FINAL REPORT

MITCHEL BATHROOM REMODEL

BY NANCY BUTCHER 12/13/2020

PROJECT CLOSURE DESCRIPTION AND VALUE

Level	Туре	Purpose	Value
Type of Closure	Normal, Premature, Perpetual, Failed	Describes how the project will end	Determine what happens to the project, team, and closure needs
Wrap- Up	Project Manager supervises end and often uses check-lists to document the process	Completing and documenting end of project	Keeps closure process consistent. Makes sure everything is completed. Archives project
Project Audits	Often done by a person not on the team. Gathers information about project success and failure. Does not target individuals or specific people on teams.	Documents project not employees. Discusses successes and failures with suggestions on future projects.	Archives project. Can be used for future similar projects to plan better/understand possible issues. Project focused, not employee focused.
Project Evaluation	Employee evaluation	Used for employee evaluations, bonuses, pay raises, redirection.	Needed to determine employee job performance and consequences (positive and negative)
Organizational Audit	Evaluation of the organization based on an industry accepted continuum	Used to determine organization "maturity" based on the continuum. The administration of the company may use this to make organizational cultural change or to determine how to move company into a new direction.	This is not an algorithmic growth model that every company goes through. It is a continuum with the top level being more of a Nirvana that many companies will never make nor would the company want to be that level. Just doing this audit indicates the company is actively seeking means of improvement. The company may or may not choose to act on the results.

Every project comes to an end. The closure activities have many levels. The first issue is the type of closure. There can be normal which is the most common, premature which must be ended quickly, the never-ending perpetual, and failed. The project manager will have wrap up closure activities including check off sheets to make sure everything is completed.

The deeper layers include project audits which are used to gather information on what went well and what could be improved without pointing fingers at any one group or person. Sometimes these are done as the project progresses and other times they are done after the work is done. Evaluations are also done which are used to determine bonuses and other information on employee performance. Finally, there can be a higher level of project audit that looks at the organization as a whole. These larger picture audit place the institution on a continuum of growth.

As a project or the project team comes to an end, the type of ending should be evident. Each closure activity has an important role to play. Having a prescribed closure process for ending a project is important to be consistent and to prevent leaving out something important. It is also important to document what was and wasn't done. Project audits that collect information on what was positive and negative about the project without pointing fingers at any one person can be used to inform similar, future projects. Because these are project focused and not people focused, the employees cannot be rewarded for a job well done nor re-directed if need be. Evaluations are done for these purposes. All of these closure activities play an important role in documenting the project, rewarding employees, and moving the company forward. The final audit is about the organization as a whole. These types of audits can be useful if the leaders of the company want to use the information gathered. Because they are on a continuum with the top level more of a Nirvana than an algorithm conclusion, the organizational audit is less imperative than the other closure activities.

PROJECT OBJECTIVES SUCCESS

Charter Objectives	Completed Objectives	Conclusions
Project start: 1/4/2020	Project start: 1/7/2020	Project was completed within a
Project end: 1/29/3030	Project end: 2/8/2020	month range from start to finish.

The Charter Objectives were to start the project on January 4 with completion on January 29. In order to keep the days of the bathroom construction to a minimum, the start date was pushed back to better coincide with the days the contractors were available. The project started on January 7. Due to the Mold Abatement and the extra wiring needed for code compliance, the project did not end until February 8. The project was completed within the charter's month time frame. Therefore, the objectives were successfully achieved.

Planned Elements	Element Impacts	Conclusions
Deliverables:	All of the charter deliverables were	All of the deliverables were
Demo: Remove tub, toilet,	completed with the addition a	completed. The goals were met to
vanity/sink, shower tile and light	mold abatement and additional re-	the best possible means available.
fixtures; paint; Install new tub,	wiring. The goals were mostly met.	All assumptions were met. The
toilet, vanity/sink; install light	The bathroom is beautiful. The	only consequence was corrected.
fixtures and GFI; re-tile shower; lay	materials are energy efficient and	The the mold and the re-wiring
new flooring; walk-through and	mostly sustainable. Disposal was	improved the value of the house.
punch list creation with customer;	made in the most responsible way	
address all punch-list items;	possible. All assumptions were	
turnover bathroom to customer	met. The only consequence was	
Goals:	the underlying conditions found in	
To create a beautiful bathroom. 2.	the demolition and electrical	
To use sustainable, energy efficient	upgrades.	
materials. 3. To dispose of used		
materials in a sustainable and		
responsible manner.		
Assumptions:		
Correct blue prints, materials		
available, skills adequate		
Consequences:		
Unknown underlying and		
potentially costly conditions found		
during demolition needing repair		
before project can continue; New		
codes requiring more		
materials/repair/work to existing		
items than planned; Mistakes that		
require repair or replacement of		
necessary items. The need for a		
professional such as a plumber or		
electrician to do any unexpected		
repairs.		

All of the deliverables were made. The goals were made to the best possible way available. Sustainable materials are expensive and not always available. Disposing of the old materials is as good as possible, but not perfectly environmentally the best. All assumptions were met. The only consequence that did come to fruition was the underlying conditions of the mold and the need for re-wiring. They added cost to the project and added days. In the end, the corrections of both added value to the house.

PROJECT BENEFITS SUCCESS

The Mitchel Bathroom Remodel Benefits were to create a relaxing and beautiful bathroom. The plans were also to upgrade the fixtures and materials to improve the health and safety of the room and to be more energy efficient. The replacement of the tub will stop any further water issues that caused the need for the mold abatement. This will protect the health of the family and the structure of the house in the future. The electrical re-wiring will not only bring the house up to code, but also provide a safer house. While energy efficient fixtures were used, the actual savings to the energy costs will be determined after a year of comparing the new bills with the old bills. All of these things have increased the value to the home.

BASELINE AND FINAL SCHEDULE COMPARISON

Baseline Schedule	Final Schedule	Conclusion
Project start: 1/4/2020	Project start: 1/7/2020	Even with a change in start date
Project end: 1/29/3030	Project end: 2/8/2020	and construction issues, the project was completed within a month
		range. The homeowners were
		satisfied.

The Mitchel family did not want to be out of use of the bathroom for more time than necessary. They agreed that about a month would be acceptable. The baseline schedule started the project on 1/4/2020. After consulting with the contractors, the start date was moved to 1/7/2020 to better match the dates when the contractors would be available. The mold abatement added 1 day and the re-wiring added 2 days. However, the homeowner and the PM were able to do the demolition and the tile much quicker than planned. They were able to make up the extra time. While the project completion date was later than the planned completion date, the bathroom was only out of use for a month. The later completion date was completely acceptable.

PLANNED AND ACTUAL COST COMPARISON

Planned Cost	Actual Cost	Conclusion
\$6540	\$6292	The Project was under the planned
		budget.

The planned cost was \$6540 and the Actual Cost was \$6292. The project was \$248 under budget. The homeowner was able to reduce some of the planned costs by watching sales and traveling to discount stores in another city to purchase equal or higher quality materials at a lesser cost. The homeowner and PM were also faster at doing the demolition, installation, and tiling than they originally thought. They were able to reduce their work hours. Their cost reduction offset the higher cost of the environmentally friendly paint as well as the additional costs of the mold abatement and the re-wiring.

Planned	d Risk	Actual I	Risk	Conclusion
1.	Construction Issues	1.	Construction Issues	Most of the risk concerns did not
2.	Home Owner/PM Issues	2.	Material Issues	arise. The construction risk did
3.	Contractor Issues			consider the possibility of needing
4.	Material Issues			to address problems found in the
5.	Supervising Decorator			demolition of the bathroom. Mold
	Issues			is a common bathroom issue.
				Older homes often require
				rewiring. The risk planning for
				materials did not include cost. The
				risk planning might have had better
				contingency plans for those three
				specific issues.

The planned risk not only included the normal concerns of construction, contractor, and material issues, but risks involving the work done by the home owner and PM as well as the approval of Mrs. Mitchel, the supervising decorator. We did not have to mitigate either one of those risks. Mrs. Mitchel was completely happy with the décor. She became instrumental in reducing the cost of the materials by watching the sales and traveling to another city to purchase acceptable materials. The concerns of the novice construction skills of the home owner were over blown. The home owner and the PM were able to complete the tasks in less than required time and do so with more than acceptable skill. There were no issues caused by the COVID Pandemic. There were no issues with the contractor having to reschedule or not being able to work. After scheduling the contractors, the initial start date was pushed back from 1/4/2020 to 1/7/2020. This was to keep the days of the bathroom being unusable to a minimum. There were two issues that did happen. We had to accept the mold abatement and the re-wiring. These two items increased costs and increased days on the schedule. In the future, the risk trigger point could include some of the more common issues found in this type of construction. Mold issues and electrical re-wiring are very common issues in bathroom renovation. The action plan could have been more specific in regards to the typical risks.

TOP 4 LESSONS LEARNED FROM CLASS

Project Management is more than holding the blue prints and pointing while answering the phone.

- 1. Project management is like being the under secretary to the chief of staff. The PM must negotiate all the politics and yet, make sure everything gets done without all the power of the little sign on the desk that says "The Buck Stops Here." Political allies, networking, and people management are most necessary skills.
- 2. Project management uses efficient organization, tracking and documentation. Keeping track of complex calendars, time tables, and people responsible for specific work requires at-a-glance understandable documentation. The use of technology is rapidly changing the creation and keeping of the documentation. The new apps allow for quick creation and changes as well as making all the information portable on a cell phone. The same is true for the closure documentation. Being able to do an electronic search for historical projects can be done in seconds. While all this new technology reduces tedious calculation and calculation time, it also increases the expectation of "do it now." The industry is changing methods making flexible management necessary.

- 3. Project management requires people skills. A project manager must be a negotiator, a counselor, a motivator, a team facilitator, and sometimes the swat team member directing traffic. Because team members may not know each other or be temporary to the project or live on the other side of the world, the pm must be able to create a successful working collaboration. Understanding the motives, culture, and temperaments of each team member allows the pm to facilitate the work, assignments, and conversation to complete the tasks in the best possible manner.
- 4. Project managers must see the project as a whole from beginning to end as well as understand each little part. The pm must juggle the issues with each little part of the project and how they interact in order to meet the goals at the end of the project. With the growing "do it now" culture in many industries such as technology, the ending is not always as concrete. Agility in planning is a must.
- 5. Bonus: Professor Kauffman's example of how to be a project manager was THE BEST learning experience. His classes were well prepared, informative, concise, and still entertaining. I would refer back to my videos to understand a concept rather than go to the book. I appreciated how he would give us enough information to do the assignment. By having the group project mirror the individual project, my team was able to figure out what to do and then apply it the next week to our individual project. Never did I dread having to go to Zoom class. My team felt that our team Zoom meetings were more like attending class and discussing the issues. We did not dread having to meet as a team. I give Professor Kauffman the credit for making this class a joy. This is most important because I took this class by accident. I could not get a response from my advisor nor find my specific course requirements on line. I thought I found it. Signed up for this class. Then half way through the class, I discovered that I have no reason to take it. I am glad that I did. I think it will be most helpful in my future.