NPM methodology

Network-based project management – for industrial investments

TRIVIA INDUSTRY Technology Integrator and Contractor Ltd. (TID)

2025 · rev 000 · Management study for potential industrial customers

What is TID NPM and what does it offer to industrial investment?

1. Network-based, agent-based system

It organizes all activities as separate, yet integrable agents. The agents are arranged in a matrix and cover the entire operation of the project.

2. Four-phase operating cycle (EDVE)

All agents run in the same order: Preparation → Decision → Execution → Control. Unified regulation, transparent powers.

3. Two-axis matrix structure

Ordinate = activity content (product, money, communication, document, contract). Abscissa = stakeholder / operational role (sales, procurement, cooperation, compliance, inventory, development).

4. Modularly parameterizable organization

Agents can be divided into mandatory and optional modules; they are designed to be an organizational unit that can be adapted to the size and complexity of the project.

5. IT-integrable, development-free implementation

MS Planner, Zoho Projects, ClickUp, Notion, Wrike, MS Project Online – AI and automation (Power Automate, Copilot) can be integrated directly.

All NPM agents follow the same four-phase lifecycle

EDVE is the internal operational standard for agents. Every functional module – be it contract management, finance, manufacturing or compliance – goes through the same four steps, creating a unified language and auditability for the organization.

E. Preparation

Documenting the subject, requirements, responsibilities, templates, legal/technical frameworks and deadlines. Creating the prerequisites for the process.

D. Decision

Internal approval, commitment, assignment of roles, finalization of specifications. Formal act of the management layer.

V. Implementation

Operational processing: documents, physical movements, communication, contract fulfillment. The actual stage of processing.

E. Inspection

Auditing, deviation management, quality feedback, recording, corrective action. The final activity of the management layer.

Agents organized along two axes provide full coverage of the project

NPM is a systematic methodology: all project activities are organized into a single, two-dimensional matrix. Its elements are agents, each of which can be interpreted independently, yet fit into the entire organization with a unified logic.

Ordinate (↓) – content axis

What is the object of the agent? Product, money, communication, document, contract. The ordinate gives the nature of the flow or state being handled.

Abscissa (→) – role axis

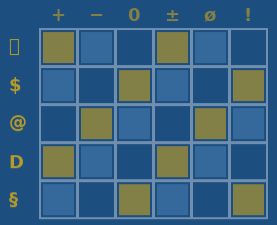
Who or what context is it related to? Sales, procurement, collaboration, compliance, inventory, development. The dimension of the operational relationship system.

Cell = agent

The intersection of the ordinate and abscissa is a specific, four-phase operating module that can be independently controlled, IT-mapped and audited. The entire matrix covers the operation of the project.

30

modul · 5 × 6



Product distribution agents

5 ordinates × 6 abscissas = 30 modules to cover the entire distribution cycle

The intersection of the ordinates (5 flow types) and abscissas (6 roles)

Ordinate ↓ / Abscissa →	Sales (+)	Procurement (–)	Collaborations (0)	Compliance (±)	Stocking (ø)	Development (!)
1. Product (↗)	1.1	1.2	1.3	1.4	1.5	1.6
2. Money ($)	2.1	2.2	2.3	2.4	2.5	2.6
3. Communication (@)	3.1	3.2	3.3	3.4	3.5	3.6
4. Document (D)	4.1	4.2	4.3	4.4	4.5	4.6
5. Contract (§)	5.1	5.2	5.3	5.4	5.5	5.6

Six abscissas – complete management of physical asset and product flow

1.1 Sales (+)

Customer handover: configuration, partial handover scheduling, physical handover, customer protocol, handling of defective performance. Proven product path.

1.2 Procurement (–)

Supplier product: request for quotation, contract conclusion, receipt, quality/quantity control, handling of non-conforming goods.

1.3 Collaboration (0)

Consortium/partner handovers: common product lists, interfaces, mutual deliverables, alignment with milestones.

1.4 Compliance (±)

Regulatory/standard compliance: certification requirements, explosion-proof equipment, pressure vessels, compliance audit, recertification.

1.5 Stocking (ø)

Policy (FIFO/LIFO/JIT), storage capacity, RFID/QR identification, min/max levels, inventory, ERP/MES integration, variance management.

1.6 Development (!)

Prototype, pilot production, zero series, R&D product flow, testing movements, development logistics audit.

Six abscissas – full control of the project's financial flows

2.1 Sales (+)

Revenue side: pricing, partial invoices, final invoice, factoring, payment morale, cash flow balance. Regular inflow.

2.2 Procurement (–)

Expense side: cash-flow planning, supplier payment terms, payment prioritization, payments, escalation protocol.

2.3 Collaboration (0)

Partner accounting: cost sharing, advance payments, revenue-share, joint audits, resolution of partner disputes.

2.4 Compliance (±)

Tax, accounting, AML, subsidy compliance: NAV/ÁSZ/EUTAF audit support, authorization thresholds, document generation.

2.5 Stocking (ø)

Inventory value, FIFO/LIFO valuation, inventory financing (factoring/bank guarantee), accounting assigned to inventory movements.

2.6 Development (!)

R&D cost structure, return calculation, subsidies, internal allocation, capitalization, amortization requirements, ROI measurement.

Six abscissas – structured, documented information flow to all actors

3.1 Sales (+)

Customer relationship matrix: sending offers, question-answer, kick-off, status reports, SLA measurement, complaint management.

3.2 Procurement (–)

Supplier tender, question-answer, production status reports, delivery coordination, response time SLA, escalation.

3.3 Collaboration (0)

Partner workspace, joint coordination, on-site logs, digital protocols, conflict management, partner KPI.

3.4 Compliance (±)

Support for regulatory consultation, submissions, compliance audits, mandatory data reporting, and deadline notifications.

3.5 Stocking (ø)

Internal warehouse communication, inventory reports, automatic notifications, inventory level alerts, inter-warehouse coordination.

3.6 Development (!)

Sprint review, version tracking, bug ticket, change request, testing feedback, developer communication platform.

Six abscissas – version-controlled, auditable document management

4.1 Sales (+)

Offers, technical annexes, draft contracts, calculations, version control, approval workflow, delivery confirmation.

4.2 Procurement (–)

Request for quotation, order, technical request, supplier confirmation, delivery note, archiving, authorization management.

4.3 Collaboration (0)

Negotiation protocol, opinion-taking, joint design documents, shared library structure, multi-party version management.

4.4 Compliance (±)

Official notification, certificate, declaration of conformity, electronic signature, time stamping, certified archiving.

4.5 Stocking (ø)

Receipt slip, delivery note, movement summary, inventory reconciliation, scrapping report, VAT/accounting compliance.

4.6 Development (!)

Technical concept, validation procedure, test protocol, IP protection, confidentiality, copyright, version and rights management.

Six abscissas – full lifecycle management of legal relationships

5.1 Sales (+)

Customer contract: offer, template terms, legal/financial/technical approval, amendment, litigation preparation, closing.

5.2 Procurement (–)

Supplier contract: penalty, performance criteria, supplier selection, signing authority, audit, qualification update.

5.3 Collaboration (0)

Consortium, subcontract, framework agreement: purpose-based, mutual performance, partner qualification, final auditing.

5.4 Compliance (±)

EHS, construction, labor, environmental clauses, approval based on official expert opinions, legal correction.

5.5 Stocking (ø)

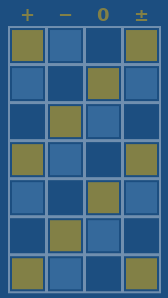
Consignment, hire warehouse, logistics service SLA, ownership / insurance / warranty issues, contractual risk.

5.6 Development (!)

R&D cooperation, license, OEM/ODM, technology transfer, result sharing, IP protection, confidentiality, patent.

28

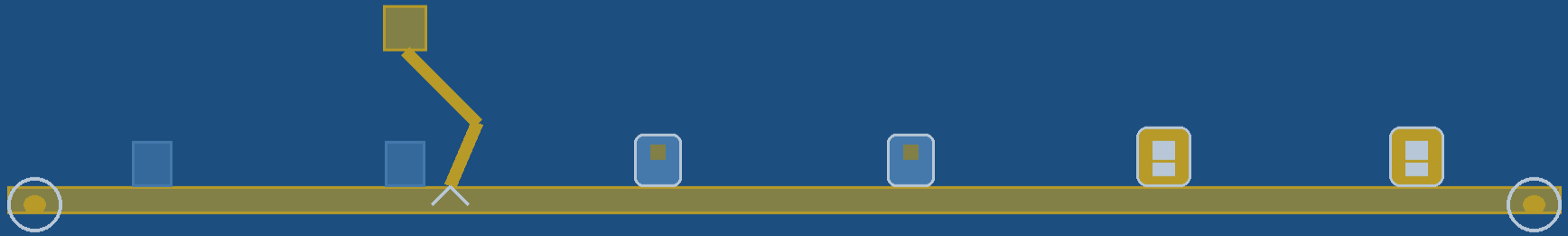
modul · 7 × 4



II

Product manufacturing agents

7 ordinates × 4 abscissae = 28 modules for the entire production chain



Seven production ordinates × four stakeholder abscissae

Ordinate ↓ / Abscissa →	Sales (+)	Procurement (−)	Collaboration (0)	Compliance (±)
6. Planning (↗')	6.1	6.2	6.3	6.4
7. Production (↗')	7.1	7.2	7.3	7.4
8. Implementation (↗')	8.1	8.2	8.3	8.4
9. Operation (↗')	9.1	9.2	9.3	9.4
10. Maintenance (↗')	10.1	10.2	10.3	10.4
11. Shipping (↗')	11.1	11.2	11.3	11.4
12. Counseling (↗')	12.1	12.2	12.3	12.4

Four abscissas – full coverage of the design cycle

The design agent translates customer and technical requirements into plans suitable for implementation, involving partners and authorities.

6.1 Sales / 6.2 Purchasing

Customer: design tender, milestone coordination, approval rounds, customer design handover. Procurement: manufacturability/material usage control, supplier manufacturing drawing validation.

6.3 Cooperation

Common design platform, designation of a lead designer, legal framework for partner task and data sharing, shared version control, consolidated technical opinion.

6.4 Compliance

Incorporation of legal/standard/authority requirements, consultation with specialist authorities, filling gaps, archiving approved plans. Prevents construction obstacles.

Four abscissas – management of production processes

The manufacturing agent translates the design from the technical specification to a physically manufactured product, in accordance with the partners and the compliance system.

7.1 Sales / 7.2 Purchasing

Customer: customer-tailored production, scheduling, partial delivery, customer satisfaction. Procurement: bid evaluation (price-deadline-quality), certificate verification, complaint management.

7.3 Cooperation

Partnership role assignment (MoU/SLA), joint quality assurance, milestone reporting, joint acceptance, corrective action with joint protocol.

7.4 Compliance

Manufacturing environment licensing, raw material origin, legal compliance of installed products, independent certification, auditing, monitoring of legal changes.

Four abscissas – organizing on-site construction

The implementation agent manages the work phase of integrating the manufactured elements on site, ensuring both customer handover and regulatory compliance.

8.1 Sales / 8.2 Purchasing

Buyer: area transfer, partial transfer, trial operation, billing rights, customer complaints. Procurement: subcontractor selection, performance security, partial invoice, contract amendment.

8.3 Cooperation

Co-contractor/integrator/engineering office relationship: joint resource planning, responsibility matrix, mutual SLA, escalation, partner assessment. Division of labor and recording of interface points.

8.4 Compliance

Construction supervision, fire protection, environmental protection, occupational safety: on-site audit, contractor training, protective measures, final official documentation, risk assessment.

Four abscissas – long-term, documented operation of the facility

The operating agent is responsible for the service-level operation of the system delivered after the investment, fully covering life and operational safety requirements.

9.1 Sales / 9.2 Purchasing

Customer: SLA, service package, operations manual, performance report. Procurement: materials, subcontractor capacity, warranty, inventory management, cost control.

9.3 Cooperation

Outsourcing partners: task sharing, joint control, cost/revenue sharing, partner SLA, escalation. Structured coordination of operational operations.

9.4 Compliance

Operating permits, safety/environmental principles, mandatory inspections, regulatory data reporting, risk assessment updates.

Three additional product production agent groups – a compact overview

10.1–10.2 Maintenance (sales/purchase)

Preventive and incident maintenance with SLA: cycles, intervals, spare parts, response time. Supplier pre-qualification, warranty obligations, service protocol.

10.3–10.4 Maintenance (compliance)

Joint maintenance with partners (joint SLA), legal and standard requirements, mandatory cycles, regulatory inspection, certification report.

11.1–11.2 Shipping (sales/purchases)

Buyer: Incoterms, packaging, waybill, insurance, tracking. Purchasing: import, customs clearance, receiving, discrepancy management, carrier assessment.

11.3–11.4 Shipping (cooperation/compliance)

Consolidated transport, joint freight assignment. Customs, ADR/RID/IATA, certificate of origin, customs declaration, official audit, change monitoring.

12.1–12.2 Consulting (sales/purchase)

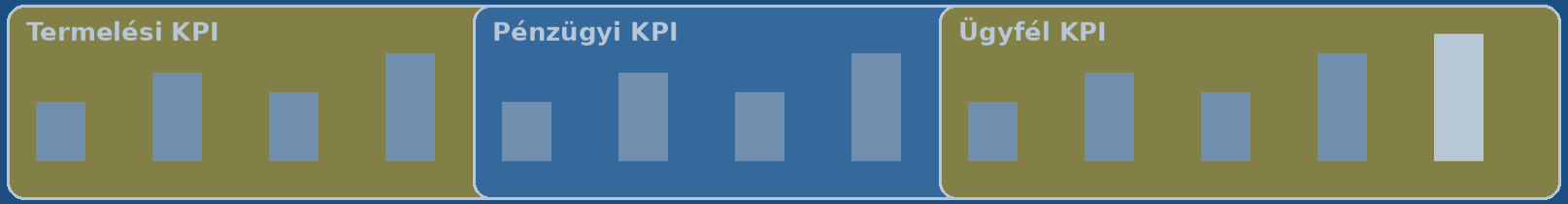
Buyer: technical/economic/strategic consulting with SLA, performance indicators. Procurement: external consultant SOW, consultant qualification, audit of results document.

12.3–12.4 Consulting (cooperation/compliance)

Tripartite consulting agreement, joint learning-recording. Data protection, industrial law, conflict of interest, declaration of independence, ethical audit.

Project management agents

Production (≡) · Management (N_o) · Customer Relations (¤)



Three ordinates (management areas) × seven abscissae (management layers)

Ordinate ↓ / Abscissa →	Production (≡)	Farming (N_o)	Customer contact (¤)
+ Steering insurance (→)	13.+ project management	14.+ project management	15+ project management
0 Engine & infrastructure (►)	13.0 tool/resource	14.0 tool/resource	15.0 device/resource
1–5 Flow systems (↗,$,@,D,§)	13.1–13.5 stand-alone systems	14.Σ integrated system	15.Σ integrated system

Seven agents for complete control of the production vertical

13.+ Production project management

Technical/economic/scheduling basic data of the investment, feasibility study, project management structure, baselines, closure report.

13.0 Production infrastructure

Tools, machines, facilities, human resources. Maintenance and capacity maintenance strategy, asset management report.

13.1 Product system (↗)

Product master, part number, revision, production route, quality assurance, complaint statistics, corrective/preventive measures.

13.2 Financing system ($)

Cash flow, leasing/revolving credit/factoring, budget framework, liquidity, loan portfolio, coverage and profitability ratio.

13.3 Coordination system (@)

Workday planning, shift scheduling, reporting, escalation, peer relations, information flow, organizational learning.

13.4–13.5 Technology + Regulation

13.4 (D): SCADA/MES/ERP/PLC, data collection, IT security. 13.5 (§): manufacturing contract, warranty, legal audit, risk assumption.

Three agents for the integrated functioning of economic governance

The management agent group builds the company's financial-accounting controlling system, integrating the economic tracking of the four basic flows (product, money, document, contract).

14.+ Management project management

Cost structure, cash-flow forecast, ROI/IRR/NPV, financing strategy (loan/grant/PPP/lease), countersignature order, cost overrun monitoring, project closure.

14.0 Management infrastructure

Planning of real estate, equipment, IT hardware, software licenses, human resources. Cost center, equipment matrix, procurement/maintenance, capacity utilization monitor.

14.Σ Farming system (↗,$,D,§ integrated)

Accounting + controlling: chart of accounts, IFRS/local GAAP, controlling KPI, cost center coverage, plan-actual variance, annual report, audit support.

Three agents for integrated management of the entire customer relationship spectrum

Customer relationship agents cover customer-oriented operations from stakeholder mapping to benchmark-based evaluation, with a controlled introduction of CRM infrastructure.

15.+ Customer relationship project management

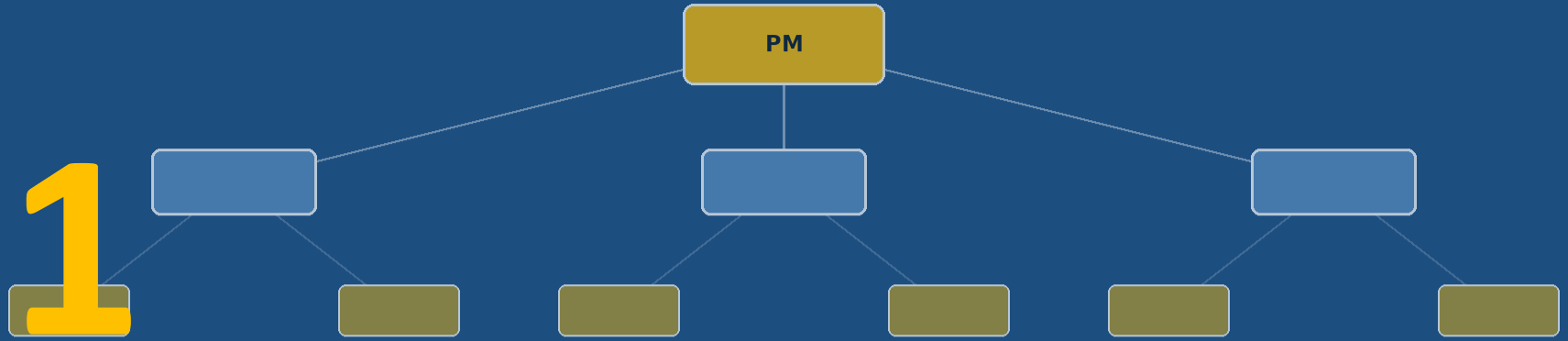
Stakeholder map, contact structure, requirements list, communication channels, milestone handover, customer satisfaction report, development proposal.

15.0 Customer Relationship Infrastructure

Customer portal, helpdesk system, CRM module, customer manager, data protection/SLA levels, customer database, communication templates, incident documentation.

15.Σ Customer Relationship System (↗,$,D,§ integrated)

KPI-based management, benchmark data, competitor comparison, complaint/contract dispute audit, loyalty-enhancing tools, senior management report.



1 Project organization & structure (∏(≡))

6

Modularity · Organizational units · Roles and responsibilities

PM	Tervező	Operatív
Munkacsap.	Beszerzés	Pénzügy
Compliance	Logisztika	Auditor

The basic principle of project organization: a system built from regulated modules

Agents are elementary activities that can be interpreted, controlled and documented independently. When organized into a system, they provide a robust, matrix-based project model that is capable of covering the entire operation, but can also be adapted to the specifics of the project.

Mandatory and optional agents

Some agents are always applicable (contract, finance, coordination), others are optional (advice, compliance document flow, benchmark). Omitting optional ones does not violate integrity, but requires a recalculation of risk.

The advantage of standardized solutions

Regulated, compatible modules enable dynamic compilation tailored to the given topic – facility investment. Flexible organizational structure instead of static.

Digital imaging

Each module has predefined operational, responsibility and management logic. The module structure assigned to elementary activities can be easily integrated into ERP/CRM/PM systems.

Two axes – three organization composition logic

Organizational units can be structured along the ordinate or abscissa – or both. The choice determines the organization's resource requirements, robustness, and level of redundancy.

Ordinate organization (recommended)

By content axis: Cash flow management, Communication coordination, Contract management. This ensures the greatest consistency in operational and management processes.

Abscissa organization

By role axis: sales, procurement, collaboration, compliance. Recognizable to traditional functional systems, but less supportive of the full benefits of the methodology.

Redundant (ordinate + abscissa)

Both axes at the same time. Beneficial for manpower-intensive, but complex, high-risk projects: reduces management risk, increases transparency and accountability.

The procedure assigned to the agent is the basis of the job description.

Each agent has an independent, documented workflow, which is the primary basis for job descriptions. A person's job description consists of the totality of the assigned agents, thus it is structured modularly, covering multiple areas of activity.

Job = procedure of agent(s)

Objective, input-output, scope of responsibility, decision points, implementation rules documented. May be supplemented with a methodological description (regulatory environment, measurement system, tool use, quality criteria).

Division of authority into four segments

Execution: Preparation + Execution. Management: Decision + Control. Structured, documented breakdown for each agent: who is authorized for the given subtask.

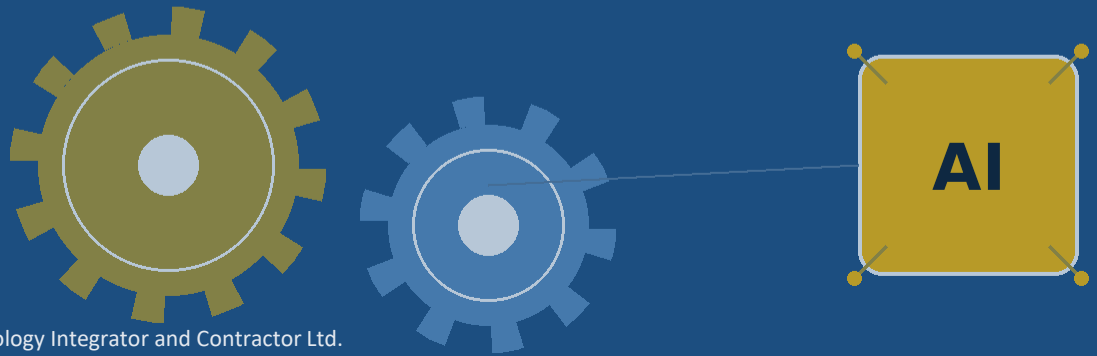
Disjoint organizational levels

Management (decision/control) and execution (preparation/execution) should not be at the same organizational level, except in the smallest integrated models. This ensures ISO-compliant operation.

17

Project IT (∏(i))

PM platforms · Hierarchical agent structure · Automation · AI support



Platforms supporting multi-level hierarchy management – can be parameterized without development

Platform	Main strength	NPM compatibility
Microsoft Planner / To Do	Simple, M365-integrated, fast deployment	Single-axis (basic interface), additional SharePoint/Power Automate recommended
Zoho Projects	Extensible, detailed hierarchy management	Native support for project → subproject → module → task decomposition
ClickUp	Multi-hierarchy, segmented task, custom view	Multi-axis agent segmentation, multidimensional labeling (ordinate/abscissa)
Notion	Relational database approach, unique views	Agent-based data model, flexible report and view configuration
Wrike	Complex project levels, detailed authorization	Agent-based authorization management, multi-level responsibility system
MS Project Online	Multi-level project and WBS structure	Classic WBS view, detailed agent code mapping

Combination of no-code automation + AI-driven decision support

Automation – processes

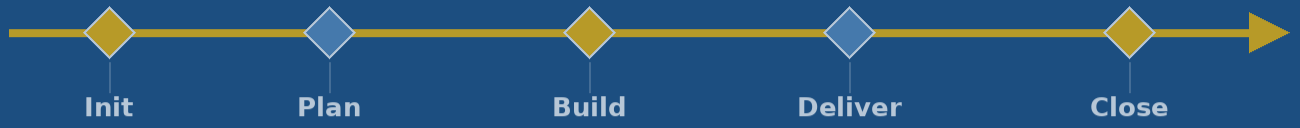
Power Automate, Zapier, Make, Zoho Flow, ClickUp Automations. Template task generation, state change events, process step linking, deadline escalation, automatic project reporting.

AI – decision support

Microsoft Copilot, Zoho Zia, ClickUp AI, Notion AI, ChatGPT API. Job description generation, document summarization, legal/technical control, communication proposal, risk analysis, KPI analysis, natural language query.

Combined application

AI generates feedback email after status change. Automated task generation with AI content. AI tagging and agent assignment when uploading documents. Up-to-date, adaptive, decision-supported system.



Project Execution Plan (∏(PEP))

Strategic Management Document · Agent-Based Restructuring

8

Stratégia	Taktika	Operáció
●	●	●
●	●	●
●	●	●

The NPM-compatible Project Execution Plan

The PEP is a strategic and operational management document: it defines the entire implementation structure, rules and methodology of the project. It is structured along the agents and EDVE phases in an NPM framework – uniform, traceable, auditable, IT-compatible.

01. Scope and purpose

Project objectives, scope, organizational structure, agent tasks, powers, procedures, communication, scheduling, resource allocation. Covers the entire life cycle.

02. Agent × EDVE structure

The classic PEP chapters (goal, scope, schedule, responsibility, communication, quality) are mapped to agents, broken down into four phases. Specific implementation units instead of thematic sections.

03. Software parameterization

PEP is not just a document: a template or workflow can be assigned to each agent, which can be automated, audited, and traced. MS Planner / Zoho / ClickUp parameterization base.

Combining the traditional PEP and NPM systems

The classic PEP stages are transformed into execution units assigned to agents. The responsibility hierarchy is displayed in a breakdown by agent module instead of RACI, and each stage can also be broken down in detail along the EDVE phases.

Module-by-module responsibility system

Instead of RACI, a detailed breakdown of responsibilities and authority by module. Who, in which agent, in which phase (E/D/V/E) is responsible for implementation, decision, and control. Clear, non-overlapping, auditable.

Optional PEP sections

NPM-PEP is not static, but adapts to the size and complexity of the project. Some agents can be omitted, others are included in simplified or expanded versions - regulated but flexible documentation.

Code-based reference

All agents and EDVE segments receive structured code (e.g. [1.3] Sales / Communication Management). Clear mapping of PEP chapter and IT system element; uniform reference, automated document generation, auditability.

T

hi

s

Epilogue & judgment

Competitiveness · Standards · Strategic message

From traditional linear project management to modular agent system

Classic project management follows a sequential logic based on WBS and Gantt. NPM, on the other hand, is a modular, typified and recombinable task architecture: goal-oriented, content-based, and adaptive to industrial complexity.

Scalability and agility

Functional units can not only be defined separately, but can also be combined as desired. Reuse of standard organizational modules, fast job creation, easy audit.

IT support without new software

Common PM and workflow applications (MS 365 Planner, Zoho One, ClickUp, Jira) manage agent-based logic and the four-phase operating cycle with parameters. Low-cost implementation.

Redundant, fault-tolerant organization

For large-volume and high-risk projects, ordinate + abscissa parallel organizational logic is possible. It increases project safety, deliverability, and accountability.

Five main strengths that underpin international competitiveness

Modularity & typability

Activities and responsibilities in an explicit agent structure. For industrial facility projects where complexity and number of participants are high: reduces overlaps, helps with scaling.

IT supportability

No new software development required – template-based parameterization of existing PM tools is sufficient (MS Planner, Zoho, Smartsheet, ClickUp). Cost-effective, fast implementation.

Risk reduction

An organization that can be composed along the ordinate or abscissa – or redundantly both – enhances compliance in complex, regulatory or EU-regulated projects.

Transparent authority

The responsibilities distributed based on the EDVE matrix meet ISO-compatible system requirements. Increases auditability, supports ISO 9001/14001/45001/50001 certification.

AI automation support

Modular, repetitive structure is an excellent basis for AI-driven controlling, template document robots, and offer generation. A springboard for digitalization.

Strategic assessment

NPM is not just a technical tool, but an organizational philosophy. A structured, parameterizable, scalable framework for smart industry, EU infrastructure and ESG projects.

Entry barriers and market positioning

✗ Wrong approach (NOT Lean)

- ✗ High entry complexity – logical depth requires serious PM and system organization maturity.
- ✗ In companies with traditional organizations, there may be serious internal resistance during implementation.
- ✗ Employee training and methodological commitment are necessary – otherwise the system will degenerate into a formality.
- ✗ Few PM applications on the market natively support multidimensional, EDVE matrix agent hierarchies – they need to be customized.

✓ Lean approach

- ✓ EU-competitive, especially in the DACH region, Scandinavia and the Benelux states: high system principles, quality assurance expectations.
- ✓ International benchmark: comparable to elements of the NASA Systems Engineering Handbook, PMI PMBOK 7th edition and INCOSE methodologies.
- ✓ More detailed breakdown of responsibilities and a more complete IT support strategy – than market alternatives.
- ✓ Innovation value: agent matrix + EDVE decomposition + digital extensibility = system integration breakthrough.

The impact of NPM on the four main project performance indicators

It directly supports the achievement of four main quality objectives in facility investment projects: deadline, cost, technical compliance, and documentation.

✓ **Meeting deadlines (acceleration)**

Agent-based logic: precise responsibility, concurrency avoidance, elimination of communication blind spots. Templated logic enables fast activation. Redundant organization reduces the risk of overruns.

✓ **Keeping a budget (savings)**

Management and financial agents provide transparent, scheduled, measurable cash and product flow management. Prevent hidden costs and slippages; realize savings potential.

✓ **Technical quality (conformity)**

Production technology, production control, customer relationship benchmark – all technical activities under control, along clear requirements. Continuous quality improvement, rapid innovation integration.

✓ **Documentation (coherence)**

Modular nature + explicit agents for document and data flow + document-based mapping of decision and control points. Consistent, auditable, traceable project flow.

NPM provides a strategic advantage in the market for facility investment projects – especially where transparency, compliance and adaptability are key requirements.

Appendix – NPM Components

Static state space · Dynamic event space · EXTERN/INTERN synchronous

An operational language that can be understood by both machines and humans

Static components provide the current structure of the enterprise (media, engines, nodes, integration). Dynamic components describe the event-based operation (BSZ/AKM/ÉTK/EGM).

Three principles

Disjointness: unambiguous classification without overlap. Quantization: every object and event is a discrete unit. Time-based: every state and event is time-bound (t).

Unified marking system

Δ…(t) = quantum; x…(t) = time-dependent state; state(t) ∈ {FUT, ACT, HIST} = position-state machine. Medium, motor, node, integration at the same notation level.

Triad synchrony

Mandatory for EXTERN ↔ INTERN boundary events: under the same event ID, the Document (Đ), the Policy Reference (§) and the Financial Position ($ or $') are updated together.

Product · Money · Information – broken down into quantized, state-manageable elements

Medium	Definition and components	Notation
Product (↗)	Goods (↗): quantity/unit of measure/unit price | Services (↗'): result/unit of time/unit price	Δ↗(t), x_↗(t)
Money ($)	Cash ($): currency/nominal value/value date \| Guarantee ($'): guarantee type/nominal value/maturity	Δ$(t), Δ$'(t)
Information (Đ)	Document (Đ): legal entity, version, original/copy | Data (Đ'): schema, record ID, change tracking	ΔĐ(t), ΔĐ'(t)

Four engines: regulation, cohesion, infrastructure, technology

Engine	Components and function	Notation
Regulation (§)	Contract (§): internal obligation | Law (§'): external norm. Interpretation priority: §' → §	Δ§, Δ§'
Cohesion (¤)	Organization (¤): RACI, mandate, procedure | Communication (¤'): channel, message type, SLA	Δ¤, Δ¤'
Infrastructure (⚙)	Assets (⚙): static tangible/virtual | Resources (⚙'): dynamic, capacity-based	Δ⚙, Δ⚙'
Technology (λ)	Information Technology (λ): applications, functions | Database (λ'): schema, identifiers, integrity	Δλ, Δλ'

Network endpoints and connected financial management states

Nodes (CMP)

Relationships (●): Customers (●) ∪ Benchmark (●'). Actors (○): Owners (○) ∪ Partners (○'). Institutions (□): Authorities (□) ∪ Banks (□').

Integrations (ITR)

Management (∮): Finance (∮) ∪ Liquidity (∮'). Supervision (Φ): Accounting (Φ) & Controlling (Φ'). Management (Σ): Decision (Σ) ∪ Control (Σ').

Maintaining discontinuity

The same entity can only be in one set at a time. Role change = new event (Δ…(t)). Each transition of the state machine is recorded with a timestamp and event ID.

Four basic bundles with a uniform syntax and sign system

Bundle	Product (↗)	Money ($)	Information (Đ)	Impact (MTR/CMP/IRN)
BSZ – Procurement	+ (comes in)	− (goes out)	± (mixed)	+ (positive)
AKM – Application (internal)	0 (net none)	0 (no consideration)	± (mixed)	0 (neutral)
ÉTK – Sales	− (goes out)	+ (comes in)	± (mixed)	− (negative)
EGM – Collaboration	± (bidirectional)	± (bidirectional)	± (mixed)	± (mixed)

A closed, auditable trail under an event ID

Each operation runs under a single event ID, with identified input–output references and timestamps. Events act on three flow planes (TMK, PNZ, IFM) and write state to three static spaces (MTR, CMP, IRN).

State machine rules

state(t) ∈ {FUT, ACT, HIST}. Rollback is only interpreted in the direction ACT → FUT, with documented conditions. HIST → ACT is not allowed – a new event must be created.

Disjointness between bundles

A given event is recorded at a given point in time according to the rules of exactly one batch (BSZ or AKM or ÉTK or EGM). Cross-references ensure coherence.

Auditability and automation

The dynamic component system thus written can be directly audited, automated, and measured back to the static state space. A unified operating language for engineering, finance, law, and IT.

A new generation management framework for industrial facility investment projects

NPM (Network-based Project Management) is a network-based, agent-based, EDVE-phased, modularly scalable methodology supported by AI/automation.

✓ **Agent matrix covers the entire project**

I. Distribution (5×6 = 30 modules) + II. Production (7×4 = 28 modules) + III. Management (production/management/customer) + organization/IT/PEP. Unified EDVE cycle for all agents.

✓ **IT-mapping without development**

MS Planner, Zoho Projects, ClickUp, Notion, Wrike, MS Project Online + Power Automate, Copilot, ChatGPT API. Template parameterization and no-code automation are sufficient.

✓ **Strategic competitive advantage**

EU-competitive (DACH/Nordic/Benelux). ISO 9001/14001/45001/50001 compatible. Directly applicable to the management of smart industry, EU infrastructure, ESG projects.

TID is ready for detailed professional consultation and customized NPM implementation diagnostics. — www.triviaindustry.net

TRIVIA INDUSTRY Technology Integrator and Contractor Ltd. (TID)

www.triviaindustry.net

Headquarters: 1021 Budapest, Hűvösvölgyi út 14 Branch: 1037 Budapest, Máramaros út 47

Phone: +36 70 341 5995 & +36 30 996 1940 Email: info@triviaindustry.com

Tax number: 26205494-2-41 | Slogan: industrial systems integration & industrial platform