MPM357: Project Performance and Quality Assurance

VL Development Group: Quality Management Integration

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Highlights: Quality Systems – Six Sigma, Kaizen, Plan-Do-Check-Act, Baldrige Malcolm, Pareto Chart, Inspection, Quality Management, Communication

Programs Used: Microsoft Word, CTU Virtual Campus, CTU Library, Google Search

Instructor Feedback: Good job discussing the Three Levels of Quality Management: quality system and resources to support the organization level; the processes that to implement and maintain quality management; and what each individuals role will be in contribution to quality. The Communication Plan Section included which reports are specific to the quality assurance activities, the result of the quality check, and dates. Grammar and spelling were good.

Final Grade: A

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Project Outline

The project for VL Development Group is to start up a web development company. This company will need all administrative and legal business matters completed, a customer management system, accounting and bookkeeping system, banking and payment processing set up, professional web site with portfolio, marketing materials, and communication methods set up including cell phones, toll-free, fax number, and emails. Each of these deliverables will need to be completed prior to the business opening.

Organizational Readiness for Quality Management

The organization does not currently employ any quality systems since the project is just beginning. The business does not yet exist, but will be ready to incorporate the quality management from the beginning. The start-up organization can employ the necessary quality management system through the use of additional support. This support will include hiring a project manager that will develop and follow procedures established in the quality management system. Support will be available to this manager through national and regional teams and forums. This manager will play a crucial role in getting the organization ready for business.

Quality Systems Analysis

There are many quality systems available to use for project management. Some of those include Six Sigma, Plan-Do-Check-Act, and Malcolm Baldrige (Task List, 2012). There are pros and cons to each of these systems. These systems can work independently or together with a combination of systems to provide the best outcome for the individual project.

Six Sigma

Six Sigma is a very strict system which uses highly trained professionals as Green Belts, Black Belts, and Master Black Belts. The Six Sigma standard strives for near perfection through discipline and data-driven approaches. This system will work to eliminate defects and must not have more than 3.4 defects per million opportunities. Six Sigma uses DMAIC and DMADV methodologies to accomplish its goals. These include defining, measuring, analyzing, improving, and controlling the processes (What is Six Sigma, 2012). The pros to using Six Sigma include a high ROI for large companies that can invest in a Master Black Belt to save the company a lot more money in the long run by having lean processes and Six Sigma can be used in conjunction with other systems to provide a strong framework. The cons of using Six Sigma are that it is a very rigid system with high demands. The costs may be too much for small companies and the near perfection may not be possible for some organizations due to limitations in resources. The lean Six Sigma system will not be the best system for the VL Development Group project because it is too small of an organization.

Plan-Do-Check-Act

The Plan-Do-Check-Act is also known as the Deming Cycle. It is considered a cycle because the steps are repeated over and over to provide a continuous circle of improvement. There are four steps in the cycle; Plan, Do, Check, and Act. Plan is the first step and should be started at the beginning of a change or new project. Do is the second step and it requires that the change is tested and carried out on a small-scale. The third step, Check, is the part of the cycle where the test is reviewed and analyzed. This step is important because it yields information that will help the project to run as proficient as possible. The review will show what is working and what needs to be further refined. Act is the last step and it is the action step where the new process or change is implemented. The cycle then repeats looking for better and more efficient ways to complete the project or processes (Plan-Do-Check-Act, 2012). This is a great model to use for new projects and processes that are repetitive. The pros are that it is a simple model and can be easily implemented by all management. The cons are that it works best in an environment that is trying to refine a repetitive process. For the VL Development Group project it doesn't meet all of the needs since the start up will not include a lot of repetition. This system would work better once the company is functioning and new clients/projects come into the company business cycle.

Baldrige Malcolm

The Baldrige Malcolm model is used by many organizations as an organizational model to help improve processes and performances in order to have better results. It is a framework which supports management, strategic planning, customers, the workforce and the operations. One benefit to using the Baldrige Criteria is that it is a framework which can be modified and customized to each individual organization and project. It helps to evaluate performance and assess where the changes need to be made in order to increase results. The Baldrige Model is recognized throughout the United States and offers nationwide support and Quality Awards. (Learn the Value, 2012). The Baldrige model can be easily implemented into any size of business and provides enough guidance to be effective, but enough flexibility to adapt to all situations. The con to the Baldrige Malcolm system is that because there is a lot of room to adapt the framework it also leaves a lot of room for unrefined processes to continue on. It is not as strict or focused as other systems which could result in lost opportunities if the management is not experienced and careful with the application of the model.

The VL Development Group project will follow the Baldrige Model by focusing on leadership, strategic planning, customer and market focus, measurement, analysis, and knowledge management, workforce focus, process management, and finally business results. (Business Management, 2012). This model takes each part of the business and breaks it down into sections that can be defined, analyzed, and refined as it focuses on only one part. Each

section works together as a whole, but also individually so that problems and ideas can be contained within one part of the model. This model will provide a strong framework for the start up business and can employ ideals and processes from other systems as part of the overall framework. Some sections can use the Plan-Do-Check-Act system within them to check for results.

Quality Dimensions & Criteria

Quality Dimension	Description of what it is in terms of project	Criteria to measure	Meets or Exceeds Criteria (Yes or No)
Performance	The business web site must function well and provide quick access to information and portfolio. The down time for the site must be very minimal.	All navigation is easy to use and there are no broken links. The site and portfolio loads quickly – test speed. Monitor hosting down time to ensure site is performing.	
Features	The business plan must include customer management system, accounting system, company web site, and marketing plans. The site should showcase a portfolio and a list of services available. The features should include examples of work, price lists, contact forms, email, and web hosting services.	CMS is set up properly. Accounting system is set up and functional. Web site is live and provides all information necessary for customers. Marketing plan is complete. The site clearly defines the services that are available and the features that can be incorporated into the customers' sites.	
Reliability	The web site must be reliable because it provides information to potential clients, but it also showcases the quality of work provided by the company. If the site is not reliable it will deter potential clients.	Monitor down time. Perform routine checks on email and forms. Provide long term customer relationship focus to keep clients and renew future projects.	
Conform	The site must conform to the W3C standards and comply with all regulations for privacy and internet use. This will provide peace of mind to visitors that the site is high quality and the site and business can be trusted.	Validate all pages through W3C prior to publication. Check all forms for security measures. Provide Terms of Use and Privacy Policies on the site. Set up industry standard accounting practices.	

Durability	The web development industry is very competitive and the business must be set up correctly from the foundation so that it can have a sustained durability. This will be important for the long term success.	Check for sound accounting practices, filing system, customer management system, banking and payment system, and budget. This will allow the company to handle growth and change.	
Serviceability	The company must be able to provide top notch customer service. Technology is always changing and must be debugged and revised often. Customers must have access to help when they need it.	Have contact information readily available. Response to email, forms, phone calls within 24-48 hours. Problems to be resolved in critical order or in the order they are received.	
Aesthetics	The aesthetics for a web development company are crucial. The site must be attractive, easy to look at and use, and showcase the talents and skills of the company.	Check the site is designed well. The navigation is easy. The graphics are high quality. The colors and text are easy to look at and read. Perform tests.	
Perception	The branding of the company is very important. Customers should recognize the company as being knowledgeable, skilled, professional, and customer focused. The company should provide results for their clients so that the brand recognition is positive.	The company uses high quality products and technologies. The company has a strong brand and clear graphics. The site displays professional appearance and associations. All account managers are trained for customer service practices.	

Quality Process Improvement Tools & Techniques

The project for setting up a new business for VL Development Group can implement a number of quality process improvement tools and techniques. The technique that would work the best for the project is Kaizen. This technique focuses on five primary elements. The elements in Kaizen include quality circles, improved morale, teamwork, personal discipline, and suggestions for improvement (What is Kaizen, 2012). Each of these elements focuses on the workplace environment. It is important that employees are able to work together along with the management team in order to improve the efficiency of the business or project. The elements are in place to encourage good communication, teamwork, feedback, and personal management. This technique is a great choice for VL Development because there are many independent

employees who will be working together in a team to provide services to their clients. The following paragraphs will outline in more detail how each element will be used for the project.

The first element is quality circles. This element references small groups of 6-9 people inside of the organization (Quality Circles, 2012). These groups are put in place to work out details of a particular business aspect. For VL Development there will be 3 quality circles. These circles will include a technology circle, office administration circle, and management circle. The technology circle will include two developers, one graphic designer, one web designer, one coder, and one network administrator. The role of this circle is to determine the best possible physical working conditions for the new company. They will discuss hardware, software, workspace, internet speeds, and all other technical aspects of the computer network. One person from the management circle will also act as a liaison between the technology circle and the management circle. This will keep the management informed and the technology team will have some direction on budget and other management requests.

The second circle is the office administration circle. This circle will have an office receptionist, accountant, bookkeeper, billing specialist, legal representative, and customer service personnel. A member of the management circle will also be assigned to this group as a liaison. This group is responsible for researching and recommending the proper set up for the office and administrative responsibilities for the company. They will consider the physical equipment required to complete their jobs including; accounting and bookkeeping software, filing systems, payment methods, contracts and policies, billing processes, and setting up the office space. This group will not need to collaborate as often as the technology group, but they will still need to work together to make sure all processes are fully integrated together and working as a whole.

The third circle is the management circle. This circle is smaller than the other circles. There are only two managers at this time. One manager will work with the technology circle and the other will work with the office circle. The manager for the technology circle has an IT degree and the manager assigned to the office circle has a Business degree. Both managers are also co-owners of the new business. They will work together to discuss developments and monitor the progress of the project. Together they will provide the timelines, budget, expectations and other necessary components for the other two circles to work successfully.

The circles are important during the set up of the new company but these circles will also exist once the business is operating. The teams will need to work well independently but also as a team. The design process is very rarely a single person job. All team members will have to work together to accomplish the goals of the new projects that will come to the company. The circles can use some of the seven classic quality tools in their decision processes. These tools include the use of histograms, flow charts, scatter diagrams, Pareto charts, cause and effect diagrams, check sheets, and control charts. The tool used will depend on the challenge at hand.

The second element in Kaizen is improved morale. This element is used to create an environment that is efficient and productive. When the employee morale is low it is difficult to perform at the optimum pace. Production will suffer and employees will not be motivated to do their best. Some ways to create high morale are to display goals, give recognition, and seek suggestions. These will improve communication and help motivate all team members to have positive attitudes when working through changes. By allowing all members to have input and be actively engaged in the company they will take pride in their work and show ownership. Each of the quality circles can incorporate the concept of improved morale within their working environments. (The Definition of Kaizen, 2012).

The third element is teamwork. This element requires that individuals participate in group environments often. Members are expected to contribute to the success of the team through input, hard work, and cooperation. When working in a team environment for this project there will be a lot of give and take because there are so many possible solutions to the set up process. The technical circle will have to present ideas for networks, hardware, software, and functionality. There are countless possibilities and products available. Team members will have to work together to present the best possible plan using input from all team members. They will also have to work as a team to get the system set up and functional. The office team must collaborate on office procedures, payment procedures, filing, bookkeeping, and all other aspects of running the front-end business. These members will have to use experience and research from all members to provide the best working solution. When members of the team are not working well together the processes will be impaired and the final business set-up will be lacking. Teamwork is essential in a Kaizen environment.

Personal discipline is the fourth element in Kaizen. This element is extremely important in the web development company as each of the members are contracted to do their part. Each person has a responsibility to contribute to the project in their own area of expertise. The members must have personal discipline in order to get the project done right and on time. Personal discipline includes having each person take responsibility for meeting deadlines, completing research, implementing ideas and suggestions without a lot of supervision, being engaged in the goals of the company, and following standard procedures. Self discipline is also part of the 5 S's which provide a structure for achieving organization and standardization in the workplace (Understanding Kaizen and 5S, 2012). The Kaizen concept should be adapted in all areas of the members' lives so that it simply becomes a way of living.

Improvement suggestions are the final element in Kaizen. Allowing all members in the VL Development project to provide suggestions is essential. The success of the project is based on these ideas and suggestions. The suggestions will involve all members who must identify potential problems, possible solutions, and setting standards (Understanding Kaizen and 5S, 2012). The suggestions will be part of the initial planning process but will also be implemented

throughout the project. Ideas that might have appeared to work well may not be right when the actual plan is being carried out, or another solution that was not previously considered might present itself as the project moves forward. Suggestions and changes will happen throughout each stage of the project until the project is completed. The Kaizen environment will then continue on into the company's operating business when the members will be working with clients and working to improve processes in design, administration, and presentation. The involvement of all team members is important because members will be more likely to adapt well to change when they have an active role in the change management.

With the implementation of Kaizen the project team will maintain an environment of constant improvement. This helps to establish higher standards that will contribute to lasting improvement instead of only short-term improvements. The business environment will be more efficient and productive allowing the company to have success in a highly competitive industry.

The tool that will be used to implement the Kaizen technique is the PDCA (Plan-Do-Check-Adjust) board and a Kanban Board to track and follow progress. The following is an example of a board used to document the project. The Plan column will list each component of the set up project. The Do column will document what needs to be done and when it is done. The Check column will be used to analyze the work and see if it is functional and efficient. The last column, Adjust, will be used to implement any changes that need to be made based on the suggestions in the Check column. The board can continue on with new rows until the project is complete. There are online boards that can be used by all team members to document and share information as the project moves through the phases. The following board shows an example of a board that can be used for VL Development. Each part will be filled in by the quality circles.

Plan	Do	Check	Adjust
Network Topology – Research Star, Bus, Ring, or Hybrid	Complete research Prepare presentation Present to group	Test ideas Look for improvements	Make changes to plan and update documentation
Network Hardware – Research servers, work stations, cables, storage	Complete research Prepare presentation Present to group	Test ideas Look for improvements	Make changes to plan and update documentation
Network Software – Research programs, security systems, backup and restoration	Complete research Prepare presentation Present to group	Test ideas Look for improvements	Make changes to plan and update documentation

Quality Performance Monitoring & Control

There are many tasks, efforts, and resources that need to exist in order to monitor and control quality. The tasks for the quality control include having meetings, spending time documenting and creating reports, and conducting audits. The efforts coincide with the tasks in that members of the team and quality circles must be willing to find times to meet, they must be current and thorough in their research, documentation, and reports, and they must be able to help with audits. The audits will be done to measure effectiveness, productivity, down times and more. The resources needed for the quality control will be software that can track and analyze data, printers/paper for reports, and email. There are other minor tasks that will fall under these main responsibilities for quality control.

The primary budget for these tasks is $4,500 per month. This number includes the hourly rate for each of the members that will be required to meet once a week for one hour to discuss quality control and two hours each per week to research, audit, document, and plan reports. This is a total of three hours per member each week that is devoted to quality control. Because this project is relatively small and short-term this should be a sufficient amount of time. These three hours are not part of their regular working hours, but are devoted to quality control. This budget also includes the monthly maintenance fee for the software that is used to track and display QA information.

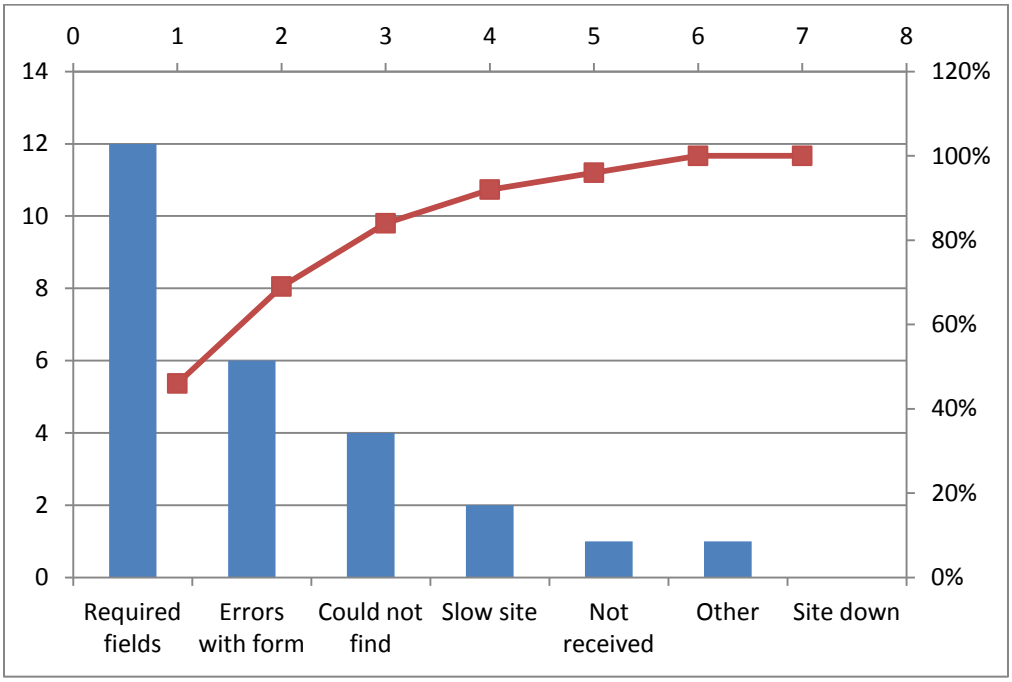
The Cost of Quality according to PMBOK is the total costs that are associated with efforts to achieve quality in a project. These can be costs of conformance and non-conformance. The costs of conformance can be prevention costs or appraisal costs. The non-conformance costs could be internal or external failures (Rajabi, 2011). As part of determining the budget all costs should be considered. These include activity cost estimates, contracts, resources, and other baseline costs. The plans should use the tools available to help determine the cost of quality prior to the project implementation. Any revisions to the budget will have to be approved by the owners of VL Development and all costs should be considered up front to minimize budget changes.

Two quality performance tools that will be used on the VL Development project are the Pareto Charts and Inspections. Both of these are important to ensure quality implementation of the hardware, software, and processes for the new company. A Pareto Chart was named after economist Vilfredo Pareto, who used the chart to show wealth and population. This chart is used to measure two variables, such as time and money, and uses a series of bars whose heights show the value associated with one variable. The bars are lined up from left to right in descending order. The chart is most useful to show which factors are most significant and should be focused on. It is a good way to visually see where resources should be used in order to address the major problems (Pareto Chart, 2005).

One way to use a Pareto Chart for tracking information in the VL Development project is to see if users can submit a contact form successfully within 3 minutes of entering the website. The test can be conducted by selecting a test group of users who are instructed to visit the website and then submit a form for the company to be able to contact them. The results will be tracked and recorded on a Pareto Chart so the network administrators, designers, and developers can see where any potential break downs are happening. The reasons for problems with the site/form could include; the site was down, the site was too slow, the customer could not find the form, the form was submitted but was not received by the company, the form was received but with errors, customer did not fill out required form fields, or other problems. The following chart shows sample data.

Pareto Chart

Site was down	0
Site was too slow	2
Customer could not find the form	4
Form was submitted but not received	1
Form was received but had errors	6
Customer did not fill out required form fields	12
Other problems	1



This chart shows the largest quality problem with the contact form is that users are not completing the form properly. This problem accounts for over 40% of the problems. The second problem is errors with the form (e.g. the email received did not reflect the information entered in the form). The chart tells the members where the focus needs to be on fixing the problems. The site being down was not a problem at all, so the members will not need to do additional testing on the hosting server to check the down times. They also know that the problems are in the development and design phases. The developers will need to spend additional time testing the required fields in the form. A second Pareto Chart can be completed to break down why the required fields are not being completed. These reasons could be that the user just did not put anything in the fields, they entered invalid information in the field (e.g. missing digits in the phone number), or they put the wrong information in the wrong fields (e.g. the zip code was entered in the city field). Most of these problems could be solved by adding a form validation that would check for missing or incorrectly formatted data. They might also need to revise their labels in case it is not clear to the user what should be entered in what field, or in what format. The design team will also need to revisit their navigation structure to see where people were getting lost in finding the form. New ideas can be given to make the form more visible.

Inspection

Another tool that can be used to check quality is inspection. In the highly technical environment at VL Development there is a lot of room for error in technology. Inspections can be used to test different variables in the environment. Each inspection can be recorded on standard inspection forms and filed by departments and responsibilities. Some inspections that should be done include testing the network speed on each workstation, testing the internet connection speeds and quality on each workstation, testing the storage server for integrity and storage space, testing the backups and restoration plan. There are many areas that can benefit from regular inspections. Inspections will save time and money for the business because it is a proactive approach instead of a reactive. The business will fail if it ever needs to rely on backups and those backups are corrupt or missing. The inspection forms will include the date, department, inspector, element tested, results of the test, follow up recommendations, and appropriate steps or actions that must be taken to resolve any conflicts or problems that arise. These inspections should be entered in electronically and filed. The reports should be easy to pull to see over time how the inspections have been addressed and problems have been fixed.

The following is a sample inspection form.

Department: _Backup and Restoration___ Inspection Number: _1207_ Date: _12/19/2012__
Inspector: _Sam Checketts_____ Manager: __Trina VanderLouw_____
Description of Inspection:
_Test Backup Files in C:/ProjectFiles/Clients/1-10/_____
Results of Inspection:
_Backup files are working correctly. All test files were restored as expected. Storage space is _ currently limited and may need to be expanded in the next 6 – 9 months to avoid slow server __ speeds or loss of future data. _____

_____
Follow up Recommendation:
_There is no follow up required for this inspection. _____

_____
Action Steps:
_Review storage space – make recommendation for upgrade in 6-9 months_____

_____
Date Filed: _12/20/2012__ Electronic File Name: _E:/Inspections/Backups/2012-12-19.docx_
All Follow Up Completed: _12/21/2012 TV

Three Levels of Quality Management

The three levels of quality management are organizational quality management, process quality management, and individual/performer quality management (Sheehan, 2012). Each of these levels of management will work together to ensure the success of the project and the success of the organization. The organizational level is at the high level of senior management where overall objectives are decided. The process quality management deals with the processes and procedures that are being performed. The individual/performer level is concerned with each member of the team and how they are working. The following paragraphs will evaluate each of these levels in more detail.

Organizational Level

The organizational level takes into consideration the overall objectives and goals of the company and project. The organization will be managed by the leadership of upper management. These managers will discuss what quality is. They will also set expectations and priorities, define stakeholders and their expectations, plan for competitive advantage and analyze market conditions. The organization as a whole will perform according to the due diligence of the managers at this level.

In the VL Development project the senior management consists of the two co-owners. These co-owners will make the decisions regarding quality levels that are expected at the company. They have completed research on market conditions, demographics, and personal standards of excellence. Each of these elements plays a role in determining the quality of work and customer service that can be expected in the organization. The stakeholders in this project are expecting the highest quality network available for the allocated budget. This means that the processes for development and implementation must also be refined.

Process Level

The process level is concerned with how things are being done. This level will analyze processes and procedures to look for ways to improve. The process level allows for the greatest potential for quality improvements (Sheehan, 2012). The processes are made up of procedures which each include a series of steps. All of the steps should be reviewed to see if they add value. The value could be in making the process better, faster, or cheaper. The processes should use established steps that have clear goals in order to identify potential improvements. The steps could be monitored to see if steps could be combined or eliminated. These changes can result in increased flow and speed (Sheehan, 2012). Time is a valuable asset that is often disregarded. The wise use of time will help the company and individuals to be more productive and successful. Using the Plan-Do-Check-Act cycle can help to identify what did or did not work well and what changes might provide better results.

Processes for the VL Development project will include researching and presenting information on the network, hardware, and software. They will also include front end business procedures such as payment processing, customer management systems, contractual and legislature policies, etc. Testing will be done to identify that the systems are working correctly and in the best possible way. The testing protocols will continue into the operating business once the set up project is completed. The inspection process must be managed to ensure that the quality levels are defined and that it is easy to see what passes inspection and what would not. The budget for VL Development is limited so perfection and the fastest speeds are not realistic for the company, but the best possible solutions available within the budget constraints should be found and used. The constant review of the options and current operating processes will allow for upgrades and changes to take place over time.

Individual/Performer Level

Quality management at the performer level focuses on the individuals involved in the project. It is important to monitor how people are performing. It is also important to understand what motivates the people who are doing the work. For some it might be money, for others it may be recognition. Team members will need to feel valued in the project in order for them to

take responsibility and ownership of the work to be done. Part of managing at this level includes communication. The next section goes into more detail of the communication plan.

At VL Development all members of the team are contracted as individuals and not employees. This creates a different environment than the standard employer/employee relationship. The contract environment thrives on personal accountability and responsibility. Each member was selected based on criteria including credentials, personal management styles, communication styles, and working habits. The members are leaders in their respective areas and do not need to be micro-managed. Communication between members is crucial to avoid conflict, but each person understands the value in teamwork and individual contribution prior to being selected to work on the project. The members were found through referrals or previous work experience with the owners. These are professionals who are motivated by success and a job well done. Monetary compensation is expected as part of accepting the job, but respect, reputation, and high quality work are the true motivators. These members align themselves with the job because they enjoy working with the owners and value the working environment. The owners/managers can motivate the team simply by being organized, having a schedule, expectations, and providing high quality referrals for the work that was done.

Quality Performance Communication Plan

Good communication is very important to the success of the project. The Quality Performance Communication Plan can be used to guide communications within the organization. This plan outlines how communication will be handled and how information will be collected, stored, retrieved, and distributed. The plan determines the flow of information and the timeliness and appropriateness of the information being shared. Communication is internal and external, formal and informal, horizontal and vertical, official and unofficial, written, oral, verbal and non-verbal (Sheehan, 2012). The organization of this communication will allow the project to move forward in the most effective way. Each of these types of communication will be outlined in the plan for VL Development described below.

Internal communication will be between all of the people involved in the project. This includes the owners, managers, and all team members. External communication is between any of the owners, managers, or team members with any person who is not directly working within the project. This could be a manager talking to a banker or a team member researching hardware at a local computer store.

Formal communication is usually written or in a meeting format. These communications could be contracts, policies, or agendas. Informal communication is communication that takes place between members and is often considered “off-line” communication. This could be as simple as a manager telling the office person they are expecting a call and to forward it to the conference room.

Horizontal communication happens between members of the same level. For example, the two owners are having a conversation about the budget, or the designer and developer are collaborating on a page layout. Vertical communication is when the information is being passed from level to level. An example could be the owner asking the marketing director a question about an upcoming ad campaign.

Official communication is information that should be "on the record." This could be a meeting agenda or minutes. It could also be an inspection form or other record keeping data. Unofficial communication is a large part of the communication inside of a company. One example is throwing out ideas in a brainstorming session. Not all ideas will be recorded, but ones that are considered should be part of an official communication document.

Written communication is a tangible message that is recorded on paper or electronic format. Oral and verbal communication is every conversation that occurs either in person or over the phone. Non-verbal communication is usually in the form of body language. For example, an employee nodding their head shows they understand what is being said. (Types of Communication, 2012).

Reports

Reports are a large part of the communication plan. The reports will be written and filed electronically. The reports for VL Development project include weekly budget updates, updated Gantt charts, reports on inspections, data on network test speeds, and updated progress reports. Any change orders must also be recorded in a weekly report. These reports will help the management to have a record of what is happening each week and to gauge the progress of the project. They will also help them to evaluate any potential problems early on.

Quality Assurance Activities

The VL Development project has a schedule where the quality circles must meet daily, first thing in the morning, to touch base on what needs to happen that day and if any new developments have come since the last time they met. The owners will meet every Monday morning with their respective quality circle. These meetings should be fairly formal and last approximately one hour. The owners will then meet to discuss any updates or concerns from the teams. Any follow up items will be responded to by the next day at noon. This allows the management to make informed decisions without waiting too long to respond to the groups. Other meetings can be called on an as needed basis. The regular meetings will ensure that all team members are "on the same page" when they are working on the project. The meetings will also provide time for discussion of quality issues. This will allow the members to focus on the biggest needs at the beginning of the week and then file a report with their team leader by Friday for any important items that need to be covered at the Monday meeting.

Other communication can happen as needed. At some points of development there may be a need to call a collaboration meeting mid-week. It may even be necessary to meet every day at some parts of the project. The team leader and members involved can call those meetings whenever they are needed, but those meetings will not take the place of the Monday morning meeting. Those meetings will remain consistent throughout the project. Other less formal communication can also happen at any time. Team members can call each other, email, IM, text or communicate face-to-face as often as they would like.

Final Closure Process

The final closure process relates to how the project manager will handle resolved quality assurance issues. The most important part of the process is to have clear and defined documentation. It does not have to be too long but should provide the necessary details for the change. This would include the problem that was encountered, the steps taken to remedy the problem, and the new protocol for handling the process. One example of this at VL Development could be that the process for entering in new clients was tedious and confusing in the current software program. A new program could be substituted, or a new approach to the old, which would allow for quicker entry of new client information. This change would be documented and the new solution would become the official process for entering in new data. This information will be extremely helpful as the business begins operating and must train front desk staff members. The protocol should be followed to provide a streamlined process that is the most efficient method.

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