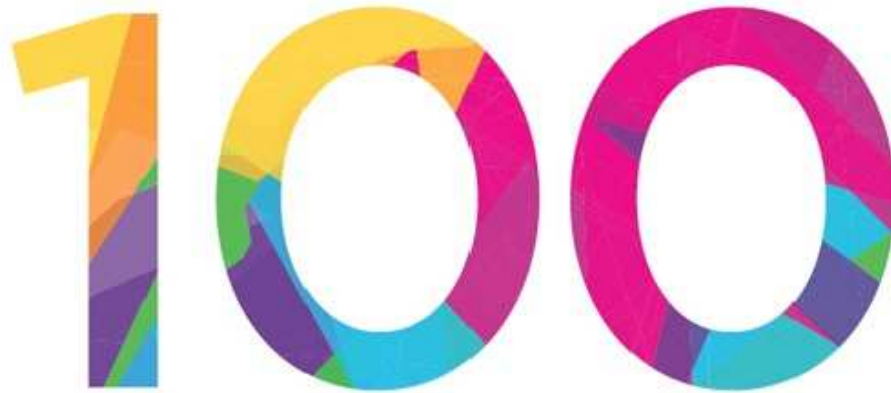




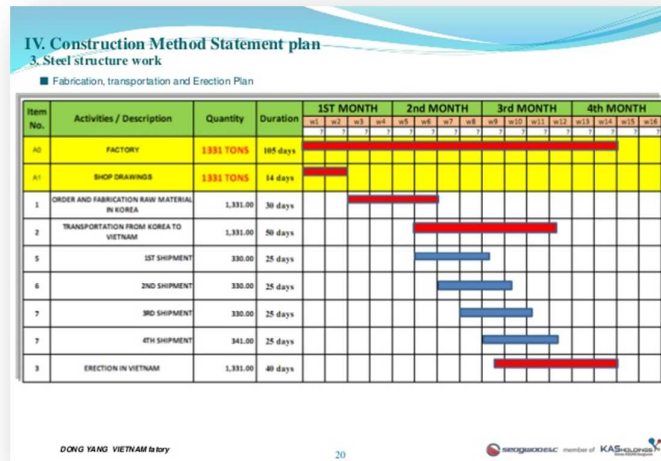
RESPONSABILITIES OF A CONSTRUCTION PROJECT MANAGER

For what concerns the construction's domain it is a very well-known fact that that one of the most important key actors in the process is the Project Manager. The duties and responsibilities of a PM are wide and complex and he has to improve his skills continuously from one project to another. An experienced and well-educated professional, the construction project manager is usually a very organized person, with abilities and training of a leader, well-equipped to deal with all kind of issues, skilled and intelligent.

Apart from the theoretical training gathered during the university years or build up across the special project management courses, practical experience in project management is essential. In order for you to get straight information of the most important responsibilities that a project manager shall have during his activity, please find below a comprehensive list with in point duties that will lead you directly to the best results!

100: Plan the Work

Even from the tender procedure the Project Manager has to be involved in the project's process in order to analyze (generally) the solutions, the budgets, the deadlines, the payment conditions etc. Before the first nail is hammered, the PM must plan the work that his or her crew will actually do for the whole project.



The PM looks over a proposed project to determine how and when the work will be performed, including prep work that must be completed before the building starts. The PM's cost estimate is important because it determines the price at which the PM's company will bid its services. The PM also develops a deliverables schedule to provide a road map that the construction team must stick to in order to finish the job in a timely and cost-effective manner (two other PM responsibilities). And the construction manager must review the project in depth in order to be prepared to handle tasks that come up along the way. One very important step in PM's preparations is to pay very careful attention to the charts for PLACING THE ORDERS FOR THE NEEDED MATERIALS (and to strictly respect it during the start of the project steps) and CASH FLOW chart for the full project development (in order to avoid blocking periods during its financing).

The PM has to have knowledge about different planning software (like Microsoft Project, Primavera, Spider etc.) in order to compile his comprehensive charts on the project. For smaller projects (let's say of 500.000 – 1 mil Euro) he can compile this charts also in Excel files or,

simply, on paper. A very important job of the PM, before starting the works (but continued also during the site works), is to overlap the different charts that he compiles in order to verify the links between them: material's supply chart + site works chart + cash flow chart + personnel on site chart etc.

99: Hire, Fire, Supervise

From his office where he is planning the development of his project or on the construction site, the PM is the boss.

The construction project manager is not only responsible for planning the work and making sure it gets done, but also supervising the hard hats who do it. That means coordinating and directing the efforts of the designing department, supplier chain (or logistic) department, quality control of his materials and site works responsible and, not last, the teams of construction workers. It also means hiring, disciplining and perhaps even firing those who step out of line (or those who, like Vito Spatafore in "The Sopranos," spend more time sipping coffee, thumbing through a newspaper and doing unexpected things in the port-o-john than lifting a hammer).

A strong PM gets the problems in his hands and he's solving it without much help from other sides and he has to be capable to assemble his team, to draft the contracts, to ask for and receive offers (or accomplish tender procedures if necessary), to contract materials & works on his site, to supervise and, if demanded, to fire the non-efficient ones and replace them with capable or better players.



98: Get Materials & Equipment...at the proper time

"They want you to cook the dinner; at least they ought to let you shop for some of the groceries," legendary NFL coach Bill Parcells once famously said of his desire to be involved in choosing the players for his teams. For construction project managers, the sentiment also holds true when it comes to selecting the materials and equipment used to complete the job.

One of the biggest responsibilities of the PM is to order the needed materials, equipment and manpower at the proper time. If the PM does not work his charts (materials supply, site works, cash flow etc.) carefully and if he does not order from the early beginning the needed resources (with long enough time before starting the works on site) then his project is sealed for fiasco. Based on his Bill of Materials (which must be a comprehensive list with all the materials needed in the project) the PM can work an Excel file in which he sets from the beginning the Order Dates of all materials. Using the site works chart he shall proceed in the same way for manpower and equipment.

The people the PM oversees are worthless without the proper tools. That is why the PM must obtain the equipment and supplies - from nails, to bulldozers - necessary to complete the project, not to mention find a place to store it and implement a method for tracking inventory. It's important that the PM be thorough in this aspect of the job, keeping costs within budget while also ensuring that no time will be lost waiting on additional equipment or repairs once construction begins.

The PM also has to keep an eye on the manpower lodging conditions, food supply, transport to the site, solving people's complaints, avoiding drinking alcohol on site or after etc.

97: NEGOTIATE...everything

Among other important qualifications that a PM has to have, an important activity that he must pursue is to negotiate all the offers and the contracts on his project. Even if we are talking about buying screws, gaskets or silicone and arriving to the important material's orders like steel/concrete structure, glass, aluminium, thermo-hydroinsulation etc. the PM has to negotiate in 2-3 rounds all the prices. The procedure has to be similar also for subcontracting the works or for the acquisition of the

needed equipments. Construction field is an area where negotiation is common and possible in each of it's activities and that's why (in order for PM to fit into his budget to optimize his costs and to achieve better results) he has to perform this compulsory activity. Experience will show you all the possible situations, will discover you all the tricks of this art (i.e. negotiation), will polish your skills, but if you want to be well prepared from the beginning read some books on this subject, you'll find a plenty on the library stores.

96: Set Goals

A construction PM may not be the one drilling holes, turning screws, hammering nails or installing the glass on the facades, but it's his or her responsibility to make sure that all of the work is done properly, on time and within the projected cost.

The PM typically sets specific project goals after the contract with the owner (client) is signed. The PM reviews the contractual conditions of performance - requirements and deliverables - to determine precisely the work that must be accomplished in order to satisfy the contract. He or she then determines cost and time goals as well as "micro-goals" for accomplishing different phases of the construction. Based on these goals, the PM sets out the number of workers and types of supplies and materials necessary to reach them.

Off course the intermediate goals in a project have to be settled down not just with the client but also with his Superior Management, Designer/Architect, Consultant, PM or the representative of the Client, Supply Chain team etc.



95: Stay on time

Veteran hard hats often refer to a construction project as "any collection of vaguely related activities that are ninety percent complete, over budget and late".

A particular job typically comes with a very specific set of objectives and constraints, where the time in which it should be completed is a key goal. The time period is important because the construction contract often includes money penalties against the builder in the event the project runs late. Think also that your works are part of a bigger project, where other's subcontractor's works together with the General Contractor's works has to perfectly fit in the whole picture. Don't mess your works because you may damage the whole process not your company's goals and the Client will not be so happy. Time, indeed, is money !



94: Stay under budget

A good PM knows that he has to be involved in the process of a construction project from the early beginning. And this means that he can fit into the discussions from the tendering procedure phase or immediately after signing the contract. The experienced PM participate actively even to the „signing the contract” procedures in order to be sure that all the tricks will be avoided in his future contract and that he ensures him for the future works the best options, conditions and resources.



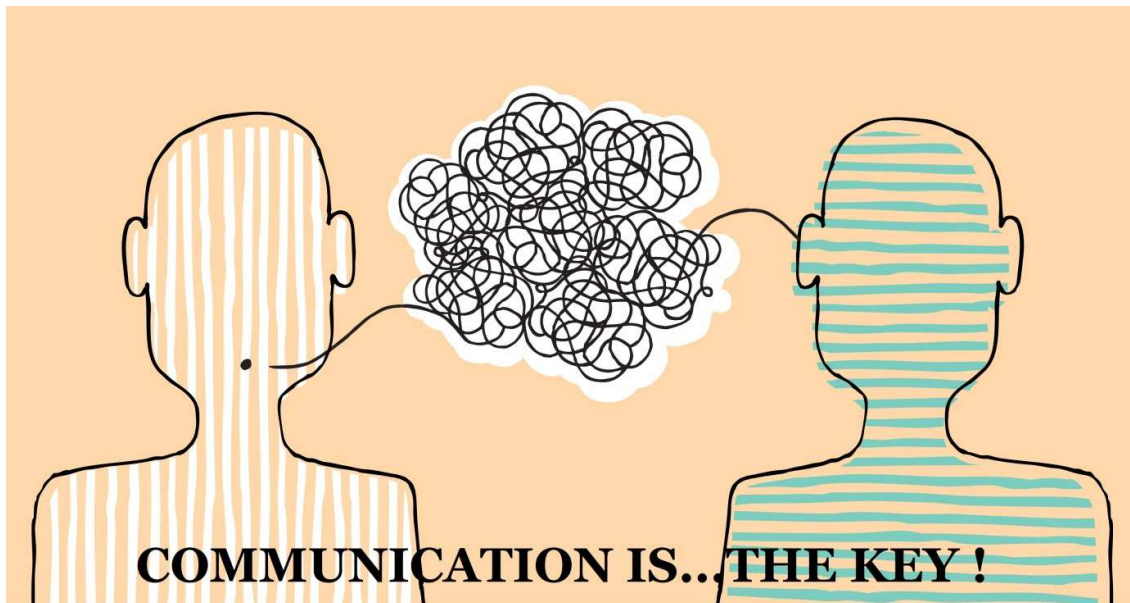
Before the work begins, the PM runs cost estimates - considering wages, equipment and materials - to help establish a budget. Cost-projection is a crucial aspect of construction project management because it determines the parameters under which not only the work will be done, but also on which the project's financial success will be determined.

While the works on site are progressing the PM has to keep continuously an eye on his budget and carefully update it in order to be sure that he is under or on his cash availabilities.

93: Keep Client (and Boss) in the loop

On a construction site or from his office, the PM may be the boss, but he serves two masters: the construction company that employs him and the client for whom a particular project is being built. Never ever neglect to keep these two important parts continuously and properly informed and updated.

The PM is expected to keep both of these parties informed as to the ongoing process and any hiccups that come along across the way. This is typically done by preparing a variety of internal and external reports pertaining to job status, equipment, policies and procedures along with a host of other issues. If possible, the most effective solution for the PM is to have face to face meetings and discussions with these two important parties in the process; this will solve many of your problems and will increase your efficiency.



If an issue arises that will cause the construction schedule to change, for example, the PM must inform the client of the situation, projecting how it is expected to affect timing and costs and specifying any planned adjustments to be made. Don't be afraid to communicate them always your problems, predictions for further steps, ideas etc., because from the whole chain they are the most powerful and entitled to offer you the best and quickest support.

92: Draft contracts

The contract between the owner and builder typically spells out all the work to be done and it is therefore imperative that the PM be involved in drafting it and be intimately familiar with the requirements in order to ensure that they're met. Whatever your company's structure is do not trust that your colleagues will fully draft & sign the contract for you and all the future way on the project will be for the PM just milk & honey. Get involved in the process, read each word of the contract, amend it, improve it, refine it and then let the company's representative to sign it.



But this isn't the only agreement that a PM must manage to make sure the project goes off without a hitch. There are also architects, materials suppliers and subcontractors (facade installers, electricians, carpenters and heating and cooling professionals, for example) to be located and brought into the fold. The PM must monitor agreements with each of these parties covering the various pieces of the building project puzzle that they will complete.

91: Dispute management

The PM role often also requires a project manager to do an imaginary referee shirt and whistle, resolving a variety of disputes. Whether it's between fellow construction workers or with subcontractors or the client, an unresolved dispute can throw a rod in the smooth running engine that is the PM's construction project.



When handling disputes among employees, the key to successful resolution is to nip a disagreement in the bud. This requires clear preventive measures and effective mechanisms for resolving conflicts that inevitably arise.

Like in medicine, it's better for you to prevent this situations, so pay attention to all your processes and stay informed. If anyway these problems appears, don't worry, take the bull by the horns, get involved and solve the problems ! There are anytime solutions in order to calm down the situation and put everybody back to work, you just have to find them !

90: Manage risk

An essential component of troubleshooting is risk management; that is, limiting the amount of trouble that will need to be "shot." A wide variety of factors present potential risk in a construction project: site conditions, design assumptions, materials poor delivery or quality, winter weather conditions, public regulations, worker safety and environmental concerns and regulations, to name a few. As a result of the increasing number of risks, owners have taken to sharing it by requiring that a builder be at least partially liable in the event of a loss due to these factors.



It is therefore the PM's job to analyze risks going into the project so that both the builder and the client are aware of them and can reach a mutual agreement on how the risk will be shared. Once construction is underway, the PM must try to mitigate the risks by carefully selecting materials and equipment and closely monitoring the work being performed. Experience in construction field demonstrates that the list with possible risks during a project development undoubtedly exists (and it does not have to be underestimated) but the number and the implications of those risks depends by the peculiarity of the project. The solutions shall be put by you on the table just if you can predict the problems before they occur. Stay with your eyes wide open !

89: Supervise and control everything in your project

In life and also in their career peoples are hoping (and unfortunately many of them are also fully believe) that the things are going to happen according to the previous plans, discussions, charts or contracts. Theoretically it should have, but the real life teaches you that in most of the cases the things are not happening like that. That is why a construction PM has to supervise all the works and procedures in his project in order to be sure that all the time the things are happening according to his plans.

If you are well organized and if you know exactly what to do in your job it will be a piece of cake for you to easily supervise your project. You don't have to do everything by yourself and if you are smart you can establish a control/supervision system by delegating clear tasks to you colleagues that will help you to do the job and report you all the needed information.



For sure there are certain actions in this process that have to be done by yourself; please find some non exhaustive examples in the following rows: visit your construction sites (watch them, control them, feel them constantly) and do not (never ever) manage them just from your warmly office; check all the price offers before you approve them; if somebody else approves payments in your project, check his procedures constantly; do not treat with indifference or superiority your site supervisors, employees/subcontractors or even your site workers, talk to them, question them, listen to their problems or complaints, be involved and try to solve also those kinds of problems and to continuously improve the process; supervise the site working program in order to be sure that everybody is working to the full capacity (including Saturdays); supervise your logistic/stock's department; check the quality of the realized works on site etc.

88: Respect the regulations in field

A construction PM has to study, know, apply and respect the norms and regulations in his field of activity. For this reason he has to be all the

time informed about the last laws in field, the modifications of the norms, the new updates, further possible changes etc. You cannot be a professional in your area of activity if you do not know and respect the rules! More than that, it is even dangerous if you do your job without knowing (and also not respecting) the procedures and regulations in your field, because you may drive your project (but also your career and life) in very muddy waters. Be informed!, read the standards, study the procedures, the laws in construction field, the health and safety procedures, the regulations that define the relation with the authorities, ask questions and request help to persons who may help you etc.



87: Know and check the indicators

Off course this paragraph refers to the indicators of your Project. In order to manage and control better your project, you have to know very well “the numbers” (or the indicators that are describing your project in simple information that you easily can keep in mind, control, check and verify). Depending on your type of project/construction (civil, infrastructure, roads, facades, industrial, residential, public etc.) the indicators may vary but some examples that may characterize your work are the following: you have to know the number and type of the buildings of your project, the number of floors, the areas, the m³ of excavation, the needed m³ of concrete, the tons/kg of steel used, the number/area of facades, the number of windows/balcony/doors/etc., the linear meters of balustrades, the area and location of the curtain walls,



Apart from the indicators described above, the PM also have to know the technical and financial indicators of his project, which may be: the quantum of his cash incomes, the incomes reported to his budget, the current costs for the materials/manpower/equipment/transports in correspondence to his budget, the consumed days with different activities, the number of the workers, the remaining days till the end of his project, the profit, the exact value of the losses on his project etc. Check the indicators at least one time per week and it is recommended to do this during the weekly meetings that you are keeping with all the parts involved in the project.

Remember: a number (data or information) that you don't know, you will never control!

86: Fulfill the Healthy and Safety requirements

This is one of the most important procedures that a PM has to be sure that on his sites are fully respected. It is crucial for everybody involved in the project to accomplish the HSE activities. Read & Study (all the time) the HSE laws and regulations in filed in order for you to know exactly what you have to respect, what you have to transmit to your site supervisors and workers, what to prepare and check with the Human Resources Department in your company (or specialized HSE company if

this is the case), what papers must be compiled, what special trainings you have to organize, which safety equipments you have to have on your sites, what HSE special works on your sites you have to realize (examples: protection balustrades, lifting plans, transportation routes etc.), what controls you may have on site from the local authorities and penalties etc.



(Do you see the little kid on the right ? Cool, isn't it ?)

Do not loose from your view that the HSE procedures are complex and include a lot of specifications and actions regarding at least the following: Work planning, Site organization, HSE representative for each projects, Site access, Site boundaries, Welfare facilities, Storage procedures, Lighting, Emergency procedures, Fire safety, First aid procedures, Reporting injuries, Site rules, Lifting planning, Special compulsory trainings for special works, Local authorities controls and inspections, Penalties, Site management procedures, Working at height, HSE materials & equipments, Site traffic, Moving goods, Groundworks, Demolition procedures, Health risks plan, Electricity, Slips and trips, Working in confined spaces, Regular papers to be filled constantly, Works affecting the public, Monitoring. Be honest ! You did not thought

that there are so many procedures, isn't it ? Ok, then READ the regulations in field and be prepared !

85: Announce your problems

Communication is one of the keys to success! Use it in an intelligent way and properly in order to solve your problems! When you predict some problems in your close or far future of your project or when you really have big problems, don't make the mistake to hide them! Make your problems public because in your team, or on the Client's team, or on the Entrepreneur side, or somebody else's side may be somebody who has the ways to help you solve your problem.



If you'll hide a problem, sometimes it'll get bigger and very complicated and in one moment or another it will be visible for the others and it may be too late to be solved. In that moment you'll have real big problems and your losses on the project may be unsolvable. Present your problems to the superiors first, try to find a solution with them, if not go forward and discuss them with the Client/Consultant or Main Contractor; maybe the problem is not really on your side, maybe they

have the proper ways to help you, maybe they will be interested to help you (because it's their project too), maybe they will find somebody else who can offer you a solution etc. Don't wait...act and get involved with everybody else in order to solve the problem.

**...for the rest, please contact the owner of the book:
boddoflo@yahoo.com! Thank you!**