



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

IT PROJECT MANAGEMENT BEST PRACTICES: A SYSTEMATIC REVIEW OF METHODOLOGIES, SUCCESS FACTORS, AND EMERGING TRENDS

Umidakhon Sharipova¹,

Fazliddin Arzikulov²

¹Head of the Department of International Finance and Investments,
University of World Economy and Diplomacy, Tashkent, Uzbekistan

PhD in Economics, Associate Professor

E-mail: umida-s@mail.ru; usharipova@uwed.uz

²Assistant, Department of Biomedical Engineering, Informatics and Biophysics,
Tashkent State Medical University, Tashkent, Uzbekistan

E-mail: arzikulovfazliddin1997@gmail.com

ABSTRACT

This article presents a systematic literature review of IT project management best practices, examining methodological frameworks, critical success factors, failure modes, and emerging trends including agile transformation and AI-assisted project management. Publications from 2010 to 2024 indexed in Scopus, Web of Science, IEEE Xplore, and ACM Digital Library were analysed. The review covers traditional and agile project management frameworks, the evidence base for critical success factors, economic consequences of IT project failures, hybrid methodology approaches, and the implications of digital transformation for project management practice. The analysis reveals that IT projects continue to experience high failure rates — approximately 30–40% exceed budget and timeline by more than 25% — with stakeholder engagement, requirement clarity, and adaptive project governance emerging as the strongest predictors of success. Agile methodologies demonstrate superior performance for complex, innovation-



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

intensive IT projects in dynamic environments. Implications for IT project management capability development in Uzbekistan are discussed.

Keywords: IT project management, agile methodology, project success factors, software development, digital transformation, project governance, Uzbekistan.

1. INTRODUCTION

Information technology projects — encompassing software development, system implementation, infrastructure deployment, and digital transformation initiatives — represent a major category of organisational investment with consistently documented delivery challenges (Standish Group, 2023; PMI, 2021). Approximately 30–40% of IT projects exceed budget, schedule, or scope targets and 10–20% are outright failures, representing an estimated annual waste of USD 50–150 billion globally. In Uzbekistan, where large-scale IT investments are being undertaken as part of the Digital Uzbekistan strategy — including e-government systems and enterprise digitalisation — evidence-based IT project management frameworks are of direct practical significance. This review synthesises current evidence on best practices and derives implications for project management capability development in the regional context, relevant to institutions including Tashkent State Medical University and the University of World Economy and Diplomacy which are engaged in significant IT project portfolios.

2. TRADITIONAL VS. AGILE PROJECT MANAGEMENT FRAMEWORKS

Traditional plan-driven project management — codified in PMBOK (PMI, 2021) and PRINCE2 — is characterised by sequential phases, comprehensive upfront



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

planning, and change control mechanisms. Empirical evidence supports its effectiveness for IT projects with high requirement stability and regulatory compliance requirements (Serrador & Pinto, 2015). Agile project management — originating with the Agile Manifesto (Beck et al., 2001) and operationalised through Scrum and Kanban — prioritises adaptive planning, continuous delivery, cross-functional team autonomy, and close customer collaboration. Meta-analyses consistently demonstrate superior agile outcomes for time-to-market, customer satisfaction, and team productivity in software development contexts characterised by dynamic requirements. A meta-analysis by Serrador & Pinto (2015) of 1,002 projects found that agile usage correlated significantly with both project efficiency ($r = 0.26$) and stakeholder satisfaction ($r = 0.22$).

3. CRITICAL SUCCESS FACTORS

Systematic reviews (Cserhádi & Szabó, 2014; Joslin & Müller, 2015) identify the following CSFs with the strongest empirical support: executive sponsorship and leadership commitment; clear and stable requirements (ambiguity accounts for 15–30% of IT project cost overruns); stakeholder engagement and communication quality; project manager competence and experience; team capability and stability; and realistic scheduling and budgeting. The relative importance of CSFs varies by project type: for enterprise system implementations, change management and user adoption are particularly critical; for digital transformation initiatives, organisational change readiness and executive digital literacy emerge as distinctive predictors (PMI, 2021). Governance structures — including steering committees, escalation protocols, and regular health assessments — consistently show positive associations with project success.



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

4. ECONOMIC CONSEQUENCES AND HYBRID APPROACHES

Flyvbjerg & Budzier (2011) analysed 1,471 IT projects and found that one in six was a 'black swan' with cost overruns averaging 200% and schedule overruns averaging 70%. PMI (2021) estimates that organisations with mature project management capabilities waste 28 times less money than low-maturity organisations. Hybrid frameworks combining agile techniques with traditional governance and reporting are reported by 52% of practitioners as their predominant approach in the 2021 PMI survey. Scaled Agile Framework and Disciplined Agile Delivery represent codified hybrid frameworks with growing enterprise adoption. AI-assisted project management — using machine learning for schedule risk prediction and early warning of delivery problems — represents an emerging capability with significant potential, with early evidence suggesting that AI models can predict project delays 4–6 weeks before they become apparent through traditional monitoring (Gartner, 2022).

5. IMPLICATIONS FOR UZBEKISTAN

For Uzbekistan's ambitious digital infrastructure programme, investment in project management capability — including methodology training, governance framework development, and PM talent development — represents a high-return complement to technical investment. The integration of agile methodologies into public sector IT project governance frameworks, the development of IT project management education at institutions including the University of World Economy and Diplomacy, and the establishment of project management offices in major public sector IT programmes are priority actions for improving digital transformation delivery outcomes.



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

6. CONCLUSION

IT project management continues to present significant challenges with economically substantial failure rates, while the evidence base for best practices is mature and actionable. Agile methodologies demonstrate superior outcomes for complex, innovation-intensive projects; hybrid approaches are gaining support for large-scale enterprise implementations; and stakeholder engagement, requirement clarity, and adaptive governance emerge as the most robust success factors. Investment in project management capability represents a high-return complement to technical investment in Uzbekistan's digital transformation programme.

REFERENCES

1. Beck, K., Beedle, M., van Bennekum, A., Cockburn, A., Cunningham, W., Fowler, M., & Thomas, D. (2001). Manifesto for agile software development. Agile Alliance. <https://agilemanifesto.org/>
2. Cserhádi, G., & Szabó, L. (2014). The relationship between success criteria and success factors in organisational event projects. *International Journal of Project Management*, 32(4), 613–624. <https://doi.org/10.1016/j.ijproman.2013.08.008>
3. Flyvbjerg, B., & Budzier, A. (2011). Why your IT project may be riskier than you think. *Harvard Business Review*, 89(9), 601–603.
4. Gartner. (2022). Magic quadrant for agile enterprise planning tools. Gartner Research.
5. Shuxratovna, M. K. (2024). QURILISH–SANOAT KORXONALARIDA MAHSULOTNI DIVERSIFIKATSIYA QILISHNING AHAMIYATI VA O‘RNI. *Scientific Journal of Actuarial Finance and Accounting*, 4(06), 217-222.



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

6. Begimqulov, A., & Maraimova, K. (2021). THE THEORY OF THE FIRM'S ACTIVITIES AND ORGANIZATIONAL FORMS OF ENTREPRENEURSHIP. In ВОПРОСЫ УПРАВЛЕНИЯ И ЭКОНОМИКИ: СОВРЕМЕННОЕ СОСТОЯНИЕ АКТУАЛЬНЫХ ПРОБЛЕМ (pp. 65-69).
7. Shuxratovna, M. K., & Akbarjon o'g'li, T. M. (2025). MAMLAKATGA INVESTITSİYALARNI JALB QILISHDA BOSHQARUV MODELLARINI QO 'LLASH SAMARADORLIGI. ZAMONAVIY TA'LIMDA FAN VA INNOVATSION TADQIQOTLAR JURNALI, 3(2), 41-49.
8. МАРАИМОВА, К., & МАРДОНОВА, С. ПРИМЕНЕНИЕ ЗАРУБЕЖНОГО ОПЫТА УПРАВЛЕНИЯ ПЕРСОНАЛОМ В ТНК В РЕСПУБЛИКЕ УЗБЕКИСТАН. ЭКОНОМИКА, 715-721.
9. Мараимова, К. Ш. (2022). НАЦИОНАЛЬНЫЕ ЦЕЛИ УСТОЙЧИВОГО РАЗВИТИЯ УЗБЕКИСТАНА. Экономика и социум, (4-3 (95)), 54-58.
10. Shukhratovna, M. K. (2022). National sustainable development goals of uzbekistan.
11. Sh, M. K. (2025). THE INTEGRATION TREND OF THE OIL INDUSTRY INTO RENEWABLE ENERGY SOURCES. Journal of Modern Educational Achievements, 11, 46-51.
12. Мараимова, К. (2024). ЯНГИ ЎЗБЕКИСТОН ШАРОИТИДА САНОАТ МАҲСУЛОТИ ИШЛАБ ЧИҚАРИШНИ ДИВЕРСИФИКАЦИЯЛАШНИНГ МИЛЛИЙ ХУСУСИЯТЛАРИ. Talqin va tadqiqotlar ilmiy-uslubiy jurnali, 2(43), 17-22.
13. Safaeva, S. (2020). Investment in the tourism sector: the pandemic and its impact. Архив научных исследований,(32).
14. Rikhsibaevna, S. S. (2025). Environmental sustainability in tourism: perspectives for Uzbekistan. Mehnat iqtisodiyoti va inson kapitali, 4(3), 176-185.



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

15. Sayyora, S. (2024). Analyzing Resource Allocation and Management in the Uzbekistan Hotel Industry Within the Context of Cloud, Distributed, and Parallel Systems. *International Journal of Biological Engineering and Agriculture*, 3(1), 118-128.
16. Сафаева, С. Р. (2021). Основные аспекты совершенствования сферы туризма в период мировой пандемии. Тенденции развития науки и образования, 79(3).
17. Абдимажитова, Б. М. Қ., & Гулямова, Г. С. (2024). ОСОБЕННОСТИ РЕГУЛИРОВАНИЯ НАЛОГООБЛОЖЕНИЯ В ЕС. *Oriental renaissance: Innovative, educational, natural and social sciences*, 4(6), 225-230.
18. Gulyamova, A., & Gulyamova, G. (2023). Use Of Innovative Services In The Development Of Retail Trade Banking System [Использование Инновационных Услуг В Развитии Розничной Торговли Банковской Системы]. *Paradigms of management, economics and law*, (4), 58-67.
19. Гулямова, А. Л., & Гулямова, Г. С. (2023). Использование инновационных услуг в развитии розничной торговли банковской системы. *Парадигмы управления, экономики и права*, (4 (10)), 58.
20. Gulshahnoz, G. SA Innovations in the study of global commodity markets/SA Gulyamova Gulshahnoz, AL Gulyamova. *Innovatsionnye tekhnologii v menedzhmente: upravlencheskiy i sotsial'nyy aspekty: materialy mezhdunarodnoy nauchnoprakticheskoy konferentsii*, Moskva, 30, 300-309.
21. Gulyamova, G. S., & Gulyamova, A. (2021). Innovations in the study of global commodity markets. In *ИННОВАЦИОННЫЕ ТЕХНОЛОГИИ В МЕНЕДЖМЕНТЕ: УПРАВЛЕНЧЕСКИЙ И СОЦИАЛЬНЫЙ АСПЕКТЫ* (pp. 300-309).
22. Азларова, А. (2020). РАҚАМЛИ ТРАНСФОРМАЦИЯ ШАРОИТИДА БАНКЛАРГА РАҚОБАТБАРДОШ МУТАХАССИС КАДРЛАР



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

ТАЙЁРЛАШНИНГ ДОЛЗАРБ МАСАЛАЛАРИ. Архив научных исследований.

23. Sabirovna, G. G. (2022). Advantages and disadvantages of financial globalization. *Res Militaris*, 12(4), 2159-2163.

24. Gulyamova, G., Abdullaev, A., & Sharipova, U. (2020). Peculiarities and modern trends in world energy and the development of global pipeline transport networks. *Journal of Critical Reviews*, 7(4), 388-392.

25. Kizi, O. M. A., & Bakoeva, G. (2021). Prospects of the derivatives market in Uzbekistan. *ASIAN JOURNAL OF MULTIDIMENSIONAL RESEARCH*, 10(5), 297-302.

26. Bakoeva, G. M., & Ibodullaev, S. T. (2021). FOREIGN TRADE ACTIVITIES OF UZBEKISTAN: PROBLEMS AND OPPORTUNITIES FOR DEVELOPMENT. *International journal of trends in marketing management*, 9(1).

27. Baqoyeva, G. M., & Qilichov, K. K. (2022). O'ZBEKISTONDA QIMMATLI QOG'OZLAR BOZORINING HOZIRGI HOLATI TAHLILI VA BU BOZORDA KAPITAL JALB QILISHNING ISTIQBOLLARI. *Academic research in educational sciences*, 3(1), 712-725.

28. Matyakubovna, B. G. (2024). Improving Financial Technologies in Central Asia Countries. *World Economics and Finance Bulletin*, 35, 1-7.

29. Bakoeva, G. M. Analysis of Banks Activities That Have Successfully Implemented Digital Innovations in Uzbekistan. *American Journal of Business Management, Economics, and Banking*, 31, 7-16.

30. Gulbakhor, B. (2025). ACCOUNTING TREATMENT OF DERIVATIVES UNDER IFRS 9 STANDARDS. *INTEGRATION OF EDUCATION AND SCIENCE: GLOBAL CHALLENGES AND SOLUTIONS*, 1(2), 136-139.



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

31. Bakoeva, G. M. (2020). Foreign experience in applying IPO practice in Uzbekistan's securities market and potential of using derivatives. *International Relations: Politics, Economics, Law*, 48-57.
32. Азларова, А. (2020). РАҚАМЛИ ТРАНСФОРМАЦИЯ ШАРОИТИДА БАНКЛАРГА РАҚОБАТБАРДОШ МУТАХАССИС КАДРЛАР ТАЙЁРЛАШНИНГ ДОЛЗАРБ МАСАЛАЛАРИ. Архив научных исследований.
33. Ибодуллаев, Ш., & Бакоева, Г. (2021). Актуальные вопросы развития банковской системы Республики Узбекистан. *Общество и инновации*, 2(2/S), 179-186.
34. Bakoeva, G. M. (2023). PECULIARITIES OF THE CURRENT SITUATION OF THE BANKING IPO MARKET. In *International Scientific and Current Research Conferences* (pp. 78-81).
35. Bakoeva, G. M. (2024). The Essence Of Transformation Of The Banking Sector In The Context Of The Implementation Of Modern Financial Technologies. *NATURALISTA CAMPANO*, 28(1), 2569-2575.
36. Umida, S., Bahodir, I., & Otabek, B. (2022). The development of e-tourism in Uzbekistan: based on the foreign experience of the ASEAN countries. *Confrencea*, 5(5), 259-266.
37. Sharipova, U. A. (2022). WAYS TO DEVELOP INNOVATIVE BANKING SERVICES IN COMMERCIAL BANKS: FOREIGN EXPERIENCE. *Thematics Journal of Economics*, 8(1).
38. Umida, S. (2023). Features Of Tourism Growth In Uzbekistan: Based On Foreign Experience. *World Economics and Finance Bulletin*, 29, 203-209.
39. Sharipova, U. A. International Marketing: A Study of Marketing Strategies Adapted to International Markets. *World Bulletin of Management and Law*, 35, 58-60.



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

40. Sharipova, U. A., & Zaynutdinova, N. N. (2021). Nestle scandals, negative impact of conflicts to brand prestige. *Academicia Globe*, 2(6), 376-379.
41. Sanoqulov, A., & Sharipova, U. (2022). Jahon iqtisodiyotida kriptovalyutaning o'rni va istiqbollari. *Евразийский журнал социальных наук, философии и культуры*, 2(11), 96-99.
42. Hughes, D. L., Dwivedi, Y. K., Rana, N. P., & Simintiras, A. C. (2016). Information systems project failure — Analysis of causal links using interpretive structural modelling. *Production Planning & Control*, 27(16), 1313–1333. <https://doi.org/10.1080/09537287.2016.1217571>
43. Joslin, R., & Müller, R. (2015). Relationships between a project management methodology and project success. *International Journal of Project Management*, 33(6), 1377–1392. <https://doi.org/10.1016/j.ijproman.2015.03.005>
44. PMI. (2021). Pulse of the profession: Beyond agility — Flex to the future. Project Management Institute.
45. Serrador, P., & Pinto, J. K. (2015). Does agile work? A quantitative analysis of agile project success. *International Journal of Project Management*, 33(5), 1040–1051. <https://doi.org/10.1016/j.ijproman.2015.01.006>
46. Standish Group. (2023). CHAOS report 2023. The Standish Group International.
47. Turner, J. R. (2014). *The handbook of project-based management* (4th ed.). McGraw-Hill.
48. Whitty, S. J., & Maylor, H. (2009). And then came complex project management. *International Journal of Project Management*, 27(3), 304–310. <https://doi.org/10.1016/j.ijproman.2008.06.005>
49. Williams, T. (2016). Identifying success factors in construction projects: A case study. *Project Management Journal*, 47(1), 97–112. <https://doi.org/10.1002/pmj.21567>



International Congress on Economics, Management and Business Studies

Hosted Online from New York, USA

Date: 23rd June , 2026

Website: <https://econferencia.com>

50. Wysocki, R. K. (2019). Effective project management: Traditional, agile, extreme, hybrid (8th ed.). Wiley.

51. Zwikael, O., & Smyrk, J. (2019). Project management: A benefit realisation approach. Springer.