PROJECT GOVERNANCE – PHASES AND LIFE CYCLE

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Abstract:
When talking about projects, the barrier is clear: successful and failed. Some fail due to different reasons, but lack of good project and risk management played a large part. Others succeed largely because of the rigorous and disciplined application of good project practices. But both groups illustrate many points that underline and demonstrate important concepts applicable to current projects. Systematic application of good methods leads to successful outcomes in projects of all types. All projects are fundamentally dependent on people, and human beings are not very different today than we were hundreds, or even thousands, of years ago. This paper uncovers main elements in projects area such as the concepts and governance of projects, with an underline of the main characteristics and the projects phases and life cycle that erase the uncertainty that joins all the projects built at any time.

Keywords: project management, life cycle of a project

Introduction

A *project* is a temporary endeavor undertaken to create a unique product or service.

It can also comprise an ambitious plan to define and constrain a future by limiting it to set goals and parameters. The planning, execution and monitoring of major projects sometimes involves setting up a special temporary organization, consisting of a project team and one or more work teams. A *project* usually needs resources.

Projects are different from standard business operational activities as they have the following characteristics.

Are *unique* in nature. They do not involve repetitive processes. Every project undertaken is different from the last, whereas operational activities often involve undertaking repetitive (identical) processes.

Have a defined *timescale.* Projects have a clearly specified start and end date within which the deliverables must be produced to meet a specified customer requirement.

Have an approved *budget.* Projects are allocated a level of financial expenditure within which the deliverables are produced, to meet a specified customer requirement.

Have limited *resources*. At the start of a project an agreed amount of labour, equipment and materials is allocated to the project.

Involve an element of *risk*. Projects entail a level of uncertainty and therefore carry business risk.

Achieve beneficial *change.* The purpose of a project is typically to improve an organization through the implementation of business change.

The word *project* comes from the Latin word *projectum* from *projicere*, "to throw something forwards" which in turn comes from *pro-*, which denotes something that precedes the action of the next part of the word in time (paralleling the Greek πρό) and *jacere*, "to throw". The word "project" thus actually originally meant "something that comes before anything else is done". When the word was initially adopted, it referred to a plan of something, not to the act of actually carrying this plan out. Something performed in accordance with a project was called an object. This use of

"project" changed in the 1950s when several techniques for project management were introduced: with this advent the word slightly changed meaning to cover both projects and objects. However in certain projects there may still exist so called *objects* and *object leaders*, reflecting the older use of the words.

One may also think in terms of platonism, where *ideas* from the realm of ideals are *projected* onto the physical world.

Particularly liked by Western business, projects can subdivide into sub-projects and spawn an industrial sub-culture of project planning and project management, all oblivious to more holistic developments.

Some feel this habit of short-termism has permeated economic planning and personal growth to the detriment of cyclical and multi-cultural world views. Alternatives to project-centric planning include trend-oriented goal-setting and directional planning.

However, this view is contentious, and indeed industrial program management and portfolio management represent ways of administering a range of projects to fulfill an over-arching strategy.

Notable projects include: Manhattan Project: Developed the first nuclear weapon; Human Genome Project: To map the human genome; Project Apollo: Landing a man on the moon.

Once established as idea, the project should be turned to life and put into practice through different means and steps, which all together form the project governance.

Project governance

The term *Project governance* is used to describe the processes that need to exist for a successful project.

Project governance will outline the relationships between all internal and external groups involved in the project; describe the proper flow of information regarding the project to all stakeholder; ensure the appropriate review of issues encountered within each project; ensure that required approvals and direction for the project is obtained at each appropriate stage of the project.

Important specific elements of good project governance include: a compelling business case, stating the objects of the project and specifying the in-scope and out-of-scope aspects; a mechanism to assess the compliance of the completed project to its original objectives; identifying all stakeholders with an interest in the project; a defined method of communication to each stakeholder; a set of business-level requirements as agreed by all stakeholders; an agreed specification for the project deliverables; the appointment of a project manager; clear assignment of project roles and responsibilitie; a current, published project plan that spans all project stages from project initiation through development to the transition to operations; a system of accurate upward status- and progress-reporting including time records; a central document repository for the project; a centrally-held glossary of project terms; a process for the management and resolution of issues that arise during the project; a process for the recording and communication of risks identified during the project; a standard for quality review of the key governance documents and of the project deliverables.

Project management definition and characteristics

Project Management is the skills, tools and management processes required to undertake a project successfully. It incorporates:

A set of *skills.* Specialist knowledge, skills and experience are required to reduce the level of risk within a project and thereby enhance its likelihood of success.

A suite of *tools.* Various types of tools are used by project managers to improve their chances of success. Examples include document templates, registers, planning software, modeling software, audit checklists and review forms.

A series of *processes.* Various processes and techniques are required to monitor and control time, cost, quality and scope on projects. Examples include time management, cost management, quality management, change management, risk management and issue management.

In today's fast-paced business environment, the necessity of incorporating project management practices into an organization's operations has become increasingly apparent. Project Management's best-practices and methodologies allow workers to stay on time, on budget, while wading through the sheer mass of data. Data that has increased exponentially as a result of the information revolution in what is now being called the Information Age. Project management has become a standard practice rather than an exception, and the incorporation of these key principles is often seen as the distinguishing factor in measuring success.

Amid these advances in project management skills and technology, however, the fundamental benefit remains the same. Project management helps organizations respond faster, accomplish its strategic goals, and recognize return on investment. From this point of view project management bears some characteristics.

Project management is inclusive, not exclusive.

Project management used to be the exclusive domain of a privileged few with the skills and experience to succeed. Today everyone is a project management consumer, and many are assuming the role of project management -- some by design, some by accident. Project management is also the vehicle through which stakeholders are made aware of their assignments, interfaces, and progress. Project management must reach outside of an organization to vendors, suppliers, designers, subcontractors, to the client, and to the ever-curious public.

Project management is peer-to-peer, not top down.

Peer-to-peer project management invites participation from the very people assigned to do the work; after all, who knows better how long something will take than the resources themselves. This peer-to-peer model removes the middleman from decision-making. Project teams respond more quickly to self-identified project opportunities and threats, thereby keeping the project on schedule. Information rolls up so managers can focus on resolving conflicting priorities and resource bottlenecks.

Project management is collaborative, not hierarchical.

Project-team collaboration is the most important factor in minimizing project risks, maximizing project quality, and eliminating wasteful efforts and unnecessary rework. Since the majority of projects rely on teams that are not co-located, project management creates touch points for soliciting input and consensus throughout the project lifecycle.

Rather than enforce a rigid, hierarchical flow of information that slows down decision-making, project

management enables internal and external project team members to collaborate beyond simply coordinating calendars and circulating project-based e-mail. Project management exposes relevant project information to others involved in the project, using workflow rules and routings to ensure all have access to information they need to accomplish their work better.

Project management is cooperative, not adversarial.

One example of teams existing as virtual companies only to accomplish the project is demonstrated in the construction industry. They each have their own profit motivations and may actually be competitors. This cooperation is essential for getting the project done better, faster, and cheaper. They must cooperate, not fight. They must learn to trust each other, sharing information that once was "theirs and theirs alone" in order to distribute the burden of project complexity and risk.

Project management raises the visibility of project risks, issues, and decisions for the mutual good of the project and its participants. Designers, contractors and managers must work together to do the right things correctly the first time on behalf of their customer, the owner. The ascendance of design/build for project delivery proves this.

Project management is enterprise-wide, not standalone.

There isn't a CEO who wouldn't like to know what projects are underway in the organization, or to be able to evaluate the impacts of accelerating one project ahead of another. No CFO would be permitted to manage the business' finances in the same standalone, disconnected, unrepeatable fashion that projects are often managed.

With an enterprise-wide perspective, executives can truly understand the health of their business and the ripple effects of their strategic project decisions. This enterprise-wide insight can only come from maintaining all of the projects within a centralized system, with a company-wide project structure -- the project management "chart of accounts" -- to facilitate this cross-project analysis.

Project management is portfolio management, not catch-all management.

Once a company has a handle on all of the projects that are underway or in the pipeline, it is in a position to decide effectively which of the many new project opportunities will compliment the project portfolio. Project management enables companies to determine which projects can be accomplished with the resources that are available (or that can be hired), which will provide the greatest payback given the opportunity and the investment the company is willing to make, and which combination of projects best achieves their strategic objectives within the required timeframe.

Projects phases and life cycle

Because projects are unique undertakings, they involve a degree of uncertainty. Organizations performing projects will usually divide each project into several *project phases* to improve management control and provide for links to the ongoing operations of the performing organization. Collectively, the project phases are known as the *project life cycle.*

Characteristics of Project Phases

Each project phase is marked by completion of one or more deliverables. A *deliverable* is a tangible, verifiable work product such as a feasibility study, a detail design, or a working prototype. The deliverables, and hence the

phases, are part of a generally sequential logic designed to ensure proper definition of the product of the project.

The conclusion of a project phase is generally marked by a review of both key deliverables and project performance to date, to: a) determine if the project should continue into its next phase; b) detect and correct errors cost effectively.

These phase-end reviews are often called *phase exits, stage gates,* or *kill points.*

Each project phase normally includes a set of defined deliverables designed to establish the desired level of management control. The majority of these items are related to the primary phase deliverable, and the phases typically take their names from these items: requirements, design, build, test, startup, turnover, and others, as appropriate.

Characteristics of the Project Life Cycle

The project life cycle serves to define the beginning and the end of a project.

The project life-cycle definition will also determine which transitional actions at the beginning and the end of the project are included and which are not. In this manner, the project life-cycle definition can be used to link the project to the ongoing operations of the performing organization.

The phase sequence defined by most project life cycles generally involves some form of technology transfer or handoff such as requirements to design, construction to operations, or design to manufacturing. Deliverables from the preceding phase are usually approved before work starts on the next phase. However, a subsequent phase is sometimes begun prior to approval of the previous phase

deliverables when the risks involved are deemed acceptable. This practice of overlapping phases is often called *fast tracking.*

Project life cycles generally define: what technical work should be done in each phase (e.g., is the work of the architect part of the definition phase or part of the execution phase?); who should be involved in each phase (e.g., implementers who need to be involved with requirements and design).

Project life-cycle descriptions may be very general or very detailed. Highly detailed descriptions may have numerous forms, charts, and checklists to provide structure and consistency. Such detailed approaches are often called *project management methodologies.*

Most project life-cycle descriptions share a number of common characteristics: cost and staffing levels are low at the start, higher toward the end, and drop rapidly as the project draws to a conclusion; the probability of successfully completing the project is lowest, and hence risk and uncertainty are highest, at the start of the project. The probability of successful completion generally gets progressively higher as the project continues; the ability of the stakeholders to influence the final characteristics of the project's product and the final cost of the project is highest at the start and gets progressively lower as the project continues. A major contributor to this phenomenon is that the cost of changes and error correction generally increases as the project continues.

Conclusions

Successful projects don't happen by themselves. However, the success rate is bound to go up because project management prevents companies from inaugurating projects that are likely to fail or are poorly defined. It helps

increase speed of project delivery and efficiency of project execution. Project management helps capturing best practices so every project is more successful than the last one. It even bridges the gap between project participants so everyone is on the same page and working toward the same goals.

Also, care should be taken to distinguish the project life cycle from the product life cycle. For example, a project undertaken to bring a new desktop computer to market is but one phase or stage of the product life cycle.

Although many project life cycles have similar phase names with similar deliverables required, few are identical. Most have four or five phases, but some have nine or more. Even within a single application area, there can be major variations; one organization's software development life cycle may have a single design phase while another's has separate phases for functional and detail design.

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