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## **CHALLENGES OF PROJECT MANAGEMENT PRINCIPLES IN LARGE CONSTRUCTION PROJECTS**

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### **Abstract**

*The typical state of a venture is "disappointment" and this is not any more obvious than in the realm of enormous complex tasks where two out of three activities "fizzle". Current task the executives hypothesis doesn't give a system to progress. In this article, the current hypothetical system for the executives of enormous complex tasks is considered considering the proceeding with advancement of general administration hypothesis and the speculations of the board and undertakings investigated. Qualities of enormous complex ventures are explored and changed administration viewpoints recommended. The motivation behind this article is to move past the writer's past inquiry of "Is it an opportunity to reevaluate venture the board hypothesis" to proposing a portion of the basic viewpoint and central changes that such a reexamine will probably incorporate. Similarly as hypothesis in material science moved from an absolutely old style view to a traditional and relativistic (or neo-old style see) see, each with their own scalar spaces, so too should the universe of enormous complex tasks be better supported. The enormous complex ventures considered in this article are huge, complex designing and development extends however others may pass judgment on its decisions to apply similarly in different spaces. Broad footnoting is expected to both help the writer's perspectives just as furnish perusers with roads for extra perusing and understanding.*

### **INTRODUCTION**

Today, developments happen all around the world, without geological limitations. They emerge dramatically, and cause emotional changes. The movement of these progressions is extremely quick speaking to another test in the advancement of society. Undertaking the board can be deciphered as a device used to accelerate the improvement of advancements. Confirmation of expanding criticalness of this order is likewise developing revenue in instruction of venture chiefs is, and huge interests in trainings in venture the board and conduct courses. The intricacy of tasks powers the association to improve distinguishing, choosing, and estimating pointers of undertaking achievement. One of the variables that recognize normal from fantastic organizations are venture achievement pointers. The administration of complex tasks requires an adaptable technique. Accomplishing an incentive in venture the executives is a higher priority than fulfilling the triple limitations.



## **Future trends in Project management**

A clear example of management utilising projects is sustainable regional growth, as a premise for the development of modern society. Society is now confronted with a range of challenges that impact the direction of its development. The lack of ethical principles and, with them of corporate names contributes to price collapses, business insolvency, and more recently, intense deindustrialization and relocation to economies abounding with cheap labour. In developing countries, the wave of plant closing persists, leaving more workers without employment and without the ability to make use of very short-term skills. It is important to counter all these developments, and responsive communities should react in the right way. First in order to gain knowledge on patterns and incidents that have happened in the past, it is important to research the history and evolution of the growth of civilization as we know it today in order to recognise the generators of the current crisis. Society Growth according to D. The illustration by Zelenovic (Zelenovic, 2011) discusses the time before today during the industrial revolution, bringing the prediction all the way to 2200.

The modern age is marked in the broadest context by a multitude of individuals (through society's demands for alternatives to goods, people and events), creativity, resilience, efficiency, expense, competitiveness and, eventually, the reach of consumer needs. In order to find an efficient path to produce success, both of the above are required, which the organisation transforms into a new growth and development phase. Digital technology is known as an instrument that increases competitiveness, accessibility and allows access to information and patterns to all individuals. It is evident that the surge of transformation introduced by information technology is intense and efficient, and it is similar in strength to the developments in the Industrial Revolution and the changes that have taken place in the past. Changes from the combustion engine to Ford's production line is influenced by individuals and communities of people's technical solutions. Project cycle management has experienced several improvements in the last decade, such as reducing the number of steps and other similar procedures. Exploring the performance and particularly the long-term effect of the projects adopted was an indication that in view of the reports, projects could not be deemed really good by those standards. With respect to the management of projects classified by current management tools, it is evident that improvements and developments that are embodied in management processes ought to be set in effect.

The importance of stakeholder theory in managing, especially in terms of the project cycle, is one of the phenomena that is recognized but not adequately institutionalized in the field of project management, particularly when it belongs to a community of international development projects. Through inserting particular elements at each point, the performance of the project is



significantly enhanced in terms of the dimensions that represent the enjoyment and approval by the recipients and the general interest groups of the project result. Looking at the technical area of project management, it is clear that through the years it has evolved. They are trying to incorporate project management or not in former companies, so now the only concern is how effective the business is going to be in project management.

Project performance metrics are one of the reasons that impact the distinction between the mediocre and excellent businesses. Project management is also seen as a competitive capability required for firms to succeed in the industry. From fully disorganised management by Absolute Quality Management (TQM) and parallel engineering to the alignment of main output metrics with operational progress, management has passed through different phases (Figure 1) (Kerzner, 2013). It is apparent that the model management phase takes place in tandem with the same developments in organizational control and help project management, which is a natural difficulty with a long history of addressing project and corporate management, looking at the defined levels. The phases of reengineering, life cycle expenses, international teamwork, strategic strategy, 6 sigma, Lean philosophies, and the result of enterprise process delivery programmers are fascinating to derive.

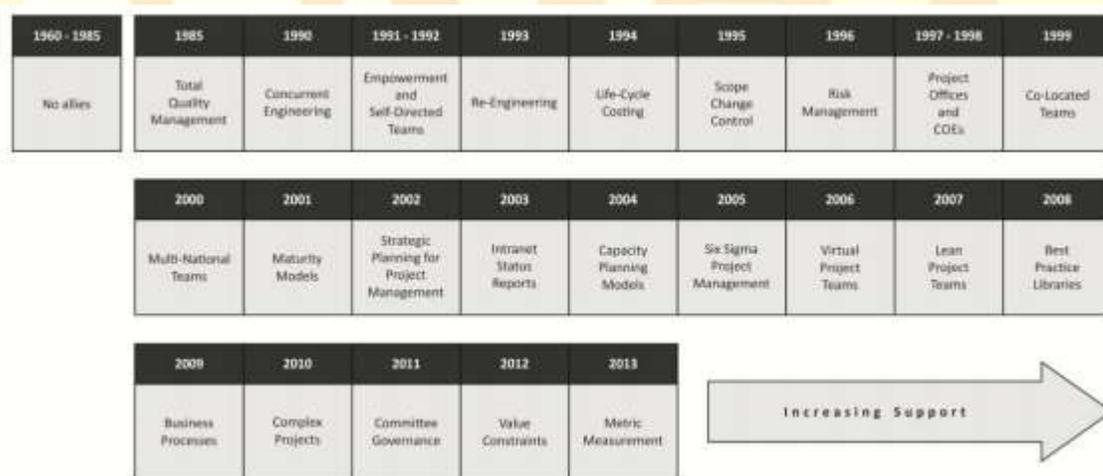


Fig 1. New processes supporting project management (Kerzner, 2013)

Investment in project managers' schooling has been significant, though investments are now primarily centred on project management instruction and behavioural classes. Task leaders are already active, rather than at the end of this stage, in the first steps of initiation. Furthermore, team leaders are still making strategic choices nowadays. Around Crawford et al. A research on



developments in project management was undertaken (Crawford, Pollack, & England, 2006) and revealed leadership in agile teams, human innovation and project sophistication as an indicator of potential studies. The scope of tasks forces the organisation to define, pick and calculate project performance metrics easier. Project management has been utilised in conventional projects focused on sequential thinking for more than three decades - life cycle phases have been well structured, routines, forms, instructions and checklists have been accessible for each level. Due to regular shifts in outcomes and stakeholder criteria, dynamic programmes need adaptive management. The key distinctions are linked to administration, the degree of risk, the amount of partners and the length relative to conventional ventures.

Although the length of conventional projects is typically about 18 months, more than 10 years of complicated projects will last. The hypotheses developed at the outset of the project would almost inevitably be altered over its lifespan due to the duration. Changes can arise in the measure of the project's progress, technologies, and size, contributing to changes relevant to the project's completion. Examples of adjustments in the assumptions for complex ventures involve, but are not limited to, bank loans, acquisition expenses, the advancement of technologies, the availability of qualified personnel and consumer adoption of goods, competitiveness, threats and the political climate. With the project's rising complexity, the number of stakeholders is also getting more diverse. The technique of distinguishing the success of programmes is a common issue in engaging with stakeholders. The key prerequisite for the progress of subsequent programmes would be the updating of the original strategy and sensitivity to current situations and decision-making with regards to the overall importance of the enterprise. A versatile approach includes the handling of diverse tasks. It is more necessary to obtain project worth than to meet the three constraints. It is felt that there would be a much stronger need for efficient management systems in the future. A mechanism for decision making is the management structure of a project. PMIS - Project Management Information System - can be connected to the control system. As project complexity grows, improvements in the nature of the project are anticipated, specifically in the area of information technology. At any point in the project life cycle, these modifications will occur. Capacity adjustments are usually attributable to inadequate understanding of specifications, badly specified requirements, difficulty, weak coordination between project leaders and other stakeholders, misunderstandings relating to stakeholder preferences, unnecessary improvements in configuration, project team excellence, time constraint markets, regulatory requirements, deadline delays, unnecessary demdem Interdependencies and impacts of foreign development programmes within the Knowledge Society have been reported in previous studies.

The findings suggest the presence of dependencies between these two phenomena, and for potential study, there are two plausible paths. It will be necessary to explore in other social



fields the effects of foreign development programmes. It is therefore important to determine the effect of construction programmes on the national knowledge society, in order to obtain a full image. There are a range of national initiatives relating to the launch of new enterprises, the incorporation of creativity, the growth of the ICT segment in terms of marketing, capacity-building and collaboration tools with international partners. These initiatives and several others have a national effect on the knowledge society and the interrelationship and dependency that results from them needs to be investigated.

Works sponsored by the following organisations should be included: the Ministry of International and Domestic Exchange and Telecommunications, the Investment and Export Promotion Department, the Serbian Chamber of Commerce, the Ministry of Finance and Environment, the Ministry of Education, the Development of Science and Technology, etc. The technique guided by the plan is linked to the conventional approach to project management, which assumes a comprehensive project plan, and it is necessary to initiate execution after its completion, although iterations are carried out in agile methodologies. The most commonly spread methodologies guided by the plan are: PMI, IPMA, and PRINCE2. In reality, since developing the agile manifesto paper in 2001, the application of agile technique in project management has increased in the last 10 years (Dingsoyr, Nerur, Balijepally, & Moe, 2012). In small teams who collaborate with the task, agile project management is present to: generate outcomes that steadily raise creative characteristics, prioritise work according to requirements and budget, iteratively execute the project in compliance with the client's vision and input, and achieve the highest value. SCRUM, Intense Programming (XP), the Crystal Family, EVO, and the Dynamic Systems Creation Approach (DSDM) are some of the most important agile methodologies. In the economy and the IT sector, agile methodologies have increasingly stabilised. Processes relating to consumer contact had to be changed and strengthened. This pattern is attributed to the reality that company needs are not fully satisfied by programmes and project management methodology. The goal of project management is to carry out the tasks in the proper manner and the agile mindset aims to do the right thing in the right moment. Project parameters are too important to be concerned with at the outset of the project. In compliance with the client's desires, it is important to maintain track of the big picture and further identify the specifications. Plan development is a very critical aspect of the lifecycle of the project and this segment should be given an acceptable time period, although the tracking and management process will be more essential for increasing the degree of consumer satisfaction.

Projection of potential studies in the area of intelligence networks for development and company and project management

Development and business systems knowledge is an area that encompasses several various



domains and can be called complimentary in terms of describing the intelligence moved from the human paradigm to the production system model. However it is important to observe a variety of distinct, extremely intelligent mechanisms present in nature, such as ant colonies, beehives, and dolphins, before finding an intelligent human being and the intellect model that can be reproduced. The creatures described above are famed for their intellect, but there is one aspect that is also a source of inspiration for the developers of the intelligent company model. For example, Dolphins have the capacity to associate small sections of their perception as the knowledge in the brain with the larger notion of the display regions surrounding them. This idea is aimed at improving intelligence in the management/business navigation framework by incorporating a great deal of information into a common image of a successful analysis and management and maintenance capacity. Companies who set conditions appropriately have substantial market prospects (Thannhuber, 2005) to work profitably. There are several research questions whose answers can lead to the establishment of conditions for the creation of intelligent organisations focused on the theory of biological species, including the areas of intelligent economy (Zelenovic, 2011). Future research in intelligence systems, focused on fields already studied, can be divided into two major directions: (1) research in the field of business intelligence (BI) based on information technology in decision-making support structures; and (2) research in the field of intelligence as a generic material consisting of individuals, technologies and synergy. Previous study has established the framework and laid the groundwork for more studies in the field of organisational preparation and mission readiness, as well as their effect on the representation of organisational knowledge. A foundation is also laid for more analysis on the effect of project activities on the organization's intelligent development as a connection between the two key previously provided directions.

It is possible to define the research problems that open up (1) the field of rapid development at the level of creativity and the role of intelligence in a defined pattern, (2) the area arising from the absence of boundaries between industrial and research disciplines, based on the existing patterns, driven by the idea that the future is already here, it is just not quite equally spread (Gibson, 2003), It is possible to define study topics in the field of biotechnology as a phenomena that offers a fertile ground for human-machine research, which can address questions regarding learning and meta-learning organisation, communication, senses, transmission of emotions, and knowledge promotion (Berner, 2004). In the light of a trend in the life of people in society, the problem of learning by games, which takes up more and more room in the production of intelligence systems, problems of concentrating on the needs of the person in the position of the client, which becomes the prevailing trend, the adjustment issues that an individual tackles in the mod We need to address the question of how to maintain calm and analyse processes and their interaction from a distance in the field of entrepreneurship as an estimated context in the hunt for intelligence, which ensures the return of existing frameworks



of thinking in the age of globalisation, the Internet and the overall speed of business growth. Intelligent enterprise must interact with the security and competence concerns in its defence and uncover the processes that contribute to the company's personal interests and goals being balanced. Society's e-volution is a movement that would once again create a systemic solution as a central approach, as the convergence of networks begins to acquire prominence. In order for potential studies in the field of project management to be able to carry out high-quality predictions, it is important (1) to create a stable base of proven facts and to recognise the findings by the period of the analysis, and (2) to suggest forecasting the development areas that have been presented so far. Project management analysis has evolved from initiatives aimed at improving monitoring and management instruments and methods into even more interesting project management inside the enterprise (Thomas et al., 2009).

### **Project approach integration in organizational management**

Integrating project strategy into the operation of an enterprise or organisation is an interesting area for more study. A variety of the concerns presented and the literature provided are a valid foundation for the establishment of study that will assess the possibilities of utilising project management methods and strategies in the organization's management. There is a stage in this area where project management, corporate planning for project management growth intersect. Research problems such as if operating the company, which is a series of projects, is exactly the same as running a project-oriented agency, what part portfolios play in programmes, how to pick portfolio projects, are both inevitable and multidimensional research is accessible to current issues. A particular field of potential study could be defined, which will involve the operational role of projects in non-project-oriented organisations.

### **Attributes of Large Complex Projects**

Two-thirds of the time major ventures crash. Failure is basically the planned state of major projects as we extend the existing philosophy of project management to the planning, implementation and execution of these projects. Either the implementation of these programmes, based on management theory, or the underlying idea of a project, especially a big project, based on classical project theory, is faulty. We looked at flaws in existing project management thinking in an earlier part of this article. We looked at project features from a classic theory of projects in the previous portion.

We would look at a couple of the project features we find in large complex projects in this segment and propose that they may act as a foundation for a neo-classical Large Complex Project Theory. Big complicated projects vary from those identified and served by the Project Management Institute and its Project Management Body of Knowledge (PMBOK) that form the



conventional project domain. Note his message that PMBOK, much of the time offers a management system for most tasks. Outside these boundary environments, massive dynamic ventures tend to be living. So what are some of the concepts and features of big complicated projects and how do they vary from projects that are best supported by classical project theory? Unlike their more normative cousins, big, dynamic ventures vary from semi-permanent endeavours to service provision throughout the development cycle. These project organisations are motivated to provide life cycles far longer than other businesses by the absolute durations often seen in initial execution and growing usage of progressively life-cycle partnerships. The increasing usage of joint projects on both the customer side and the major service provider frequently results in new companies with somewhat different cultural and operational regimes than any parent. The readiness of both the company of the owner<sup>56</sup> and the corresponding joint ventures<sup>57</sup> needs careful attention<sup>58</sup>. The transformative flows we have come to recognise in classical PM theory are informed by flows that traverse semi-permeable project boundaries and the relationship of two or more transformative flows that are present in the background of the project. This is a critical factor, since massive ventures are not readily separated and much as they are vulnerable to shifting externalities, they often function to modify the external climate they impact. I have debated with whether to characterise these borders as completely permeable or semi-permeable and have opted for the latter since, as it applies to these externalities, such governance systems are likely to restrict maximum permeability.

## **OBJECTIVE**

1. To examine the Palestinian construction industry and define the nature and performance of management in the industry, and its contribution to the overall economy and social life.

## **CONCLUSION**

Previous research also confirmed a link between the smart enterprise and its degree of operational preparation. Given the need to respond rapidly to evolving external circumstances, it has been clearly shown that if one of the components of the information structure is the degree of adaptation to the ambient conditions, the extent of organisational preparation directly influences the adoption of creativity and organisational resilience. Using canonical correlation study, the presence of a relationship between organisational and project readiness was investigated by proving the association between each of the components of organisational readiness and each of the components of project readiness. As predicted, the highest degree of association was observed between the related organisational and project preparation components (organisational leadership - leadership of the organisational project management



framework - project management system, etc.).

## REFERENCES

- [1] K. Hollan, The history of project management-project management across 4,500 years. Lessons from History.[Online]. Available: <http://lessons-from-history.com/node/44>
- [2] L. Koskela and G. Howell, "The underlying theory of project management is obsolete," in Proc. of the Project Management Institute Research Conference, 2002, pp. 293-302.
- [3] A. J. Shenhar and M. Wideman. (2000). Optimizing project success by matching PM style with project type. [Online]. Available: <http://www.maxwideman.com/papers/success/success.pdf>
- [4] T. Cooke-Davies, "The „real“ success factors in projects," International Journal of Project Management, vol. 20, pp. 185-190.
- [5] Project management, Part 1: Principles of guidelines for the management of projects, BS6079-1:2010.
- [6] J. R. Tuner and A. Keegan, "Mechanisms of governance in the project based organization: Roles of the broker and steward," European Management Journal, vol. 19, pp. 254-267.
- [7] J. R. Turner, Project Success Criteria, pp. 32-33, 2002.
- [8] A. J. Shenhar, "One size does not fit all projects: Exploring classical contingency domains," Management Science, vol. 47, no. 3, pp. 394- 414, 2001.
- [9] I. Hyvari, "Success of projects in different organizational conditions," Project Management Journal, vol. 37, no. 4, pp. 31-41, 2006.
- [10] H. Kerzner, "In search of excellence in project management," Journal of Systems Management, vol. 38, no. 2, pp. 30-40, 1987.
- [11] P. Weaver. (2006). A brief history of scheduling — Back to the future. Mosaic published and white papers. Mosaic Project Service Pty Ltd. [Online]. Available: [http://www.mosaicprojects.com.au/PDF\\_Papers/P042\\_History%20of%20Scheduling.pdf](http://www.mosaicprojects.com.au/PDF_Papers/P042_History%20of%20Scheduling.pdf)
- [12] A. J. Shenhar and D. Dvir, "Toward a typological theory of project management," Research Policy, vol. 25, no. 4, pp. 607-632, 1996.



[13] J. R. Turner and R. Muller, "On the nature of a project as a temporary organization," International Journal of Project Management, vol. 21, no. 1, pp. 1-8, 2003.

[14] P. Patanakul, B. Iewwongcharoen, and D. Milosevic, "An empirical study on the use of project management tools and techniques across project life-cycle and their impact on project success," Journal of General Management, vol. 35, no. 3, pp. 41-65, 2010.

