such as "meaningless group chat spamming" and "repeated report beautification", which must be resolutely eliminated.

2.4.2 Practical Skills for Project Time Management

- Milestone backward scheduling: Take the project deadline as the end point, reverse-calculate the completion time of each milestone, and further decompose into weekly/daily tasks. A trade show project supervisor took the "exhibition opening day" as the end point, reverse-calculating nodes such as "venue setup completion (-3 days) → material arrival (-7 days) → guest confirmation (-15 days)" to ensure controllable progress.
- Time "blocking" management: Divide each day into "focus blocks" (for core work such as scheme design and risk review), "collaboration blocks" (for communication and coordination such as meetings and inter-departmental docking), and "flexible blocks" (for handling sudden demands). A supervisor set 9:00-11:30 a.m. as "focus blocks", turning off communication software to focus on decision-making, improving efficiency by 30%.
- Progress tracking tools: Update task progress in real-time through Gantt charts, setting "early warning lines" (e.g., triggering reminders when delays reach 20%). A project management system can automatically push "delayed task lists", enabling supervisors to hold 15-minute "quick coordination meetings" daily, reducing the average task delay rate from 15% to 5%.

2.5 Team Collaboration Capability: The "Power Source" of Project Execution

The core of project success is "team synergy". Project supervisors need to break "individual heroism", build collaboration mechanisms, and stimulate members' potential to achieve "1+1>2" for the team.

2.5.1 Four Pillars of Team Collaboration

- Role complementation mechanism: Allocate roles according to members' strengths to form a "skill closed loop". In a software development project, the supervisor formed a team with "an architect (good at system design), programmer A (good at performance optimization), tester (good at user experience), and product manager (good at demand conversion)", improving module docking efficiency by 25%.
- Communication and collaboration platform: Establish "high-frequency, transparent, and efficient" communication channels. For example, a project adopted a combination model of "10-minute daily stand-up meetings (synchronizing progress/issues) + weekly review meetings (optimizing processes) + instant messaging groups (resolving sudden problems) + shared documents (accumulating information)", reducing information synchronization lag by 60%.
- Incentive and feedback system: Adopt "material + spiritual" dual incentives. Materially, link project bonuses to "contribution + collaboration" (rather than just individual performance); spiritually, affirm value through methods such as "weekly star" and "achievement wall display". A project supervisor set up a "best collaboration award" to recognize members who "proactively helped solve problems in other modules", significantly improving the team collaboration atmosphere.
- Conflict resolution capability: Conflicts inevitably arise from "differences in demand understanding" or "disputes over responsibility division". Supervisors must "focus on issues rather than

people" and concentrate on "how to solve problems". For example, when the development team and testing team disputed the "bug definition standards", the supervisor organized both parties to jointly formulate a "Bug Classification Standard" (e.g., "blocking level", "general level", "optimization level"), reducing subsequent disputes by 80%.

2.5.2 Practical Case of Building a Highly Collaborative Team

A Huawei project team implemented "pair working system": members were paired to jointly take charge of the entire process of "development + testing + launch" for one module, requiring "when one party encounters problems, the other must assist in solving them". This mechanism increased team problem-solving speed by 40%, shortened the growth cycle of new employees by 50%, and significantly improved project delivery quality.

2.6 Upward Management Capability: The "Bridge" for Resource Acquisition

The core of upward management is "building trust, aligning goals, and securing support with superiors" rather than "flattery". Project supervisors need to make superiors "supporters" rather than "obstacles" through "proactive communication, value presentation, and risk sharing".

2.6.1 Three Key Actions for Upward Management

- Pre-emptive expectation management: Before project initiation, clarify "goals, resources, and risk bottom lines" with superiors to avoid "requesting additional personnel/funds halfway through". A project supervisor submitted a "Resource Requirement List" during project approval, quantifying that "adding one data analyst can shorten the project duration by 15%", gaining superior support.
- Structured reporting: Reporting should follow "conclusion first + data support + proposal suggestions", organizing content with "pyramid thinking" (top layer: core conclusion; middle layer: supporting arguments; bottom layer: specific data). For example, when reporting progress, instead of saying "the project is a bit slow", say "current progress is 10% behind schedule due to insufficient XXX resources. It is recommended to activate alternative suppliers, which can recover progress within 3 days with a cost increase of no more than 5%".
- Risk-sharing mechanism: When discovering major risks, do not hide or avoid them. Timely synchronize "risk impact + measures taken + required support" to superiors, allowing sufficient time for resource coordination. A project faced potential delays due to policy adjustments. The supervisor reported to superiors 7 days in advance, jointly promoting an "inter-departmental special coordination meeting", resulting in a delay of only 2 days (far below the expected 10 days).

2.6.2 Guidelines for Avoiding Pitfalls in Upward Communication

- Do not be a "problem transmitter": When reporting problems to superiors, attach "at least 2 solutions" instead of simply complaining.
- Grasp the communication rhythm: Report regular progress "periodically" (e.g., once a week), key nodes "emphatically", and sudden risks "immediately" to avoid "information overload" or "information lag".
- Communicate in "superiors' language": Non-technical superiors focus more on "project value" (e.g.,

benefits, risks) rather than technical details. For example, instead of saying "we adopted the XXX framework", say "through technical optimization, system response speed has increased by 50%, and customer satisfaction is expected to improve by 12%".

2.7 Leadership: The "Lighthouse" of Project Direction

Leadership is the influence to "make teams follow voluntarily", different from management power "based on authority orders". Project supervisors' leadership is reflected in "being able to point out directions, solve problems, and empower others".

2.7.1 Three Manifestations of Project Supervisors' Leadership

- Strategic focus: Amid project fluctuations (e.g., demand changes, resource cuts), 坚守 core goals and avoid "blind adjustments". A new energy project faced cost overruns due to rising raw material prices. The supervisor rejected the proposal to "reduce material standards" and instead controlled costs through "optimizing design schemes + bulk purchasing to lower prices", ultimately gaining high recognition from customers for the product.
- Responsibility spirit: "Take responsibility first, then solve problems" when facing issues. After a project launch had vulnerabilities, the supervisor first apologized to the customer, organized the team to fix it within 48 hours, and during the subsequent review, "first reflected on the flaws in his own approval process" before analyzing team execution issues, which instead enhanced team cohesion.
- Empowering others: Create growth opportunities for members (e.g., letting new employees take charge of sub-modules, involving key members in decision-making). A supervisor "let go" midway through a project, allowing team members to lead "customer demand review meetings" with only supplementary input, enabling rapid capability improvement—60% of members later independently took charge of projects.

2.7.2 Transformation Path from "Manager" to "Leader"

- From "control" to "empowerment": Reduce "micromanagement" and enable team autonomous decision-making through "clear goals + authorized trust". An agile project supervisor delegated authority such as "demand priority sorting" and "task allocation" to the team, focusing on "aligning business goals + solving inter-departmental obstacles", increasing team enthusiasm by 30%.
- From "instruction" to "guidance": When members make mistakes, guide reflection instead of blaming. For example, when a member caused rework due to missing requirements, the supervisor helped them establish a "demand double-check mechanism" through questions like "what process issues did this oversight expose? How to avoid it next time?", preventing similar problems thereafter.

3. Process-Oriented Management: The "Ballast Stone" of Project Efficiency

The core pain point of project management is "unstable results"—the same team may succeed or fail in similar projects, the root cause lies in "relying on personal experience rather than standardized processes". Process-oriented management ensures controllable and replicable project quality and efficiency by "solidifying successful experiences, clarifying operating standards, and reducing human deviations".

3.1 Core Value of Processes in Project Management

A process is "a series of standardized steps designed to achieve specific goals", with irreplaceable value in project management.

3.1.1 Processes as "Experience Inheritors"

If successful experiences of excellent projects only exist "in old employees' minds", personnel turnover will lead to "repeated mistakes". Processes can solidify "successful practices" and "pitfall avoidance guidelines" into text, enabling new members to quickly get started. Huawei's "cabling process" is a typical case: in early Huawei projects, power cable and alarm cable bundling relied entirely on employees' experience, and new employees often caused equipment failures due to "non-standard bundling". Later, Huawei solidified details such as "bundling order (power first, then alarm), color distinction (colored cables outside), and no crossing" into processes. New employees could reach the level of old employees after 2 days of training, reducing equipment failure rates by 70%. In contrast, a company's "new product testing process" lacked written specifications and relied solely on "oral instruction from the testing team leader". After the leader resigned, the new testing team missed key testing points, causing 3 major bugs after product launches, resulting in direct losses exceeding one million yuan.

3.1.2 Processes as "Collaboration Adhesives"

The biggest challenge of inter-departmental projects is that "each department has its own working logic". Processes can unify "collaboration language", clarifying "who does what, when, and delivers what results", reducing buck-passing. In a Shenzhen enterprise's "from lead to contract" project, sales, technical, and legal departments frequently conflicted over "responsibility division" (e.g., sales complained "technical proposals are submitted too slowly", while technical teams said "sales demands are unclear"). Later, they jointly sorted out an end-to-end process: clarifying nodes such as "sales provide demand list (T+1 day) → technical output draft proposal (T+3 days) → legal review (T+2 days)", marking "responsible department, delivery standards, and delay handling mechanisms" for each link. After process implementation, inter-departmental collaboration efficiency increased by 50%, and the contract signing cycle shortened from an average of 20 days to 12 days.

3.1.3 Processes as "Risk Firewalls"

Many project risks (e.g., substandard quality, schedule delays) stem from "missing key links". Processes avoid risks in advance by "setting control points". The "annual repair process" of the Dujiangyan Irrigation Project is a model of ancient project processes: Li Bing and his son solidified details such as "deepening the beach (dredging the riverbed to the lying iron) and lowering the weir (controlling the height of the Feisha Weir)" into processes, which have been implemented annually, enabling the project to function continuously for over 2,000 years (Liu, 2004). This enlightens modern projects: "quality control points" in processes (e.g., test case review, pre-launch inspection) are like "lying iron", the bottom line ensuring project quality.

3.2 Implementation Path of Project Process-Oriented Management

Process-oriented management is not "achieved overnight" but requires a cycle of "design → execution → optimization". Ren Zhengfei's proposed "first rigid implementation, then optimization, and finally solidification" is a proven effective path.

3.2.1 Step 1: Rigid Implementation — "Follow first, understand later"

In the early stage of new process implementation, teams must be required to "strictly follow the process", even if they feel it is "unreasonable". The reason is that new processes often integrate industry best practices, and the initial "sense of unreasonableness" may stem from "unfamiliarity" rather than "actual flaws in the process". When Huawei introduced the IPD (Integrated Product Development) process, Ren Zhengfei clearly required "no naive innovation within 5 years; even if the process is considered unreasonable, it must be implemented". Because IPD summarized decades of experience from enterprises like IBM, Huawei's initial "discomfort" stemmed from "being accustomed to old ways". Through "rigid implementation", Huawei's team gradually understood the value of the process and began partial optimization after 5 years, ultimately building an industry-leading R&D process system.

When promoting new processes (e.g., "demand review process", "testing process"), project supervisors can adopt a "three-stage rigid implementation method": ① Organize full-team training to ensure "knowledge of process steps"; ② Assign "process supervisors" for on-site supervision in the early stage to correct deviations; ③ Incorporate process execution into assessments to enforce habit formation.

3.2.2 Step 2: Optimization — Identify "Improvement Points" in "Execution"

Processes are not "unchangeable dogma" but need continuous optimization based on project characteristics and team habits in practice. However, optimization must be "data-based and value-focused" to avoid "changing for the sake of change".

There are three core dimensions for optimization as follows. Efficiency optimization: Eliminate "non-value-adding links". A project's "approval process" originally required signatures from 5 departments. Analysis revealed that "2 departments only 'informed' rather than 'decided'", so the process was optimized to "copy these 2 departments", shortening approval time from 3 days to 1 day. Risk optimization: Supplement "missing control points". An event project had an accident due to the "absence of a 'venue safety inspection' link". The process was optimized to add a node of "special inspection by the security department 24 hours before the event", with no subsequent safety issues. Adaptation optimization: Make processes more suitable for team characteristics. A project team mainly composed of "post-95s" had low execution rates for the original "text-only process". After optimization to "graphic + short video demonstrations", the execution rate increased to 90%.

Optimization steps: ① Collect "process execution feedback forms" at each stage (recording "stuck points" and "suggestions"); ② Hold "process optimization meetings" to demonstrate the necessity of optimization with data (e.g., "average time-consuming of a link", "number of problems caused by the link"); ③ Pilot optimization plans on a small scale and promote them full-process after verification.

3.2.3 Step 3: Solidification — Make "Optimization Results" the "New Standard"

Optimized processes must be "solidified into text, incorporated into training, and linked to assessments"

to avoid "processes disappearing with personnel changes".

What follows are three key actions for solidification. Documentation: Formally document process steps, responsibility division, and control standards (e.g., "Project Demand Review Process V2.0") and upload to shared platforms for full-team access. Training integration: Incorporate new processes into "new employee training" and "project kick-off meetings" to ensure every member "knows, understands, and can use" them. Assessment integration: Include "process execution rate" in team KPIs (e.g., "demand review process execution rate ≥ 95%", "testing process compliance rate ≥ 90") to ensure process implementation through systems.

3.3 Design and Practice of Key Project Processes

Project management involves multiple links, requiring focus on designing core processes for the full lifecycle of "initiation → planning → execution → monitoring → closure" to ensure "rules to follow" at each stage.

3.3.1 Project Initiation Process: Determine Direction and Clarify Boundaries

The core of the initiation stage is to "avoid blind start", including the following processes. Demand review link: Organize a tripartite review involving "customers, business, and technical teams" to clarify "whether demands are clear, achievable, and valuable", outputting a "Demand Confirmation Form" (signed by all three parties). Feasibility analysis link: Evaluate from four dimensions—"technology, resources, cost, and risk"—outputting a "Feasibility Report" to clarify "whether the project is worth doing". Project charter formulation link: Clarify "project goals, scope, key stakeholders, and success criteria", signed by initiators and supervisors as the "constitutional document" of the project. An enterprise's "CRM system project" skipped "demand review" and started directly, leading to customer complaints of "this is not the function I want" halfway through development, increasing rework costs by 30%. After strictly implementing the initiation process, the demand deviation rate dropped from 25% to 5%.

3.3.2 Project Execution Process: Focus on Details and Ensure Quality

The core of the execution stage is to "advance as planned and ensure quality", requiring focus on designing the following processes. Task allocation process: Decompose tasks through WBS, clarify responsibilities with the RACI matrix, and output a "Task Allocation Table". Quality control process: Set "key node reviews" (e.g., "design draft review, test case review, pre-launch review"), with each review requiring "standards, records, and improvement measures". Change management process: Demand changes require "submitting applications → assessing impacts (on time/cost/quality) → approval (e.g., major changes requiring initiator approval) → updating plans" to avoid "arbitrary changes" causing project out-of-control. A software development project reduced "unapproved changes" from 30% to 0 through the "change management process", effectively controlling progress and costs.

3.3.3 Project Closure Process: Summarize Well and Promote Improvement

Closure is not "project end" but a key stage for "experience accumulation", including the following processes. Outcome delivery link: Transfer "project outcomes, documents, and training materials" to

customers, signing an "Acceptance Report". Review and evaluation link: Organize the team to hold a review meeting on "success experiences + failure lessons", outputting a "Project Review Report" (including "reusable processes" and "issues to be improved"). Data archiving link: Classify and archive "demand documents, design schemes, test reports, and review reports" to form a "project knowledge base". Huawei requires each project to output a "lessons learned list" after closure and update it to the company's process library, enabling subsequent projects to "avoid detours"—an important reason for the continuous improvement of Huawei's project success rate.

4. Communication and Coordination: The "Lubricant" of Process-Oriented Management

The essence of project management is "solving problems through communication". However, communication without "focus, standards, and feedback" degenerates into "ineffective wrangling". Process-oriented communication ensures "efficient, accurate, and result-oriented" communication by "clarifying communication goals, channels, and standards".

4.1 Three Core Principles of Project Communication

4.1.1 Timeliness Principle: "No Delay" in Information Transmission

Many project problems stem from "information lag": customer demand changes not timely synchronized to the technical team, leading to rework; insufficient resources not reported timely, causing schedule delays.

Practical methods for timely communication are as follows. Establish an "information transmission list": Clarify "which information (e.g., progress, risks, changes) needs to be transmitted to whom, through which channel, and within what time". For example, "risk information" must be synchronized to "project team members, superiors, and customer contacts" within 2 hours through "instant messaging + phone calls". Use tools to improve efficiency: Synchronize task progress in real-time through project management software (e.g., Teambition, Jira), setting "automatic reminders" (e.g., automatically pushing messages to responsible persons and supervisors when tasks are delayed). A project once had the technical team develop for an extra 3 days due to "untimely synchronization of customer demand changes". After implementing the "information transmission list", similar problems decreased by 90%.

4.1.2 Accuracy Principle: "No Distortion" in Information Transmission

Distorted information transmission leads to "useless work". For example, a customer saying "the interface should be simple" was transmitted to the design team as "the interface should be monotonous", resulting in outcomes not meeting expectations.

What follows are methods to ensure accuracy. Adopt "pyramid thinking" for expression: State conclusions first, then arguments, and finally details. For example, when reporting progress: "Conclusion: Current progress is 5% behind schedule; Argument: Task A is delayed by 2 days due to insufficient XXX resources; Details: Coordination with the XX department for support has been initiated, with progress expected to be recovered within 3 days". "Paraphrasing confirmation" mechanism: After receiving information, paraphrase it in your own words (e.g., "Do you mean...?"). In a project, after receiving the

demand for "optimizing the login process", the technical team paraphrased, "You hope to reduce the login steps from 3 to 2, right?", avoiding "wrong optimization direction". Control information volume: Follow the "7±2 principle" (no more than 7 core information points transmitted at a time), with complex information delivered in batches. For example, when reporting risks, first present "the 3 most urgent risks" instead of listing 10 at once to avoid receiver forgetfulness.

4.1.3 Positivity Principle: Transmit "Constructive Information"

Difficulties and conflicts are inevitable in projects. Communication should "focus on problem-solving rather than complaining and blaming", transmitting "positive energy in line with value laws". Huawei's concept of "never letting Lei Feng suffer" is a model of positive communication: by clarifying that "contributors are rewarded", it motivates employees to collaborate proactively.

Project supervisors can learn from the following in communication. Replace "complaints" with "solutions": Instead of saying "this demand is impossible to fulfill", say "This demand currently faces XXX challenges. It is suggested to solve it through XXX. Do you think it is feasible?" Prioritize affirmation, supplement with criticism: Even when pointing out problems, first affirm achievements, then propose improvement suggestions. For example: "You completed Task A very efficiently. If you can synchronize progress in advance for Task B, team collaboration will be smoother."

4.2 Communication Processes for Key Project Scenarios

Different communication scenarios (e.g., meetings, inter-departmental collaboration, customer communication) require different processes to ensure "targeted and efficient" communication.

4.2.1 Meeting Communication Process: Control Time and Deliver Results

80% of project meetings are "ineffective" and require process control. Pre-meeting preparation: Clarify meeting themes, agendas, participants, and pre-preparation materials, sending notifications 24 hours in advance (no "temporary meetings"). In-meeting control: Appoint a host (to control time) and a recorder (to record conclusions), advance according to the agenda to avoid "digression", with each person speaking no more than 5 minutes (extended for key topics). Post-meeting follow-up: Send "Meeting Minutes" within 24 hours, clarifying "resolutions, responsible persons, and completion times". The first agenda of the next meeting is "following up on previous resolutions". By implementing the "nine meeting principles", a project compressed the average meeting duration from 90 minutes to 45 minutes, increasing resolution implementation rate from 60% to 90%.

4.2.2 Inter-Departmental Communication Process: Clarify Responsibilities and Reduce Internal Friction

The core of inter-departmental communication is to "avoid passing the buck". Processes must clarify "liaison persons": each collaborating department designates 1 liaison person responsible for "information transmission and problem coordination" to avoid "anyone can be found, but no one is useful". Focus on "process nodes": when communicating, first clarify "which process link the problem is in", then discuss "how to solve it". For example, when the sales and logistics departments disputed "delivery delays", they first located whether the problem was in the "order review" or "warehouse preparation" link, then solved it targetedly. Establish a "collaboration agreement": sign an "Inter-Departmental Collaboration

Agreement" in advance, clarifying "each department's responsibilities in the process, delivery standards, and delay handling mechanisms" to reduce subsequent disputes. A Shenzhen enterprise standardized inter-departmental communication through "process + agreement", reducing departmental conflicts by 70% and improving collaboration efficiency by 40%.

4.2.3 Customer Communication Process: Build Trust and Ensure Satisfaction

The core of customer communication is "managing expectations and building trust". Processes must include the following three mechanisms. Regular reporting mechanism: Send "Weekly Progress Reports" to customers every week and hold monthly "project review meetings" to proactively synchronize "progress, problems, and next plans". Problem response mechanism: After receiving customer problems, feedback "whether received and when solutions will be provided" within 2 hours to avoid "no response". Change management mechanism: When customers propose demand changes, follow the process of "assessing impacts → quoting → confirmation" to avoid "free overtime" or "arbitrary rejection". A project supervisor increased customer satisfaction from 75 to 92 points through "weekly progress reporting + rapid problem response", subsequently securing 3 renewal projects.

5. Conclusion

As the "primary responsible person" for project success, project supervisors' competencies and management models directly determine project quality, efficiency, and value. In the complex and changing business environment and the still-improving education and management paradigms, single capabilities or empiricism can no longer meet demands. A "seven core competencies + process-oriented management" dual-drive system must be constructed: from the capability dimension, project supervisors need to possess seven competencies—"overall control, business understanding, task decomposition, time management, team collaboration, upward management, and leadership"—to balance "hard management" and "soft coordination"; from the management model dimension, process-oriented management must be implemented through the path of "first rigid implementation, then optimization, and finally solidification", enabling projects to move from "relying on personal experience" to "relying on standard processes", achieving stable and replicable quality and efficiency.

In the future, as project complexity increases, project supervisors must "take capabilities as the foundation and processes as the guideline", finding a balance between "change" (environmental and demand changes) and "constancy" (process standards and core capabilities), ultimately achieving the goal of "every project creating value and every team growing continuously".

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