Welcome to Lexington

Project Management Involving Medical Equipment Installations

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Wellstar Demographics

- 13 Hospitals
- 21 Imaging Centers
- 17th Busiest Emergency Room in country,
- 2nd Busiest Emergency Room in Georgia
- One of the largest healthcare providers in Georgia
- Recently added Medical College of Georgia and Augusta University

Background

- 1985 Started University of Michigan Health System, Ann Arbor, Michigan
- 2001 Transition to Supervisor at Erlanger Health System, Chattanooga, Tennessee
- 2015 Transition to McLaren Health System, Mount Clemens, Michigan
- 2017 Currently with Wellstar Health System, Marietta, Georgia

Thought for the day

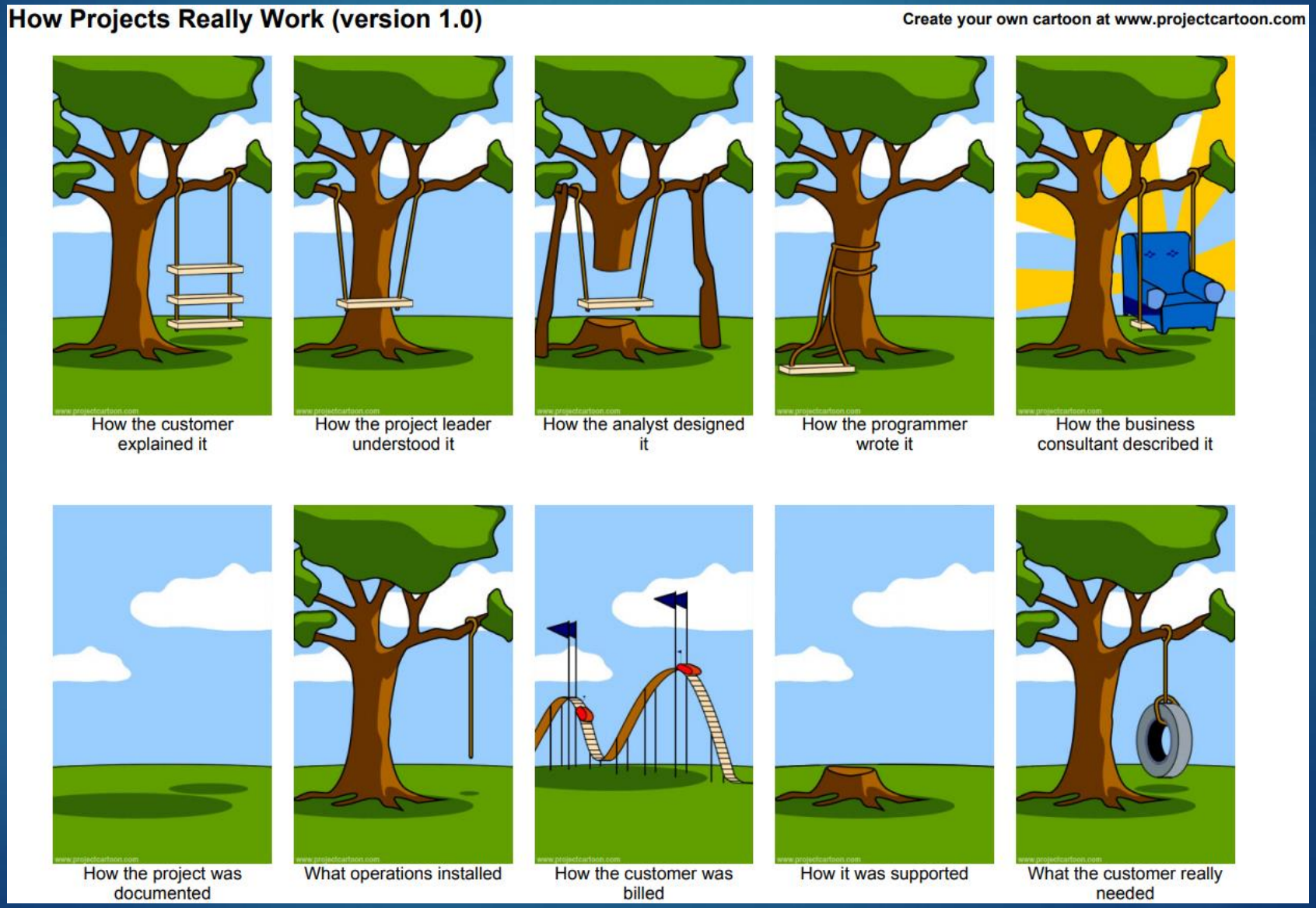
If you can't explain it simply, you don't understand it well enough.

Albert Einstein

Past Projects

- RHP- Replacement Hospital Project, New University of Michigan Main Hospital
- Patient Monitor replacement project- Entire replacement of all patient monitoring systems at University of Michigan Health System (now Michigan Medicine)
- CMMS Replacement Erlanger
- MSICU – emergency creation of temporary 12 bed ICU
- Erlanger East ED
- Patient Monitor replacement project- Erlanger
- EPIC EMR project Wellstar

EVERY PROJECT HAS CLEAR COMMUNICATION



THE COST OF PROJECT FAILURE

- Project Management statistics noted the following:
- Projects go over budget by 27% on average, and one in six projects has a cost overrun of 200%
- 17% of IT projects go so badly that they can threaten the very existence of the company
- 73% of respondents feel that their projects are either always or usually “doomed right from the start”
- IT failure rates are between 5-15% representing $50 Billion to $150 Billion in loss per year.

Project Management Statistics

- 70% of all projects fail
- 55% of all project managers site budget overrun as a reason for project failure
- 9.9% of every dollar is wasted due to poor implementation of a business strategy
- Projects are 2.5 times more successful when PM practices are used
- Organizations that use PM practices waste 28 times less money

PHASES OF PROJECT MANAGEMENT

- Initiating
- Planning
- Executing
- Monitoring/Controlling
- Closing
- ** These are universal definitions**

PROJECT LIFE CYCLE

- Project Life Cycle – The phases that a project passes through from initiation to the final closure.
- ** Every project that begins at some point has to end. **
- Project Phases- These are the milestones/progress of a project.

STAKEHOLDERS

- Any person/group that may be affected by the outcome of project or a decision or activity that is the result of a project.
- There are many different definitions for stakeholders in a project.
- Importance they are the end users of the completed project.

SPONSOR

- A person or possibly a group that provides the resources and support for a project.
- Importance- They basically are the money controller, any budget changes directly affect them. In most cases they report to higher administration.

PROJECT MANAGER (PM)/ PROJECT TEAM

- The PM is a person designated by the organization to lead the team that is responsible for achieving the project objectives.
- The group of individuals that support the project manager.

- Importance- They are the leader over the project, they make assignments to other team members and track the overall progress of all aspects of the project.

PROJECT SCOPE

- The work done to deliver a product or service.

Importance- This is the baseline of what is being asked to be completed. This should have define parameters to insure project is completed and meets desired objectives.

PROJECT SCOPE

- Money
- Tools
- People
- Materials
- Data
- Relationships

- Internal Staffing
- External Staffing
- Vendor Resources

RELATIONSHIPS

- In this case relationship is defined as a set of expectations.
- All vendor communications need to be consistent.
- Set a standard for all external interactions.
- A good example of this how incoming inspection and initial inventory process is handled.

PROJECT TIME LINES

- Timelines are used to set a base schedule for all team members to follow.
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  Importance- If timelines are not tracked it is difficult to determine the status/completion of work.

PROJECT MANAGEMENT SOFTWARE

- Microsoft Project
- This has many tools for setting time lines, allocating of resources, and measuring project work.
- This is a nice way of linking several different paths of project work together.
- Also Microsoft Excel can be used as another option.

- **** Always make sure all team members have access to any program being used.**

Team member tracking of projects

- Establish a process for all internal and external members to track project progress
- Microsoft Teams is an example of a universal software that allows establishment of a shared site for access and tracking of information and updates.
- Verify everyone is included on any important communications.

RISK ANALYSIS

- An event or condition that if it happens can have a positive or negative affect on one or more project objectives.
- Define risks associated with a project. (Breakdown Structure)
- How much risk can the sponsor take on. (Appetite)
- How much risk can the organization stand.
- All projects have some sort of risk.

IMPORTANCE OF MEETING NOTES / GENERAL DISCUSSIONS

- Documentation of progress.
- Documentation of assignments.
- Documentation of changes.
- Clarification of understanding.
- Defining aspects of a project.

CRITICAL PATH

- A sequence of activities that define the longest path through a project.
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  Why it is important- Any process that interrupts the critical path will have a global impact on project time line and success.

SCOPE CREEP

- The uncontrolled expansion of a project.
- The main issue is as the project expands provisions were not made on how this change is to be funded.
- This will also tie up resources such as team members.
- This will effect final time lines in the majority of cases.

SCOPE CHANGE

- This happens when it is determined the path of a project must take a different direction than originally planned.
- This usually will require a change in project cost and any time lines.
- Between Scope Creep and Scope Change, change at least takes a direct. Scope Creep can potentially continue to grow in many directions.

COMPRESSION/PROJECT CRASHING/FAST TRACKING

- **Compression – Maintain all aspects of the project, only decreasing the overall time to complete.**
- **Project Crashing-** A technique used to shorten the schedule duration for the least incremental cost by adding resources.
- **Fast Tracking** - the process of performing tasks in parallel so as to be able to finish the project sooner.
- **Dysfunctional-** A technique used to insure success is not an option.

ACCEPTANCE CRITERIA

- A set of conditions that must be met for before a deliverable can be signed off.
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  Importance- This is the only way to be sure a goal has been met. A sign off must be from a person that has been designated to have the power to approve.

PLANNING FOR INSTALLATION

- Clear understanding of the project scope.
- Definition of time line.
- PM and Project team identified.
- Clearly define who does what in the process.
- Routine update times are scheduled.

WAYS TO BUILD A PROJECT BUDGET

- Long Term- when a start date is somewhere in the future, potentially years. Use list price and adjust for future increase. This will be revised.
- Short Term- Project has a defined start date and funds are available quickly. Use most accurate pricing available.
- Build it to fit- The can be the hardest. You have a set amount of money that can not be increased.

BUDGET DEFINING FACTORS

- Is there a predefined budget?
- Has the scope been determined?
- Did you add everything you need to the budget?
- Is there selected vendors or a bid process?
- Is the installation in a new area or an existing area?
- Are you attempting to reuse anything without checking?

PAYMENT TERMS / ISSUES

- Are the funds available?
- How much money is committed upon arrival?
- How much money is due on final approval?
- If possible know how long it takes for your employer to pay an invoice.

ORGANIZATION OF THE PROJECT

- Blue print control.
- Estimate/ revision control.
- Project Notebook, file, or online tracking.
- Create a shared access for all team members to communicate important items like budget planning.

BEFORE YOU VOLUNTEER TO TAKE ON A LEADERSHIP ROLE, SOMETHING TO THINK ABOUT

- Bandwidth in life, sometimes leading a project requires altering work hours or overtime
- Communication ability, it’s not only what you say. It’s how you say it that matters.
- **Patience is extremely important**

INTERNAL DEPARTMENT BUDGETING

- Accurately project how much time a project will take from start to finish.
- Make sure of who internally you want involved.
- Who will pay the labor for involvement in a project?
- How soon can back billing begin?

HAVE A PLAN/ BE CAREFUL

- Before any work begins have a plan on exactly what is being done.
- Know your expected role.
- Know boundaries of your role.
- Do not take on tasks you are not able to control.
- Do not make time promises you can not keep.
- Make a contingency plan.

Construction Issues

- Where is it going to go?
- Is this a replacement of a similar device?

COMMON PITFALLS

- Purchasing equipment with user input.
- Joining late in a project and approaching involvement as a reactive verses proactive.
- Not taking the time to properly verify information, details and contacts.
- Not taking time for measurement verification.
- Lack of engagement with clinical staff.
- Making changes without proper approvals.

COMMON PITFALLS CONTINUED

- Deliberately working outside of area of responsibility.
- Unfunded equipment replacements (consignment)
- Quick purchases, only device not all pieces
- Interfacing to non-compatible equipment

Imaging Complications

- Did the site ever have Imaging equipment?
- Who has access to any shielding designs?
- Was consideration made for the weight of the equipment?
- How do you get the equipment in the building?
- How do you get it back out? Nothing lasts forever.

FIVE WAYS TO ***GET IT DONE WRONG, OR NOT AT ALL!***

- Scope-less is hopeless. Don’t decide what you are doing—just throw money at a problem.
- Focus on time and cost, not quality. Get it done yesterday. Never let anyone spend money. Don’t waste time checking anything—just get it done.
- Know the right thing to do. Don’t analyze problems. Don’t listen to experts. And—absolutely, above all, whatever you do—be sure to ignore the customer. You wouldn’t launch a project if you didn’t know everything, and what does anyone else know?
- Don’t thank the team, push them harder. Don’t waste time with planning, People ought to know what to do. Just tell the team to get it done now—or else.
- Avoid big problems. All of our projects fail. And we’ve got no time for them, either—we’re too busy putting out fires.

Project challenges

- Poor specifications/requirement development
- Sleep lab camera system

Project Challenges

- Not holding vendors to specifications
- Dukane nurse call install +600 beds

Thanks for attending

Any Questions?