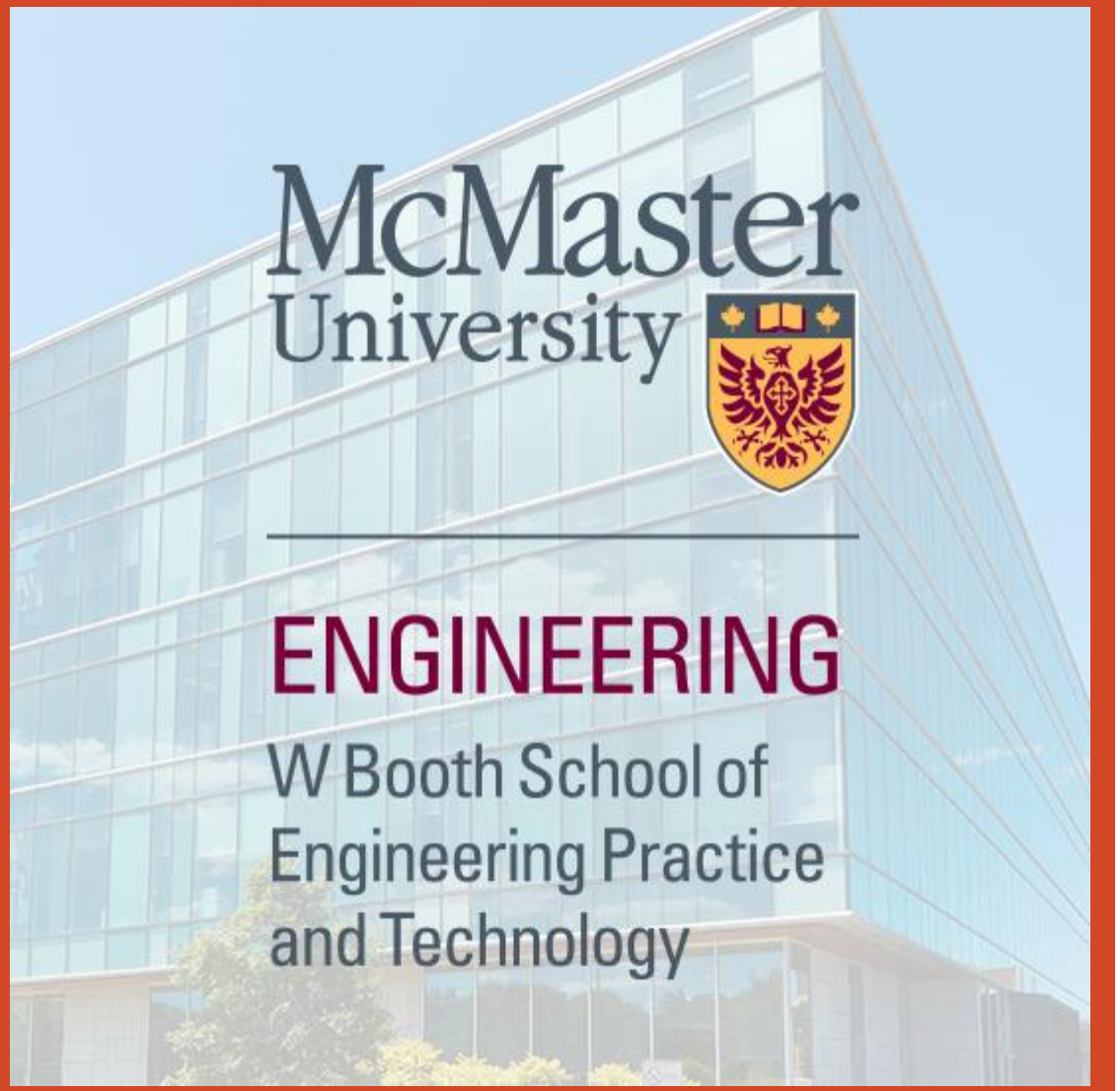
Practical Project Management for Today's Business Environment

Fall 2024

Week 9: Project Close Out and Evaluation



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Learning Objectives

Understand the steps and importance of closing projects effectively.

Learn best practices for administrative closure and deliverable verification.

Explore techniques for evaluating project success.

Apply knowledge in practical exercises.

Discuss real-world project closure examples.

Introduction to Project Closure

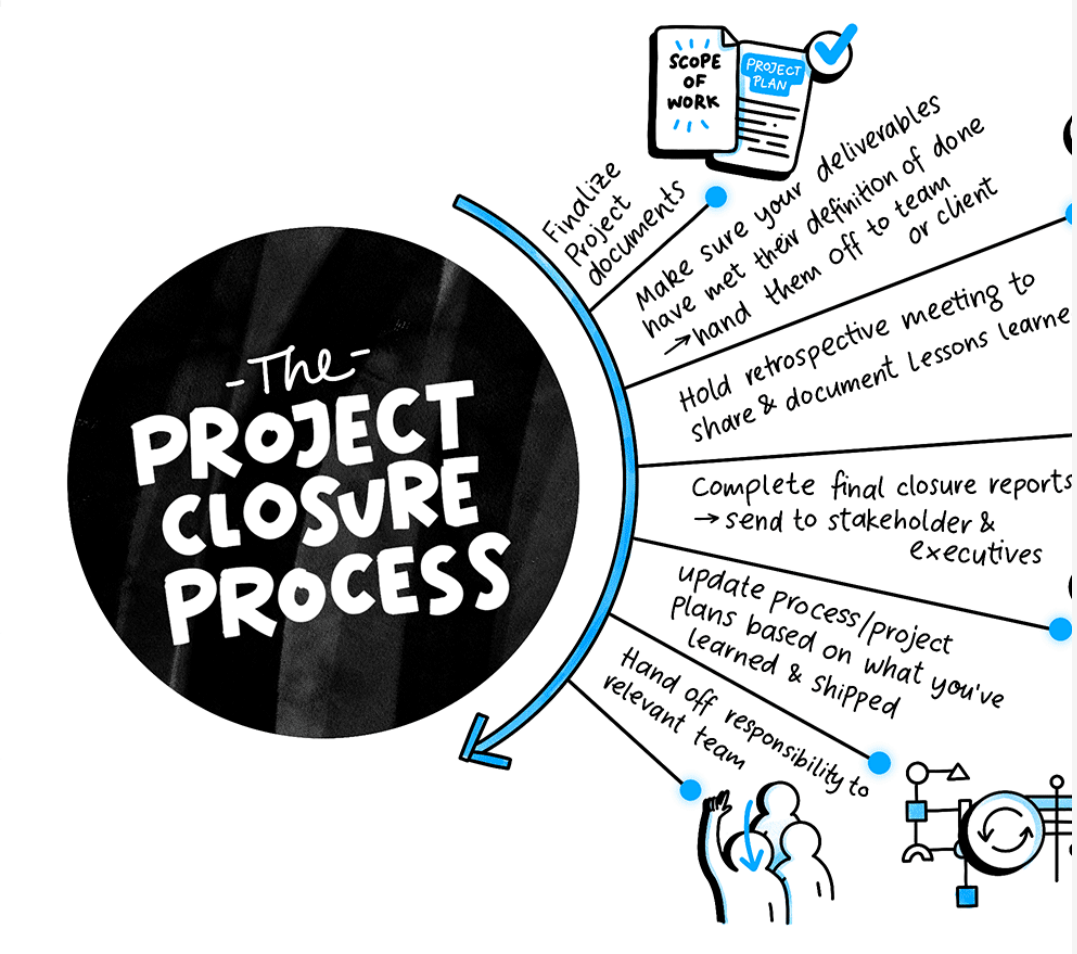
Definition: Formal process to end a project once objectives are met.

Importance: Ensures no outstanding issues and that project goals are fulfilled.

Project Lifecycle: Closure is the final stage in the project lifecycle.

Compliance: Ensures regulatory and contractual obligations are met.

Industry Example: The Heathrow Terminal 5 project formally concluded with operational testing and verification.



Steps in Project Closure

1. **Finalize Deliverables**: Ensure all work is completed and approved.
2. **Administrative Closure**: Complete documentation and sign-off.
3. **Handover to Operations**: Transition products/services to operational teams.
4. **Close Contracts**: Finalize vendor agreements and payments.
5. **Release Resources**: Reassign or release human, material, and financial resources.

Example: The **Sydney Opera House** construction had an extensive documentation process to meet preservation requirements.

Administrative Closure Process

Review Documentation: Verify that all project documents are up to date and completed.

Conduct Audits: Ensure compliance with project standards and objectives.

Close Financials: Final budget reconciliation, including vendor payments.

Regulatory Compliance: Fulfill all legal requirements, especially for government projects.

Example: SpaceX Falcon Heavy—after a successful launch, all financials were audited to close the project

Deliverable and Final Acceptance

Deliverable Verification: Confirm that deliverables meet requirements outlined in the scope.

Client Sign-Off: Obtain formal client acceptance for project completion.

Functional Testing: Final product tests to ensure operational requirements are met.

Training & Support: Provide training to end users to facilitate a smooth handover.

Example: Tesla Model 3 Production—deliverables were extensively tested before customer handover.

CHECKLIST OF ACCEPTANCE CRITERIA PLAN

Acceptance	Reference	Yes/No
User Training has been conducted.	Conduct User Training	Yes/No
System and Data Conversion has been performed as per Conversion Plan.	Installation Activities	Yes/No
Installation site were inspected in accordance with Installation Plan.	Installation Activities	Yes/No
Installation has been coordinated with System Owner, Operations, Support	Installation Activities	Yes/No
Modifications to the physical installation environment are completed.	Installation Activities	Yes/No
Hardware has been inventoried and tested.	Installation Activities	Yes/No
Data-loads and Data Conversion have been installed and executed.	Installation Activities	Yes/No
Software has been installed & tested on the hardware platform	Installation Activities	Yes/No
Problems and corrective action are documented.	Conduct Installation Tests	Yes/No
Equipment and software retested after repairs, replacements, or modifications.	Conduct Installation Tests	Yes/No
User Training has been conducted.	Conduct User Training	Yes/No
System and Data Conversion has been performed as per Conversion Plan.	Installation Activities	Yes/No

Transition to Operations

Knowledge Transfer: Share key documents and insights with operational teams.

Transition Meeting: Conduct meetings between project and operational teams.

Handover Documentation: Include manuals, diagrams, user guides, etc.

Support Agreements: Establish terms for continued support (e.g., warranties).

Example: The Microsoft Azure Migration included detailed user training and operations support plans.

Release Resources

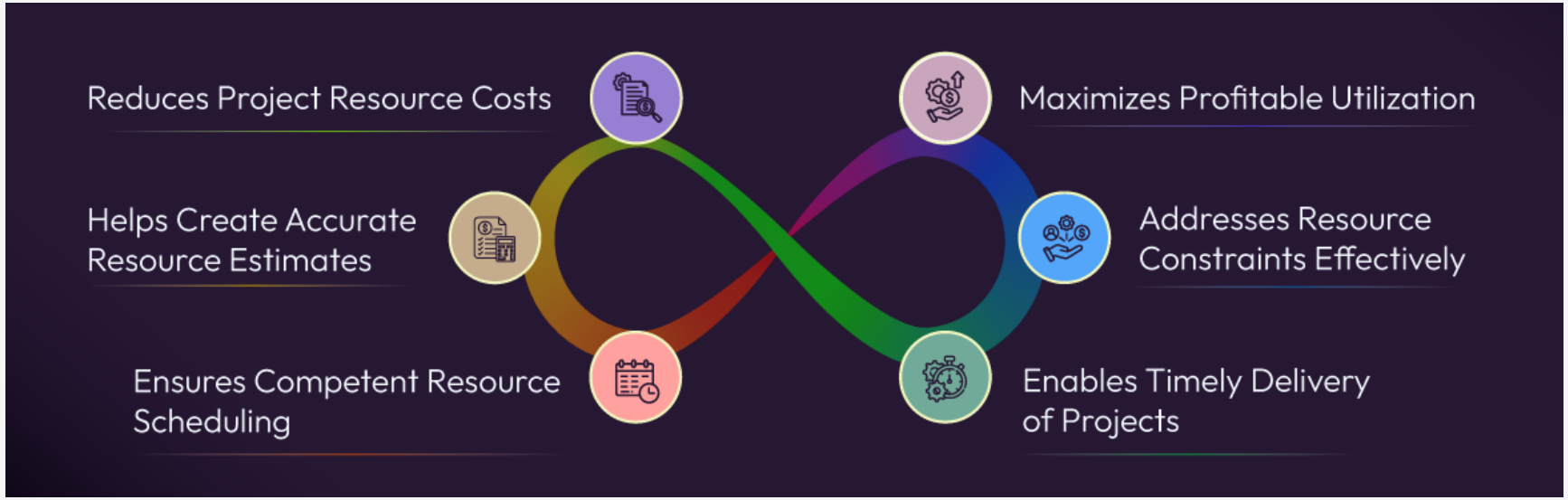
Release Personnel: Reallocate staff to new projects.

Close Contracts: Finalize agreements with vendors and consultants.

Return Equipment: Return leased equipment or repurpose for other projects.

Knowledge Capture: Ensure lessons learned are documented before releasing key personnel.

Example: In the Panama Canal Expansion, engineers were redeployed to other infrastructure projects post-completion



Closure Checklist Overview

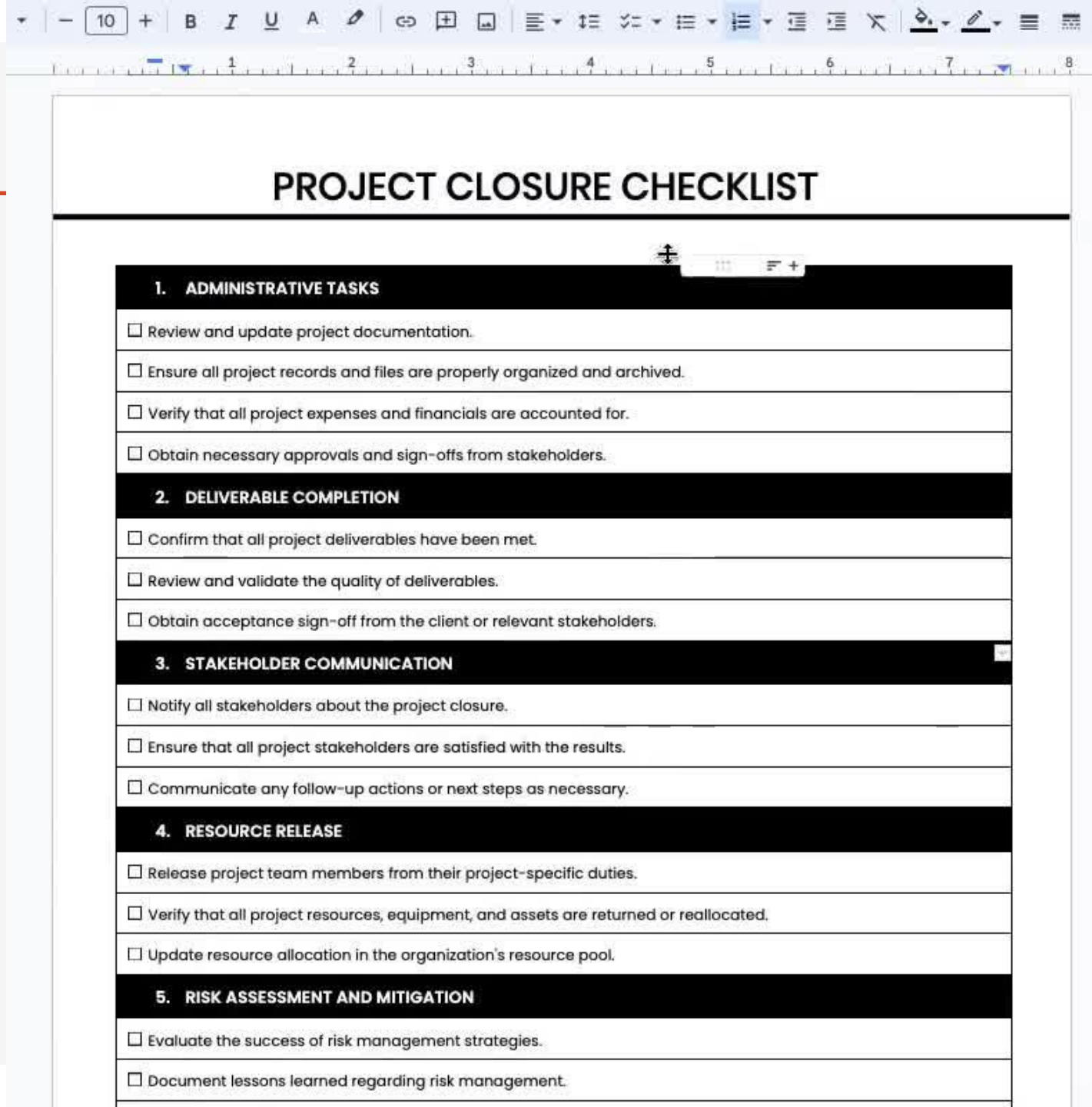
Purpose of a Checklist: Prevents missing any critical steps during closure.

Key Elements: Documentation, contracts, deliverables, resources.

Customization: Tailor checklists to specific projects.

Stakeholder Involvement: Engage relevant stakeholders to validate the closure checklist.

Example: Apple Product Launches—a detailed checklist was used to verify final quality before products reached consumers.



PROJECT CLOSURE CHECKLIST

1. ADMINISTRATIVE TASKS
☐ Review and update project documentation.
☐ Ensure all project records and files are properly organized and archived.
☐ Verify that all project expenses and financials are accounted for.
☐ Obtain necessary approvals and sign-offs from stakeholders.
2. DELIVERABLE COMPLETION
☐ Confirm that all project deliverables have been met.
☐ Review and validate the quality of deliverables.
☐ Obtain acceptance sign-off from the client or relevant stakeholders.
3. STAKEHOLDER COMMUNICATION
☐ Notify all stakeholders about the project closure.
☐ Ensure that all project stakeholders are satisfied with the results.
☐ Communicate any follow-up actions or next steps as necessary.
4. RESOURCE RELEASE
☐ Release project team members from their project-specific duties.
☐ Verify that all project resources, equipment, and assets are returned or reallocated.
☐ Update resource allocation in the organization's resource pool.
5. RISK ASSESSMENT AND MITIGATION
☐ Evaluate the success of risk management strategies.
☐ Document lessons learned regarding risk management.

Evaluation of Project Success

Meeting Objectives: Assess whether goals for scope, time, and budget were achieved.

Stakeholder Satisfaction: Evaluate satisfaction through surveys and feedback.

Quality of Deliverables: Did the product meet the quality standards?

Financial Performance: Analyze actual spending versus the budget.

Example: The Burj Khalifa Project—achieved its goals despite initial budget concerns, with positive stakeholder reviews.

Success Criteria

Performance Against Baseline: Compare performance metrics to the project baseline.

Adherence to Schedule: Was the project completed on time?

Customer Acceptance: Were the customer requirements fully met?

Team Satisfaction: Did the project team have a positive experience?

Example: Toyota Production System Implementation—measured success by employee engagement and reduction in production waste.

Tools for Evaluation

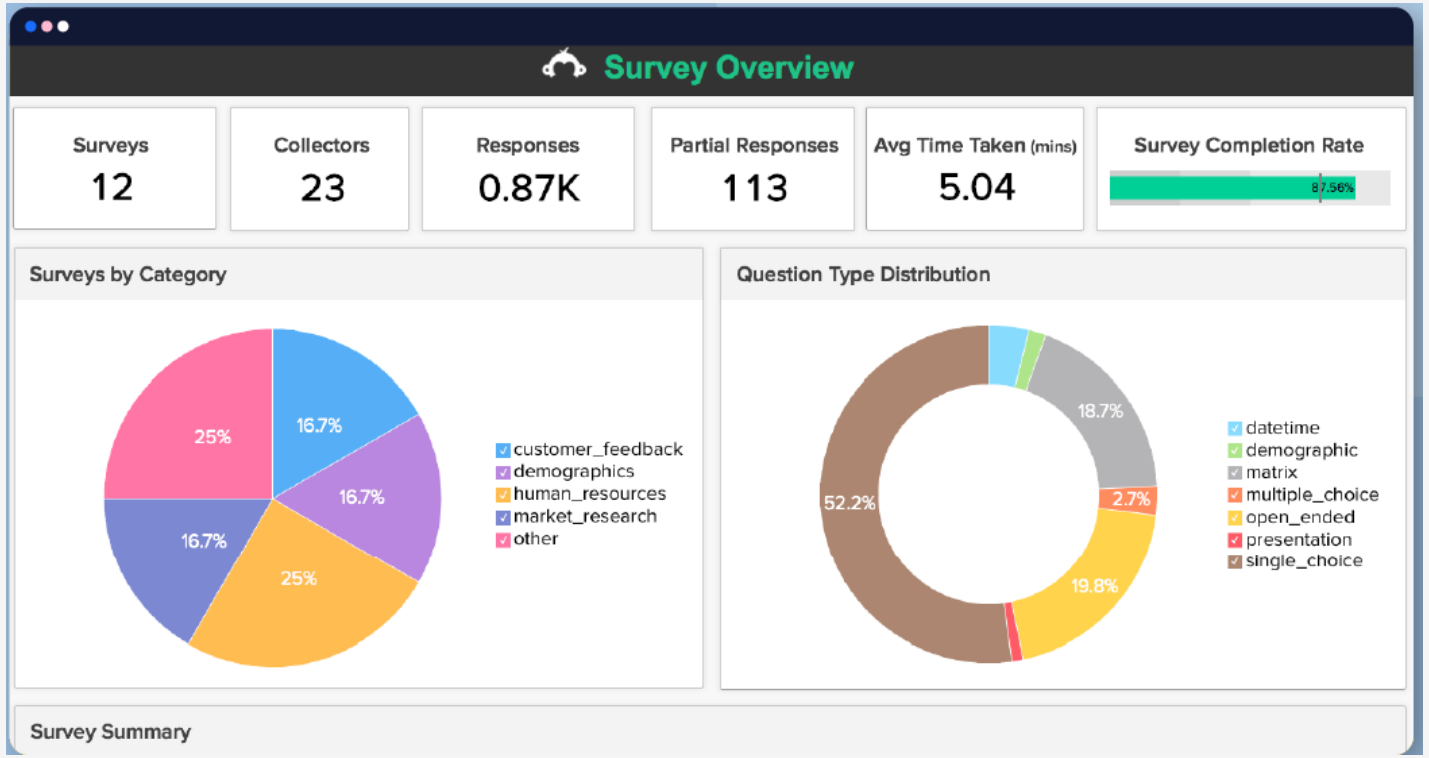
Surveys and Feedback: Gather input from stakeholders.

Post-Project Reviews: Conduct formal sessions to discuss outcomes.

Performance Metrics: Use KPIs like CPI, SPI, and defect rates.

Benchmarking: Compare project results against industry standards.

Example: Deloitte Digital Transformation Projects—used detailed surveys and performance metrics to evaluate project success.



Lessons Learned

Conducting Lessons Learned Sessions

Purpose: Identify best practices and areas for improvement.

Timing: Conduct sessions soon after project completion.

Participants: Include key team members, stakeholders, and clients.

Documentation: Capture lessons in a formal report for future use.

Example: Heathrow Terminal 5—lessons learned were shared with teams managing subsequent airport expansions.

Lessons Learned Documentation

Capture Format: Use a standardized template for ease of use.

Classify Lessons: Group lessons by category—cost, schedule, quality, communication.

Storage: Save in a centralized knowledge repository.

Access: Make available to future project teams for reference.

Example: Microsoft's Development Teams use lessons learned documents to improve Agile practices.

Lessons Learned Template

Today's Date: 1/2/2023
Project Name: My Project
Project Manager: George Washington
Notes: (add any extra info here)

ProjectManager

WIN or ISSUE	Describe What Happened	What Was the Impact?	How Does This Change Future Projects?	Action Items
WIN	time tracking system with the team to test whether or not productivity would improve	We saved 200 hours of time and delivered the work 2 weeks early	We will roll out time tracking to all teams in the company	1. Purchase software licenses for all employees 2. Send email explaining why time tracking is necessary
ISSUE	project was out sick for 2 weeks and there was no available replacement, so we had to wait for her	The project was delayed 4 weeks and the client was upset. A $25,000 credit was issued to the client	We need to have redundancy in the IT department to ensure there is always someone available	Chat with CEO and HR about hiring additional IT help
WIN	The client was so happy with the final presentation that she offered us a 2 year exclusive contract!	This contract is going to double our revenue growth over the next 2 years	The new style of in-person client presentation should be used on more projects, when possible.	Share the new client presentation format with other teams

Disseminating Lessons Learned

Internal Meetings: Share insights with relevant teams.

Knowledge Repositories: Store for access by the entire organization.

Workshops: Conduct workshops to implement new practices based on lessons.

Case Study Creation: Use real project examples to teach future project managers.

Example: IBM uses internal repositories to store lessons from global projects, accessible company-wide.

Project Closure Challenges

Industry Norms for Project Closure

PMI Standards: Refer to PMBOK Guide for formal closure guidelines.

Legal and Compliance Checks: Ensure all regulatory aspects are addressed.

Customer Feedback: Collect final feedback to improve service.

Financial Audits: Ensure project accounts are accurately reconciled.

Example: SAP Implementation Projects follow PMI best practices for closure and evaluation.

Challenges in Project Closure

Incomplete Deliverables: Items left incomplete due to scope issues.

Stakeholder Disputes: Misalignment on deliverables can delay closure.

Team Disengagement: Team members lose motivation after primary goals are achieved.

Financial Closure Issues: Reconciling final costs can be challenging if budgets weren't monitored properly.

Example: Denver International Airport—had ongoing technical issues that delayed closure.

Required outcome	Example of oversight	Scenario-based example
Assurance that all the work has been completed	Scope elements are not done, (because they were not of high priority, part of a change request that was approved but not implemented, re-planned to take lower priority, or constantly delayed because of resource (or other) constraints.	The IT team has completed the development of an application. The application was fully tested and accepted by the business and users. A few months later, users look for basic "how-to guides" but never find them, because they were seen as a secondary product and of lesser importance that the application itself.
Assurance that all agreed upon project management processes have been executed	Management processes are overlooked, oftentimes intentionally, on the premise that they are minor, irrelevant, or purely on the premise that the project manager does not have the time, focus, or bandwidth to carry out those processes.	At the end of the application development project, the project manager is required to close the contract with the vendor who provided him with two HTML developers—but hasn't—on the premise that this is a minor administrative matter and everybody knows that the project is over.
Recognizes the formal completion of a project	Stakeholders do not realize that the project is over and continue to treat it as an active project, requesting changes, modifications, additions. This would result in scope creep, as well as tying resources unnecessarily to the project	There is no formal end to the application development project, and hence developers' time is still allocated to that project. They are not free to work on other projects or tasks, and stakeholders continue to view this as a long-term project.

Overcoming Closure Challenges

Engage Stakeholders Early: Involve them in defining closure criteria.

Maintain Team Morale: Keep teams engaged until all activities are complete.

Monitor Final Deliverables: Use a checklist to track completion.

Manage Financials Continuously: Regularly update budget status to prevent surprises at closure.

Example: London Crossrail—kept stakeholders involved to ensure successful project closure.

Case-based Example	Impact
The IT team has completed the development of an application. The application was fully tested and accepted by the business and users. A few months later, users look for basic "how-to guides" but never find them, because they were seen as a secondary product and of lesser importance than the application itself	Users are dissatisfied with the outcome of the project and view it as a failure. Users are not capable of fully using the application, as they are dissatisfied with the lack of documentation to help them achieve what they need through the application. Responsibility to correct the situation is diluted. Developers engaged in supporting users, as opposed to being in a position to work on new projects.
At the end of the application development project, the project manager is required to close the contract with the vendor who provided him with two HTML developers—but hasn't—on the premise that this is a minor administrative matter and everybody knows that the project is over.	Three months after the project, the finance department receives invoices for work that was completed during the project life cycle, with claims of extra time and effort. Because the work is a distant memory, and the exact proceedings and requests were not documented at the time, the organization and the contractor enter into a dispute. Such a dispute not only harms the relationship between the two parties, but could also make one of them liable for reparations, damages, and legal costs, hence costing the organization far more than necessary.
There is no formal end to the project application development project, and hence developers' time is still allocated to that project, and they are not free to work on other projects or tasks and stakeholders continue to view this as a long-term project.	Project manager, project teams, and other resources are continuously engaged in post-project activities, though unnecessarily. Support staff is incapable of supporting the application due to the lack of a formal hand off. The organization is constrained in initiating new projects due to lack of confidence or lack of resources.

Case Study Recaps

Chunnel Project: Highlighted the need for stakeholder collaboration.

Denver Airport: Emphasized the importance of system testing and stakeholder alignment.

Sydney Opera House: Demonstrated the critical role of documentation.

Heathrow Terminal 5: Focused on lessons learned for future projects.

Takeaways: Identify common themes that contribute to successful closure.

Case Studies

Designing a Comprehensive Project Closure Plan

Scenario

Your team has recently completed a large-scale IT infrastructure upgrade for a global financial institution. The project involved upgrading server hardware, migrating data to a new cloud platform, and ensuring compliance with financial regulations. The project is at the final stage, and you need to create a comprehensive closure plan to ensure all tasks are completed smoothly, the client is satisfied, and your team is ready for their next assignments.

1. **Administrative Closure** (5 minutes)
    1. **Documentation**: List key documents required to complete the project (e.g., final report, signed deliverables).
    2. **Contracts**: Identify outstanding contracts and prepare for closure.
2. **Deliverable Verification and Client Acceptance** (5 minutes)
    1. **Verification Checklist**: Create a checklist to ensure deliverables meet client requirements.
    2. **Client Sign-Off**: Outline the process to obtain client approval.
3. **Transition and Handover to Operations** (5 minutes)
    1. **Knowledge Transfer**: Identify key knowledge to be transferred to the operational team.
    2. **Support Handoff**: Outline support transition details, including contact points.
4. **Release Resources and Financial Closure** (5 minutes)
    1. **Human Resources**: Plan for releasing or reallocating team members.
    2. **Budget Closure**: Detail steps for budget reconciliation and final payments.
    3. **Celebrate Success**: Suggest ways to recognize team contributions.

Final Documentation Best Practice

Central Repository: Store all project documents in a secure, accessible location.

Document Version Control: Ensure all documents are up to date and correctly versioned.

Stakeholder Accessibility: Ensure relevant parties have access to closure documents.

Archiving: Archive documents for future audits or reference.

Example: Toyota's Production Projects—used digital archives for efficient document retrieval.

> ***Document Retention***. As used in this Section 14.03, the term "Documents" shall mean all files, documents, books, records, and other data delivered to Buyer by Seller pursuant to the provisions of this Agreement (other than those that Seller has retained either the original or a copy of), including financial and tax accounting records; land, title and division order files; contracts; engineering and well files; and books and records related to the operation of the Assets prior to the Closing Date. Buyer shall retain and preserve the Documents for a period of no less than seven (7) years following the Closing Date (or for such longer period as may be required by Laws of any Governmental Authority), and shall allow Seller or its representatives to inspect the Documents at reasonable times and upon reasonable notice during regular business hours during such time period. Seller shall have the right during such period to make copies of any of the Documents at its expense. Except to the extent necessary for the collection of monies due Seller by a third party or to perform any indemnity obligation required of Seller by this Agreement, Seller shall not retain any Documents in either written or electronic form, except that which might be retained in the ordinary archiving of Seller's database.

Metrics for Closure Success

Closure Time: Measure the time taken to formally close the project.

Client Feedback: Assess satisfaction through interviews or surveys.

Resource Reallocation Efficiency: Track how quickly resources were reassigned.

Knowledge Transfer Completion: Evaluate if all operational teams received necessary information.

Example: Amazon Fulfillment Centers—measured the efficiency of knowledge transfer as part of their closure process.

Real Life Challenges and How to Avoid Them

Inadequate Communication: Leads to misunderstandings at project end.

Poor Financial Management: Creates discrepancies at closure.

Solution: Regular updates and financial monitoring throughout the project.

Industry Norms: Conducting closure meetings helps mitigate these risks.

Example: Dubai Expo 2020—used regular meetings to prevent closure issues.

Key Takeaways

Closure Completes the Project Lifecycle: Reinforces accountability.

Documentation is Essential: Prevents critical information loss.

Knowledge Transfer: Ensures a seamless transition to operational teams.

Lessons Learned: Critical for future improvements.

Stakeholder Engagement: Maintain active communication throughout the closure phase.