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**Integration of standards for successful project
management**

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ABSTRACT

The projects from their origin have sought to response to a particular need or problem, this is how through the time the human being has had to develop different techniques which allow him to elaborate good practices to the project management. In addition to the above, this has led to the fact that today there are multiple international standards applied to project management, which sometimes, these standards diverge in the way they initiate, plan, execute, control and finalize the projects, but they converge in the search for their success. The present paper, makes a comparison of four of the most used standards around the world as the PMBOK, ISO 21500, APMBOK, and Prince 2, in order to evaluate the performance of each one of those standards and consequently, to illustrate the common features which applied to reality facilitate the success in project management.

Keywords: Knowledge areas; Manager; Process groups; Stakeholders; Traditional Methodology

INTRODUCTION

Over the years, the human being in his eagerness to survive, has been forced to develop strategies, tools and mechanisms that facilitate his work in order to supply his basic needs, many of these mechanisms at the beginning saw results immediately; For example, hunting, this non-circumstantial activity had a purpose, although it had a rapid scope, which in one way or another became something instinctive. However, with the passing of the years and with the inherent modernization that brought with it the development of the human as a thinking being and creator of new technologies, and the globalization of the planet, the environment in which man developed became more hostile and competitive. It is because of the above, that the needs of the human being arise a transformation, that is, "in order to eat you no longer have to hunt, it is



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necessary to buy food, which you acquire with money which you obtain by working and investing." This change in needs forced to extend the time in which the results of certain tasks were obtained and also to generate ways to facilitate their achievement.

A clear example of the above is the sedentarization of man, because once he leaves his existence as a nomad, he transforms his reality generating completely different needs from those known; Then, the construction of sites that allowed it to be protected from the elements, predators and many other factors that affected its existence, became mandatory. This is how the first cities and settlements began to emerge, showing for the first time the need that man had to develop projects.

As the centuries have passed, the population has increased and therefore the needs of the human being have been transformed, making that today the existence of projects is essential to survive and increasing their applicability to each of the cultural sectors , economic and social that comprise the global environment.

Part of these needs have generated the search for parameters or standards that facilitate the success of each of the activities that it carries out, in accordance with the experiences and lessons learned over the years in the development of projects.

It is for this reason that different countries and regions have developed their own standards, in search of reducing uncertainty in the development of projects. Accordingly, some of the best-known organizations, such as PMI, APM, AXELOS and ISO, have developed their own parameters embodied in literary compendia and applicable to the development of almost any type of project, where they expose the good and best practices that each one has shown in the matter of project management.

THE STANDARDS

PMBOK: Standard published by the Project Management Institute PMI, whose first version was released in 1987 and which currently has six versions, of which the most recent is from 2017 and consists of five (5) groups of processes framed in ten (10) knowledge areas generating a total of forty-nine (49) processes for project management.

Additionally, it should be noted that PMI is an organization founded in 1969 and is currently located in Pennsylvania USA. It offers eight certifications related to the management of projects, programs, portfolios, among other topics whose focus is project development.



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PRINCE2: Standard published by the organization AXELOS, which is a joint venture in which the British government and a company dedicated to consulting digital services and software called Capita participate.

AXELOS was born in April 2014 in Norwich, United Kingdom, and publishes its standard for project management PRINCE2 (Projects In Controlled Environment), based on seven (7) principles and seven (7) components, which contain a total of forty and one (41) processes. Some of the organizations that have adopted this standard for the development of their practices are the World Bank, the UN, Microsoft, HP, IBM and some governments such as the United Kingdom, Canada, Holland, Australia and Denmark.

ISO 21500: Standard created by the International Organization for Standardization (ISO), which currently operates in Geneva, Switzerland, issuing regulations and standards applicable to various topics, such as project management.

ISO 21500 saw the light for the first time in 2012, however, it had been planned since 2007. The structure of this regulation is very similar to what the PMBOK presents until its fifth (5th) edition.

Additionally, this regulation was not developed with the purpose of generating certifications of knowledge about it, insofar as they seek a homogenization of project management practices worldwide, given its wide recognition as an organization.

APM BOK: Standard created by the Association for Project Management (APM), which was born in the United Kingdom and is dedicated to the development of good and best practices for project management.

This is made up of four (4) chapters and around eighty (80) topics related to project management and focused mostly on the manager's interpersonal relationships.

It should be noted that the first edition of APMBOK was published in 1992 and currently has seven (7) editions, of which the most recent is from 2019.

APM certifies the knowledge based on the practices and regulations that they define and expose in their literature.

INTEGRATION

With regard to the success in the development of a project, it has recently been considered that compliance with the triple restriction (Scope, Time and Cost) is the element with which its



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degree of success is valued. However, there are additional factors and criteria of great importance that determine project success.

However, the standards mentioned throughout this document mention these additional factors, among which are customer satisfaction, compliance with quality requirements, administration or risk management, among others. Many times, the professional practice differs from what is theoretically exposed. Either, due to the absence or deficiency of the application of good practices at the level of hard knowledge and soft skills. Elements that to generate a true success in the development of projects require to be combined efficiently.

Regarding these soft skills and hard knowledge, each standard groups and organizes them in a different way, as shown in table 1.

Standart	APMBOK	PMBOK	ISO 21500	PRINCE2
Structure	Chapters	Process Gropus	Process Groups	Processes
1	Setting up for success	Initiating	Initiating	Quality
2	Preparing for change	Planning	Planning	Plans
3	People and behaviours	Executing	Implementing	Risk
4	Planning and managing Development	Monitoring and Controlling	Controlling	Change
5		Closing	Closing	Progress
6				Business Case
7				Organization

In accordance, and taking into account that each of these standards in its search for good and best practices has developed knowledge that makes it stand out in some areas compared to others, it can be said that the PMBOK has great popularity worldwide. , first of all because of the high demand and constant promotion that it has in the international market, due to its punctuality and structuring of the processes that facilitate its application in different and multiple organizational environments and in the same way its applicability in projects of diverse nature. In the same way, the PMBOK offers the manager the facility of having a broad understanding of its content, in a way that makes it almost intuitive and facilitates its application.

Another of the great strengths that PMI shows in its standard is related to the tools and techniques that are available to the project manager, which offers a wide range of possibilities that can be applied according to different contexts. In that order ideas PMBOK describes what a project manager should know.



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Among the disadvantages that the PMBOK has is its level of complexity in terms of application for small projects. It also bypasses product management by focusing solely on project management. It does not make more reference and detail in the application of soft skills.

In turn, PRINCE2 presents a product-oriented approach with the generation of value that basically aims to define and identify What is done? Who does it? and When is it done? Elements that, according to this standard, have a starting point through a business case, which is quite relevant in its application. Well, it is this business case that guides and leads the project, unlike the PMBOK orients its projects according to a Management Plan.

Another element that stands out in PRINCE2 is the adaptation of the methods proposed for different projects depending on the conditions in which they are carried out and that additionally has a better definition of roles and responsibilities compared to the other standards.

Some authors consider that using PMBOK as a reference provides greater value in its incorporation. Meanwhile, PRINCE2 adds value if it is incorporated as a methodology, since it helps to guide in the decision making of the project and the standard itself states what project management decisions should be made, by whom and when.

PRINCE2 offers good communication channels inside and outside the project environment, that is, in the relations of the project work team, its relationship with the company and outsiders. In contrast, one of its greatest weaknesses is that it is a not very flexible methodology in terms of its principles and the application of its processes.

For its part, ISO 21500 concentrates its efforts on accrediting the knowledge that the PMBOK has captured throughout its first five (5) editions. The foregoing allows us to observe a great similarity both theoretically and in the applicability of both standards, that is, although there are some differences in "form" between them, reality shows that any of these two standards applied to any environment can obtain very good results. Similar.

It should be noted that the areas of knowledge and process groups of ISO21500 are similar to those proposed by the PMI, based on common elements such as the development of articles of incorporation, plans for project management and other definitions. However, the adoption of ISO 21500 opens up possibilities of competitiveness in the international market of the company, since it would precisely be applying an international standard recognized in the market.

APMBOK is a standard that, as mentioned throughout this writing, focuses on the importance of the application of soft skills during the different stages of project development that it proposes, without neglecting the relevance they have. hard knowledge. In that order of ideas, it can be said



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that with respect to the other standards in terms of issues related to interpersonal relationships necessary for the project manager.

Likewise, the APMBOK goes further by analyzing the human context and the environmental context, in conjunction with soft skills. Likewise, it provides a more concise look when addressing issues related to the application of project management. However, one of its greatest weaknesses is the lack of international recognition, as it is a widely known methodology in the United Kingdom.

It is also important to clarify that the APMBOK does not provide a specific method for the application of formats and templates that facilitate the planning and development activity of a project.

CONCLUSION.

Although some standards such as PMBOK, PRINCE2 and ISO 21500 have greater strength and emphasis on the applicability of hard knowledge and others such as APMBOK emphasize the need and importance of a correct application of soft skills, it is essential to know how to apply both knowledge of according to the context in which the project takes place and in this sense adapt the best practices. Thus, it is recommended that each organization choose the methodology and / or standard that best fits within its organizational structure and the realities and complexities of each project.

GLOSSARY:

Hard knowledge: They are those knowledge that are formed in traditional education, these are directly related to fields of science such as Mathematics, Engineering, Science, Technology, among other skills mainly related to numerical fields

Soft skills: This is the name of the group of interpersonal and relationship skills that facilitate the process of correct and healthy interaction between one subject and another.



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