

Advanced Project and Contract Management: An Integrated Review of Methodology, Procurement, Contractual Governance and Performance Reporting

Adebowale A. Adedokun¹

¹Bureau for Public Procurement (BPP) Nigeria

Publication Date: 2026/08/22

Abstract: Project and contract management have evolved into distinct yet interdependent disciplines that jointly determine the success or failure of capital, infrastructural, and organisational undertakings. This paper presents an integrated conceptual review of four interrelated domains: (i) project management methodology, spanning predictive, adaptive, and hybrid frameworks; (ii) project procurement, appraisal, and performance assessment; (iii) contractual governance, contract management, subcontracting, and construction pricing systems; and (iv) variations, claims, contract administration, and project reporting. Drawing on the established literature of the Project Management Institute, the Association for Project Management, the International Association for Contract and Commercial Management, and leading scholars in construction and procurement management, the paper synthesises normative guidance with practice-based considerations to propose an integrated life-cycle framework linking methodology choice to procurement strategy and contractual control. The review finds that project outcomes are rarely determined by any single practice in isolation; rather, they emerge from the coherence between the chosen delivery methodology, the procurement route, the pricing mechanism embedded in the contract, and the rigour of contract administration and reporting. The paper concludes with recommendations for practitioners and directions for future empirical research, particularly on the comparative performance of hybrid methodologies and target-cost contracting in developing-country infrastructure delivery.

Keywords: *Project Management Methodology; Procurement Planning; Contract Management; Subcontracting; Construction Pricing; Variations and Claims; Contract Administration.*

How to Cite: Adebowale A. Adedokun (2026) Advanced Project and Contract Management: An Integrated Review of Methodology, Procurement, Contractual Governance and Performance Reporting. *International Journal of Innovative Science and Research Technology*, 11(8), 1454-1459. <https://doi.org/10.38124/ijisrt/26aug470>

I. INTRODUCTION

Project management methodology denotes the structured framework of principles, processes, and tools that guide the initiation, planning, execution, monitoring, and closure of a project (Project Management Institute [PMI], 2017). Because projects differ markedly in scale, complexity, and uncertainty, no single methodology serves every context equally well; the approach used by an aerospace agency to commission a space platform is unlikely to be the approach used by a construction firm to erect a warehouse (Wysocki, 2013). Advanced project and contract management therefore requires practitioners to move beyond a generic toolkit and instead select and adapt methodologies, procurement routes, and contractual structures to the specific risk profile of the undertaking.

This paper reviews the discipline across four connected areas of practice. Section 2 examines project management

methodologies and the generic project life cycle. Section 3 addresses project procurement, appraisal, and performance assessment. Section 4 turns to contractual issues, contract management, subcontracting, and construction pricing methods. Section 5 considers variations, claims, contract administration, and project reporting. Section 6 discusses the interdependence of these domains and proposes an integrated framework, and Section 7 concludes with practical recommendations and suggestions for future research.

II. PROJECT MANAGEMENT METHODOLOGIES AND THE PROJECT LIFE CYCLE

➤ *Predictive (Waterfall) Approaches*

The Waterfall model is a sequential, plan-driven approach in which a project progresses linearly through discrete phases—requirements definition, design,

implementation, testing, and deployment—with each phase completed before the next begins (Royce, 1970). Although Royce's original paper on large software systems already cautioned against the strict linearity later associated with his name, the model remains attractive where requirements are stable and well understood, such as in regulated engineering and construction works governed by fixed design documentation (Hendrickson & Au, 2008). Its principal limitation is inflexibility: because verification occurs late in the sequence, defects or misaligned requirements are often discovered only after substantial resources have been committed (Wysocki, 2013).

➤ *Adaptive (Agile) Approaches*

Agile methodologies emerged as a response to the rigidity of Waterfall planning in environments characterised by evolving requirements. The Manifesto for Agile Software Development (2001) articulated the underlying values of iterative delivery, customer collaboration, and responsiveness to change. Scrum operationalises these values through fixed-length iterations ("sprints"), defined roles (Product Owner, Scrum Master, Development Team), and recurring ceremonies such as daily stand-ups and sprint reviews (Schwaber & Sutherland, 2020). Kanban, by contrast, dispenses with fixed iterations in favour of continuous flow, visualised through a task board and governed by work-in-progress limits (Anderson, 2010). Both frameworks prioritise transparency and frequent feedback over comprehensive upfront documentation, and both have been adopted well beyond software development into product and service innovation contexts.

➤ *Process- and Knowledge-Based Frameworks*

PRINCE2 (Projects in Controlled Environments) is a process-driven methodology, widely used in the United Kingdom and across the public sector internationally, that structures projects into defined stages governed by continuous business-justification checks and clearly assigned roles (Office of Government Commerce, cited in Wysocki, 2013). The *Guide to the Project Management Body of Knowledge* (PMBOK Guide), published by the PMI, is not itself a methodology but a knowledge-area framework describing generally recognised good practice across ten knowledge areas and five process groups, from which organisations may derive their own methodology (PMI, 2017). The *Standard for Program Management* extends this logic to the coordinated management of multiple related projects (PMI, 2013).

➤ *The Generic Project Life Cycle*

Notwithstanding methodological differences, most frameworks recognise a common life-cycle logic of initiation, planning, execution and monitoring, and closure, supplemented by continuous improvement (Meredith & Mantel, 2017; Kerzner, 2017).

Initiation establishes the project's strategic rationale. It typically produces a project charter that documents objectives, high-level requirements, stakeholders, and initial risks, and that provides formal authorisation to proceed (PMI, 2017). Stakeholder identification and feasibility

assessment—technical, operational, economic, legal, and scheduling—are completed at this stage to confirm that the initiative merits further investment (Kerzner, 2017).

Planning translates the charter into an executable roadmap. Scope is defined precisely to prevent scope creep; the work is decomposed into a Work Breakdown Structure; a schedule is developed using tools such as Gantt charts and network diagrams; resources are allocated against identified constraints; a budget is estimated; and a risk-management plan, communication plan, quality plan, procurement plan, and change-management plan are prepared (Kerzner, 2017; PMI, 2017).

Execution and monitoring proceed in parallel. Execution is the performance of planned tasks, supported by communication, resource management, quality assurance, risk management, and change control. Monitoring compares actual progress against the baseline through progress tracking, key performance indicator (KPI) measurement, issue identification and resolution, scope control, and quality control, feeding corrective action back into execution (Meredith & Mantel, 2017).

Closing formally concludes the project through deliverable verification, finalisation and archiving of documentation, client acceptance, release of resources, a lessons-learned exercise, and a project closure report (Kerzner, 2017). *Continuous improvement* institutionalises organisational learning by maintaining a lessons-learned repository, reviewing processes, soliciting stakeholder feedback, benchmarking against industry standards, and investing in training and innovation (Rose, 2005). Sustainability considerations—environmental, social, and governance criteria embedded in project selection and delivery—are increasingly incorporated into this improvement cycle (Hansen et al., cited in Silvius & Schipper, 2014).

III. PROJECT PROCUREMENT, APPRAISAL, AND ASSESSMENT

➤ *Procurement Planning and Strategy*

Project procurement is the process of acquiring goods, services, or works from external sources to meet project needs, ranging from the purchase of materials to the outsourcing of specialised functions (Guth & Lochner, cited in Fleming, 2003). Effective procurement planning begins with the identification of procurement needs—quantities, quality standards, and technical specifications—followed by a make-or-buy analysis that weighs cost, in-house expertise, capacity, and time constraints (Sollish & Semanik, 2011). The organisation then selects procurement methods and contract types appropriate to the project's characteristics: competitive bidding, requests for proposals (RFP), requests for quotation (RFQ), or direct negotiation, paired with fixed-price, cost-reimbursable, time-and-materials, or hybrid contract forms (Guth & Lochner, cited in Fleming, 2003).

Supplier and contractor selection follows a structured evaluation—covering qualifications, experience, financial

stability, technical capability, and past performance—often preceded by prequalification or requests for information (Sollish & Semanik, 2011). Risk assessment addresses supplier reliability, quality, and delivery risk, and may be mitigated through backup suppliers or contingency arrangements. A procurement schedule and budget are then aligned with the master project timeline, and clear roles for contract administration are assigned (PMI, 2017). Increasingly, procurement strategy also incorporates ethical and sustainable sourcing criteria, including social responsibility, environmental impact, and compliance with fair-trade and diversity standards (Sollish & Semanik, 2011).

➤ *Project Appraisal and Feasibility Evaluation*

Project appraisal assesses the feasibility, viability, and expected benefits of a project before, during, and after implementation, enabling stakeholders to make evidence-based investment decisions (Gatti, 2013). A feasibility study typically examines technical requirements and resource availability, economic viability (through investment costs, expected returns, net present value, internal rate of return, or payback period), operational compatibility with existing systems, and scheduling constraints (Gatti, 2013). Cost-benefit analysis quantifies capital, operating, and maintenance costs against anticipated benefits such as revenue growth, cost savings, efficiency gains, or improved stakeholder satisfaction.

Risk assessment at the appraisal stage considers market, technical, regulatory, environmental, and project-specific risks, informing mitigation strategies and contingency planning (Chapman & Ward, 2011). Social and environmental impact assessment evaluates effects on communities and ecosystems and proposes mitigation and sustainability measures. Stakeholder analysis identifies parties affected by or capable of influencing the project, assessing their interests and likely influence so that engagement can be planned across the project life cycle (Freeman & Phillips, cited in Freeman, 2010).

➤ *Project Assessment and Performance Monitoring*

Once a project is underway, continuous assessment against defined KPIs and baseline measurements tracks cost performance, schedule adherence, quality, and stakeholder satisfaction (Kerzner, 2017). Monitoring and reporting mechanisms generate periodic status reports summarising achievements, deviations, and recommended corrective actions. Quality assurance is exercised through inspections, audits, and testing against specification. Formal change-management procedures evaluate the cost, schedule, and resource impact of proposed changes before approval, while post-project assessments capture lessons learned to inform future procurement and delivery decisions (Rose, 2005).

IV. CONTRACTUAL ISSUES, CONTRACT MANAGEMENT, SUBCONTRACTING, AND CONSTRUCTION PRICING

➤ *Contractual Issues and Risk Allocation*

A valid contract rests on the classical elements of offer, acceptance, consideration, and mutual intent, and practitioners are well advised to obtain legal review to ensure enforceability (Murdoch & Hughes, 2008). Risk allocation is central to contract drafting: liabilities and responsibilities must be explicitly assigned, supported by indemnification clauses, insurance requirements, and limitation-of-liability provisions calibrated to each party's capacity to manage the relevant risk (Chapman & Ward, 2011). A formal change-management clause specifies how scope, schedule, or budget changes are submitted, evaluated, and approved, while performance-management provisions define deliverables, measurement criteria, and remedies or penalties for non-performance (International Association for Contract and Commercial Management [IACCM], 2011).

➤ *Contract Management Across the Lifecycle*

Contract management encompasses drafting, negotiation, execution, monitoring, and administration across the full life of an agreement (IACCM, 2011; Manzo, 2012). During development and negotiation, objectives, scope, pricing, deliverables, timelines, and performance metrics are defined, with legal and procurement professionals engaged to ensure regulatory compliance. Execution and documentation require formal approvals and signatures and the establishment of a contract repository for secure storage and retrieval.

Performance monitoring relies on KPIs to evaluate both parties' compliance with milestones, deliverables, and quality requirements. Change management follows a formal process for documenting, assessing, and approving contract variations, while issue and dispute resolution mechanisms—mediation, arbitration, or litigation—are invoked when disagreements cannot be resolved through negotiation (IACCM, 2011). Risk management continues throughout the contract term through insurance, indemnification, and other transfer mechanisms, supported by ongoing communication and relationship management with contractors and stakeholders. At contract closeout, obligations are verified as fulfilled, final deliverables are reviewed against requirements, and lessons learned are documented. Best practice further recommends a centralised contract-management system, periodic contract audits, and continual engagement of legal and procurement expertise for complex agreements (Manzo, 2012).

➤ *Subcontracting*

Subcontracting—the outsourcing of a defined portion of project work to another firm or individual—allows organisations to access specialised expertise, optimise resource allocation, reduce cost, increase flexibility, and transfer specific risks (Kirby & Hucker, 2012). Its effective use, however, depends on clearly scoped work packages, robust legal agreements defining roles and obligations, rigorous subcontractor selection based on track record and

capability, and sustained communication and quality monitoring throughout delivery (Kirby & Hucker, 2012). Intellectual-property and confidentiality provisions must be addressed explicitly, and compliance mechanisms are needed to manage the risk of contractual disputes, delays, or underperformance originating further down the supply chain (Small Business Administration [SBA], 2015). Best practice includes developing a subcontracting strategy aligned with project objectives, maintaining transparent communication, and conducting regular performance evaluation to sustain long-term subcontractor relationships (Kirby & Hucker, 2012).

➤ *Engineering and Construction Pricing Methods*

The choice of pricing mechanism materially shapes the risk allocation between client and contractor (Hendrickson & Au, 2008; Chappell, 2011). Under a lump-sum (fixed-price) arrangement, the contractor commits to a single price for the defined scope and bears the risk of cost overruns, offering price certainty in exchange for accurate upfront estimation. Cost-plus contracts reimburse the contractor's documented costs plus an agreed fee or margin, offering flexibility where scope is not fully defined but requiring transparent cost control to prevent moral hazard. Unit-price contracts, common in repetitive works such as road construction, price defined units of work (per metre, per square foot) and calculate total cost by quantity, offering flexibility for quantity variation but demanding accurate quantity take-off. Time-and-materials (T&M) contracts charge agreed hourly rates and marked-up material costs, suited to projects of uncertain scope but weaker in cost control. Target-cost contracts set an agreed cost target and share the gains or pains of deviation between client and contractor, thereby incentivising collaborative cost control (Chappell, 2011; De Marco, 2011). In practice, these mechanisms are frequently combined or tailored—for example, a guaranteed maximum price overlaying a cost-reimbursable base—to match the risk appetite and information asymmetry present in a specific project.

V. VARIATIONS, CLAIMS, CONTRACT ADMINISTRATION, AND PROJECT REPORTING

➤ *Variations*

Variations are changes to the scope, specifications, or terms of a project or contract arising from evolving requirements, unforeseen conditions, or client-initiated changes (Chappell, 2011). Effective variation management requires a formal, systematic change process; complete documentation of the rationale, cost, and schedule impact of each change; explicit contractual provisions governing how variations are requested, priced, and approved; rigorous impact assessment across cost, schedule, resources, and risk; transparent stakeholder communication; and disciplined updating of the budget, schedule, and risk register to reflect approved changes (Hewitt, cited in International Federation of Consulting Engineers [FIDIC], 2017).

➤ *Claims and Dispute Resolution*

Claims are formal requests—typically from contractor to client—for compensation, time extension, or resolution of an issue affecting cost, schedule, quality, or performance (Chappell, 2011). Effective claims management depends on meticulous documentation and record-keeping throughout the project (plans, agreements, change orders, correspondence), rigorous evaluation of contractual entitlement and quantum, timely and formally compliant notification, and good-faith negotiation aimed at preserving the working relationship (IACCM, 2011). Where negotiation fails, contracts typically prescribe escalating dispute-resolution mechanisms—mediation, adjudication, arbitration, or litigation (Griffith & Thompson, 2012)—and both parties should be prepared to substantiate their position with independent expert evidence. Post-claim review should feed lessons learned back into contract templates and risk controls to reduce recurrence.

➤ *Contract Administration*

Contract administration is the ongoing oversight of contract execution and performance to ensure that obligations are fulfilled, compliance is monitored, and disputes are managed (Manzo, 2012). It requires a thorough initial review and familiarisation with contract terms, milestones, and special provisions; a comprehensive documentation and record-management system; continuous compliance and performance monitoring against agreed KPIs; open, structured communication with all parties; disciplined change management; ongoing risk identification and mitigation; verification of contractual deliverables; sound payment and invoicing controls; and a structured closeout process culminating in a final performance review and document archive (Manzo, 2012; Murdoch & Hughes, 2008).

➤ *Project Reporting*

Project reports provide the primary channel of accountability and transparency between the project team and its stakeholders (PMI, 2017). A well-structured report typically includes an executive summary; an introduction situating the project's purpose and context; a statement of scope and deliverables; an account of progress against milestones; a schedule or Gantt-chart update; budget and cost-performance analysis; a risk-management update; a discussion of issues and challenges encountered; a record of stakeholder-engagement activity; lessons learned and recommendations; a conclusion; and supporting appendices (Kerzner, 2019). Reports should be tailored in content and frequency to the needs of their audience, remaining concise, accurate, and evidence-based rather than exhaustive (Kerzner, 2019).

VI. DISCUSSION: TOWARDS AN INTEGRATED FRAMEWORK

The four domains reviewed above are frequently taught and practised as separate specialisms, yet the evidence synthesised here suggests that project outcomes depend on their coherence rather than their individual sophistication. A predictive, Waterfall-based methodology

paired with a lump-sum contract is internally consistent where scope is genuinely fixed, because both instruments assume that requirements can be specified accurately in advance (Royce, 1970; Hendrickson & Au, 2008). Conversely, an Agile or iterative methodology sits uneasily with a rigid lump-sum contract, because the very premise of Agile—that requirements will change—conflicts with a pricing mechanism that penalises change (Schwaber & Sutherland, 2020; Chappell, 2011). Target-cost and cost-plus arrangements, by contrast, are better suited to projects delivered through iterative or fast-tracked methodologies, since they build in the flexibility and collaborative risk-sharing that adaptive delivery requires.

Procurement strategy is the hinge between methodology and contract: the make-or-buy decision, the selection of a fixed-price or cost-reimbursable route, and the choice of competitive bidding versus negotiated award collectively determine how much of the project's uncertainty is transferred to the contractor and how much residual flexibility the client retains (Sollish & Semanik, 2011; Guth & Lochner, cited in Fleming, 2003). Contract administration, variation management, and claims processes then operationalise whatever balance was struck at procurement, which is why weaknesses in documentation or change-control at this stage so often generate disputes traceable to an earlier, poorly matched combination of methodology and pricing mechanism (Chapman & Ward, 2011; IACCM, 2011). Project reporting, finally, is the feedback instrument that allows deviations from this intended coherence to be detected and corrected before they become irreversible (Kerzner, 2019).

This integrated reading has practical implications. Organisations selecting a project delivery approach should treat methodology, procurement route, and pricing mechanism as a single design decision rather than three sequential and independent choices. It also points to a research gap: while the individual components reviewed here are well documented, there is comparatively little empirical evidence—particularly from developing-country infrastructure contexts such as Cameroon and the wider Central African sub-region—on how specific methodology-procurement-pricing combinations perform against cost, schedule, and quality outcomes. Future research employing comparative case studies or quantitative performance databases could usefully test the coherence hypothesis advanced here.

VII. CONCLUSION AND RECOMMENDATIONS

Advanced project and contract management is best understood not as a set of discrete competencies but as an integrated system in which methodology choice, procurement strategy, contractual pricing, and administrative rigour must be mutually reinforcing. The review has shown that predictive and adaptive methodologies each carry implicit assumptions about the stability of scope; that procurement planning is the mechanism through which those assumptions are translated

into a specific contractual risk allocation; that pricing methods from lump-sum to target-cost distribute risk and incentive differently between client and contractor; and that variations, claims, contract administration, and reporting together form the control loop that keeps delivery aligned with the original intent—or reveals, through disputes and cost overruns, where that alignment has broken down.

For practitioners, three recommendations follow. First, methodology and contract type should be selected jointly, with an explicit test of whether the assumptions embedded in the delivery approach match the assumptions embedded in the pricing mechanism. Second, procurement planning should incorporate risk-based supplier and contract-type selection rather than defaulting to a single organisational standard for all projects. Third, investment in documentation, change-control discipline, and structured reporting should be treated as a risk-mitigation cost rather than an administrative overhead, given its demonstrated role in reducing claims and disputes. For researchers, the principal opportunity lies in empirically testing the coherence framework proposed in Section 6, particularly through comparative studies in infrastructure-constrained and developing-economy settings where the cost of methodology-procurement mismatch is highest.

REFERENCES

- [1]. Anderson, D. J. (2010). *Kanban: Successful evolutionary change for your technology business*. Blue Hole Press.
- [2]. Association for Project Management. (2019). *APM body of knowledge* (7th ed.). Association for Project Management.
- [3]. Chapman, C., & Ward, S. (2011). *How to manage project opportunity and risk: Why uncertainty management can be a much better approach than risk management* (3rd ed.). Wiley.
- [4]. Chappell, D. (2011). *The JCT design and build contract* (3rd ed.). Wiley-Blackwell.
- [5]. Cleland, D. I., & Ireland, L. R. (2006). *Project management: Strategic design and implementation* (5th ed.). McGraw-Hill.
- [6]. De Marco, A. (2011). *Project management for facility constructions: A guide for engineers and architects*. Springer.
- [7]. Fleming, Q. W. (2003). *Project procurement management: Contracting, subcontracting, teaming*. FMC Press.
- [8]. Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge University Press.
- [9]. Gatti, S. (2013). *Project finance in theory and practice: Designing, structuring, and financing private and public projects* (2nd ed.). Academic Press.
- [10]. Griffith, A., & Thompson, P. (2012). *The standard form of building contract: A commentary for students and practitioners*. Wiley-Blackwell.
- [11]. Guth, S., & Lochner, P. J. (2010). *Project procurement management: A guide to structured procurements*. Aspen Publishers.

- [12]. Hendrickson, C., & Au, T. (2008). *Project management for construction: Fundamental concepts for owners, engineers, architects, and builders* (2nd ed.). Prentice Hall.
- [13]. Hewitt, A. (2017). *The FIDIC contracts: Obligations of the parties*. Wiley-Blackwell.
- [14]. International Association for Contract and Commercial Management. (2011). *Contract and commercial management: The operational guide*. Van Haren Publishing.
- [15]. International Association for Contract and Commercial Management. (2014). *Contract management body of knowledge* (3rd ed.). Van Haren Publishing.
- [16]. International Federation of Consulting Engineers. (2017). *FIDIC conditions of contract for construction* (2nd ed.). FIDIC.
- [17]. Kerzner, H. (2017). *Project management: A systems approach to planning, scheduling, and controlling* (12th ed.). Wiley.
- [18]. Kerzner, H. (2019). *Project management metrics, KPIs, and dashboards: A guide to measuring and monitoring project performance* (4th ed.). Wiley.
- [19]. Kirby, S., & Hucker, N. (2012). *Subcontract management handbook: A practical guide for purchasing and supply professionals*. Kogan Page.
- [20]. Loosemore, M., Raftery, J., Reilly, C., & Higgon, D. (2006). *Risk management in projects* (2nd ed.). Taylor & Francis.
- [21]. Manifesto for Agile Software Development. (2001). <https://agilemanifesto.org/>
- [22]. Manzo, V. G. (2012). *The contract management body of knowledge guide*. NCMA Press.
- [23]. Meredith, J. R., & Mantel, S. J., Jr. (2017). *Project management: A managerial approach* (9th ed.). Wiley.
- [24]. Murdoch, J., & Hughes, W. (2008). *Construction contracts: Law and management* (4th ed.). Taylor & Francis.
- [25]. Project Management Institute. (2013). *The standard for program management* (3rd ed.). PMI.
- [26]. Project Management Institute. (2017). *A guide to the project management body of knowledge (PMBOK guide)* (6th ed.). PMI.
- [27]. Rose, K. H. (2005). *Project quality management: Why, what, and how*. J. Ross Publishing.
- [28]. Royce, W. W. (1970). Managing the development of large software systems. *Proceedings of IEEE WESCON*, 1–9.
- [29]. Schwaber, K., & Sutherland, J. (2020). *The Scrum guide*. Scrum.org. <https://scrumguides.org/>
- [30]. Sears, S. K., Sears, G. A., Clough, R. H., Rounds, J. L., Segner, R. O., & Levitt, R. E. (2015). *Construction project management: A practical guide to field construction management* (6th ed.). Wiley.
- [31]. Silvius, G., & Schipper, R. (2014). Sustainability in project management: A literature review and impact analysis. *Social Business*, 4(1), 63–96. <https://doi.org/10.1362/204440814X1394890925386>
- [32]. Small Business Administration. (2015). *Subcontracting opportunities guide*. U.S. Small Business Administration.
- [33]. Sollish, F., & Semanik, J. (2011). *The procurement and supply manager's desk reference* (2nd ed.). Wiley.
- [34]. Tague, N. R. (2005). *The quality toolbox* (2nd ed.). ASQ Quality Press.
- [35]. Tinnen, C., & Tinnen, D. (2011). *The subcontractor's legal guide: The complete guide to legal issues in the construction industry*. McGraw-Hill.
- [36]. Turner, J. R. (2014). *The handbook of project-based management: Leading strategic change in organizations* (4th ed.). McGraw-Hill.
- [37]. Walker, A. (2015). *Project management in construction* (6th ed.). Wiley-Blackwell.
- [38]. Wysocki, R. K. (2013). *Effective project management: Traditional, agile, extreme* (7th ed.). Wiley.