MPCM
Maturity by Project Category Model

MATURITY IN PROJECT MANAGEMENT - BRAZIL

Archibald & Prado´s Research
www.maturityresearch.com

2021 Research Report:

Comparative Performance Analyzes

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Introduction

This report, "*Comparative Performance Analyzes*", enables the use of the DIKW (Data, Information, Knowledge, Wisdom) Pyramid, because it provides data, information, and analysis related to Maturity Research 2021. The readers can reach the knowledge that getting a high degree of Maturity in Project Management (above level 4, in a scale from level 1 to level 5) leads to Total Success, or Excellence, that is, to achieve High Performance. This report confirms the importance, advantages and benefits of achieving that high degree.

 In short, this Excellence (or High-Performance) allows:

Amazing results in Project success indicators (see slide 14), including, but not limited to, achievement of goals, delivery of benefits and satisfaction of those involved.

Strong acceptance of the Project Management theme (or discipline) by the organization's top management, which see the fact that the subject is a powerful ally for carrying out the actions and initiatives defined in the strategic planning and/or needed for good customer service (in this case, mainly for organizations project-oriented, but not just for them).

If there is interest in deepening in the situation and indicators of high-performance organizations, we suggest read also the Benchmark Report published in the scope of this same research.

High Performance, or Excellence

Not just *noblesse oblige*. COVID-19 pandemic obliged organizations to rethink management, adapt them selves and, in some cases, to reinvent. This new situation, narrowed even more the tolerance regarding delays, overruns, low quality, errors and wasting. The smartest and most attentive organizations, clearly perceived the opportunity to search excellence, and achieve high-performance.

Rethink, adapt or reinvent, demands projects. These, equally cannot delay, perform cost overrun, or don't deliver the requested (or demanded) outcome. How to get there? The answer is loud and clear in this report. Increasing the Project Maturity degree. Which are the rewards? There is an effective achievement of time, cost, scope and quality goals, and, in consequence, more benefits to organization.

It's important and timely observe that, searching this High Maturity, demands, planning, money and time. You can't get there without discipline, leadership and perseverance. It involves changes and an harmonious set of initiatives.

In this research of a sample of 181 respondents, 41 organizations (22,7%) can be considered High Performance or Excellent. Their results, presented here, are eloquent. They are, in fact, on a higher level. And certainly, they have a lot of rewards.

We hope that this work will inspire other organizations to truly pursue the quest for excellence.

As you can see here, it's worth it!

Project management implementation in an organization often does not entail immediate improvements to the management and instant retrieval of all possible and expected benefits. Rather, it is a process of maturing, time-consuming. This doesn't mean that you do not start to have benefits, as soon as this journey is initiated.

In the 8 researches carried out in the last 16 years and, also in the various projects and consultancy for the growth of Maturity, that this research team has participated or involved, it was possible to verify the words written in the above paragraph.

For evolution to occur some factors are fundamental since the beggining:

- Support from top management,

- Strong leadership in the implementation and evolution process,

- Use of good practices (processes, tools and organization),

- Choice of "good people" (talents), and,

- Creation of a culture conducive to good management.

Organizations that had discipline and persistence in this journey achieved high performance and reached the level of excellence.

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Project management has, or should have, a strong link with an organization's strategies. Therefore, good strategic planning and good project management are key factors for the desired changes to occur. However, the organization strategies and their execution, considers the confidence in the economic scenario and political stability (or instability), as we learned during the 16 years that this research has been conducted. In Brazil, we live two crisis in these factors, added to the healthy crisis resulting from COVID-19. Considering the links with the strategies, Project Management reverberates such crisis.

When a country crosses times in which the political and economic scenarios more stable, organizations has more confidence to invest. Usually in these circumstances, Project Management structures and teams are created or reinforced. In an unstable scenario, some organizations go to extreme of canceling projects, eliminting PMOs and fire Project Managers. This is noticiable in this 2021 Research.

For 2021 we got two interesting indicators: the declining of the number of participants and the rise of maturity indicator. The explanation of this events is not ease and the reader can get our interpretation in the *Message from the Coordination* of this year (only in brazilian/portuguese language)

MATURITY EVOLUTION IN BRAZIL

2005	2006	2008	2010	2012	2014	2017	2021
2,44	2,42	2,66	2,61	2,60	2,64	2,59	2,94

The Impact of Organizational Culture

The search of excellence, of High-Performance, cannot perform without a good management favorable culture. Excellence is a "novelty" which comes with changes. People and organization must be prepared to receive and accept this "novelty", in this case, Project Management. It's usual that the existing culture fights against and reject the new discipline. Change resistance it's a fact, that could be openly or in a subtle way.

This resistance is present in all organizations that start to implement Project Management and other changes. In some organizations this resistance is unsuccessful, while in others it undermines the effort made and prevents the subject from thriving. In these last ones, although one wishes to evolve, there are stagnation of the abilities in touching projects. The most common consequences:

- Delays in projects;

- Costs Overrun;

- Delivery of a product that does not fully meet expectations;

- General dissatisfaction.

Overcoming these obstacles requires, as we have already said, an understanding of the true organizational culture and where it is more "open". After this, enlightened leadership and good change management can make work easier. In this case, change management aims to facilitate the process of introducing the new culture of project management and ensuring its continuity and evolution.

High Performance Organizations

When it is observed that 2021 Brazilian maturity indicator is 2.94, there is a natural tendency to imagine that all organizations are on this plateau. This is not true. By analyzing the reports presented in this site, the reader will realize that there is a strong dispersion of values. There are regional differences, just as there are benchmark or high performance organizations.
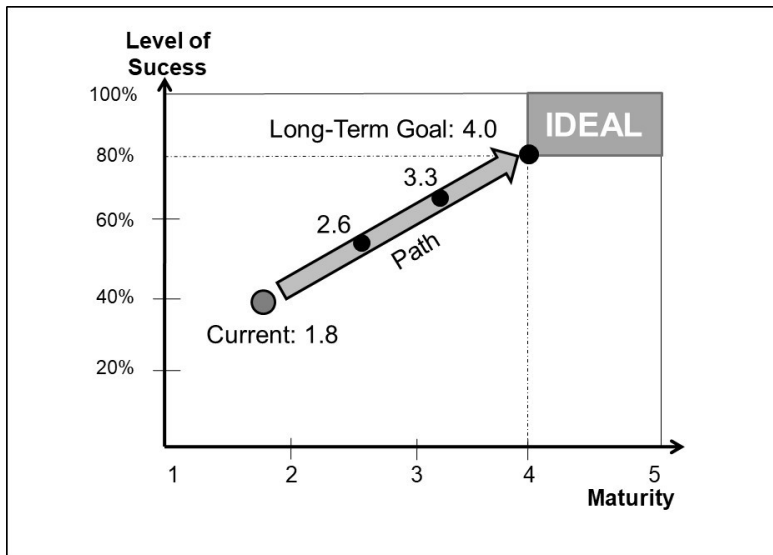
Even in periods of crisis it is possible to continue growing effectively and differentiated from competitors. This subject has been very well addressed by Jim Collins in his many research about American organizations.

What it is observed is that, high-performance project management organizations are often also highly performing in their strategic management and in their day-to-day operations management.

In this research, in 2021, we found 41 high performance organizations, 68 medium performance organizations and 62 low performance organizations. In this report a comparison is made, regarding the indicators of success, among these organizations.

See also the "Benchmark" report available on this site.

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The high performance level corresponds to maturity levels 4 and 5. Then, the path to high performance begins with a maturity assessment and success rate measurement, for example as shown in the figure on the side ("current" point). The goal is to achieve the "ideal" situation, for which we have a Total Success Index above 80% and a failure rate of less than 3%.

The path is followed in stages. The durations of the steps depend on how matrixed the scenario is (i.e. how many areas are involved in the projects). For the more complex cases, the first steps last about 1 year and the last steps, around 2 years. For agile firms (e.g. software houses), these durations are significantly lower. In all cases, each step should be treated as a project.

The book (3rd Edition) shown to the left addresses this subject.

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ORGANIZATIONS PERFORMANCE
(GLOBAL SAMPLE)

Study carried out with a sample of 181 participants

Performance Levels - General Sample 2021

Low Performance - PM is almost unknown subject. Isolated initiatives. It corresponds to levels 1 and 2 of maturity.

Medium Performance - deployed standards. The results are below the possible. It corresponds to level 3 of maturity.

High Performance - standards work, deliver results, and are optimized. It matches levels 4 and 5 maturity.

PERCENT DISTRIBUTION AT PERFORMANCE LEVELS
General - 2021

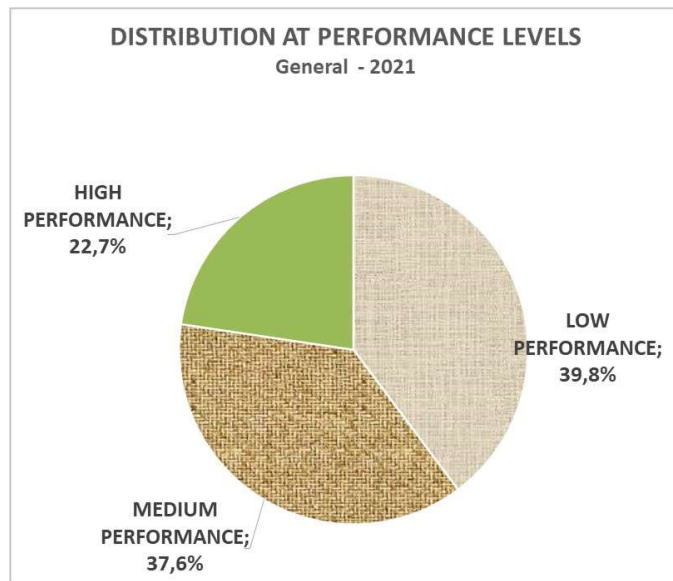|	LOW PERFORMANCE	MEDIUM PERFORMANCE	HIGH PERFORMANCE
	39,8%	37,6%	22,7%
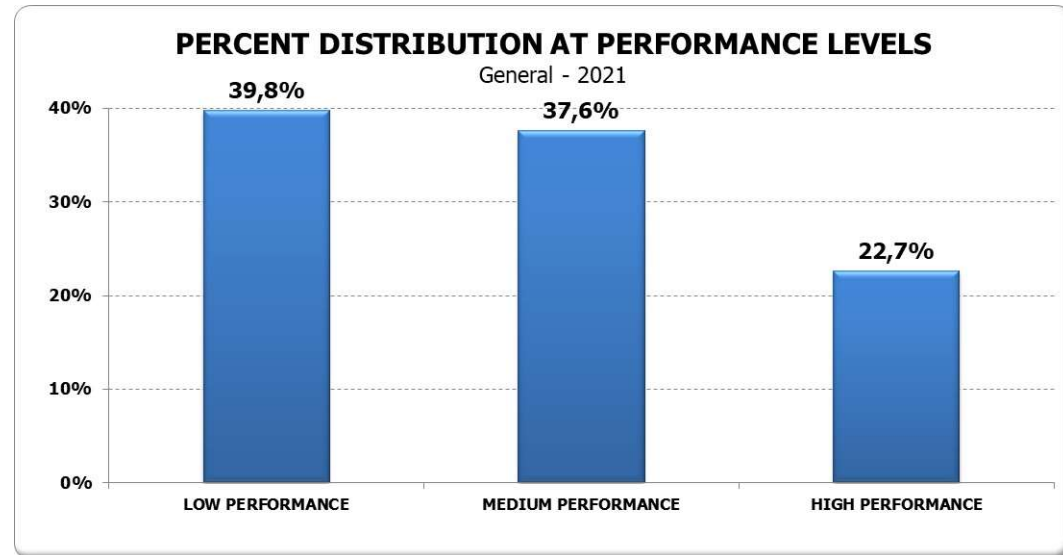
Comments

- Low Performance: For 39,8% of the organizations participating in this survey, project management results far outweigh the desired results.

- Medium Performance: 37,6% of organizations implemented standards. Despite some improvement in results, we still do not have the full mastery of work.

- High Performance: 22,7% of organizations are at levels that allow full ownership and optimization of work (levels 4 and 5). Excellence level. Recognition as *benchmark*.
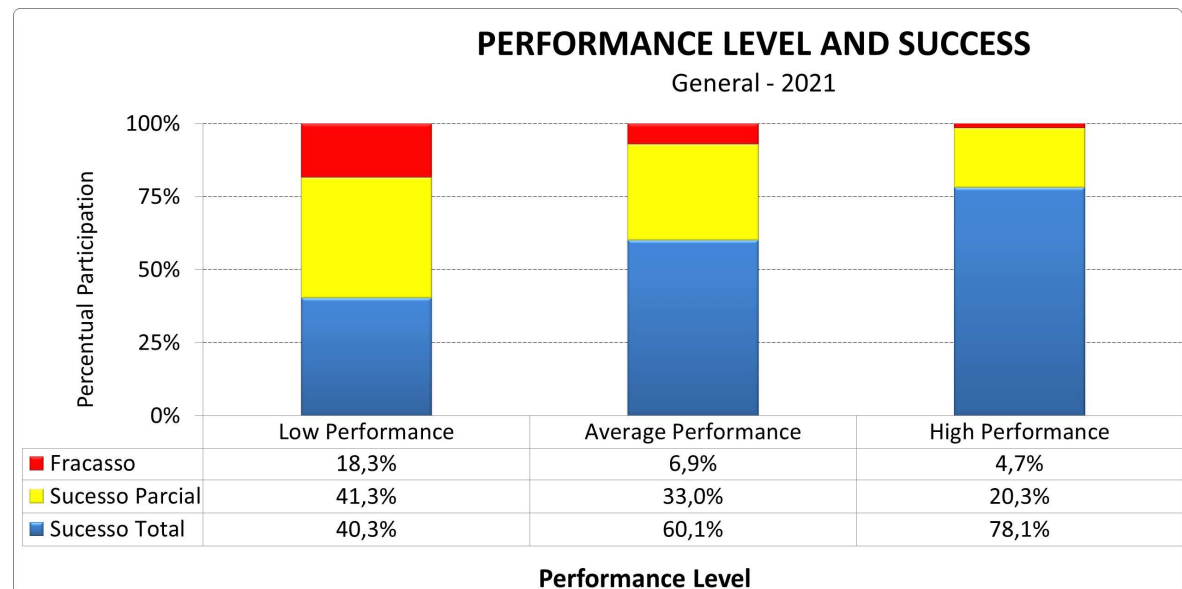
High-performance organizations have almost twice as much Total Success compared to low-performing organizations. And, especially, high performance organizations have a Failure Index almost 4 times lower than the low performance ones.

We conclude that a high performance strategy will allow us to obtain enormous benefits, including a significant cut in losses due to failure. There is a significant opportunity for those organizations whose indicators point to poor performance (39.8% of the sample).

DISTRIBUTION AT PERFORMANCE LEVELS
General - 2021

HIGH PERFORMANCE; 22,7%

LOW PERFORMANCE; 39,8%

MEDIUM PERFORMANCE; 37,6%

Samples Size: LP: 62   MP: 68   HP: 41

PERFORMANCE LEVEL AND SUCCESS
General - 2021

	Low Performance	Average Performance	High Performance
Fracasso	18,3%	6,9%	4,7%
Sucesso Parcial	41,3%	33,0%	20,3%
Sucesso Total	40,3%	60,1%	78,1%

Performance Level

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TYPE	CHARACTERISTICS
TOTAL SUCCESS	A successful project is one that has reached the goal. This usually means that it was completed and produced deliverables, expected results and benefits and the key stakeholders were fully satisfied. In addition, it is expected that the project has been closed within the expected requirements for term, cost, scope and quality (small differences can be accepted depending on the type of project).
PARTIAL SUCCESS	The project was completed but did not produce all the expected results and benefits. There is significant dissatisfaction among key stakeholders. In addition, some of the expected requirements for term, cost, scope and quality were probably significantly worse than desired.
FAILURE	There is a huge dissatisfaction among the key stakeholders either because the project was not completed or because it did not meet the expectations of the key stakeholders or because some of the expected requirements for time, cost, scope and quality were absolutely unacceptable.

See the complete set of success conceptualization on the site www.maturityresearch.com

The average backlog of a high-performing organization's project portfolio is almost one-third lower than the low-performing and about half than half-performing medium-performing organizations.

AVERAGE DELAY
General - 2021
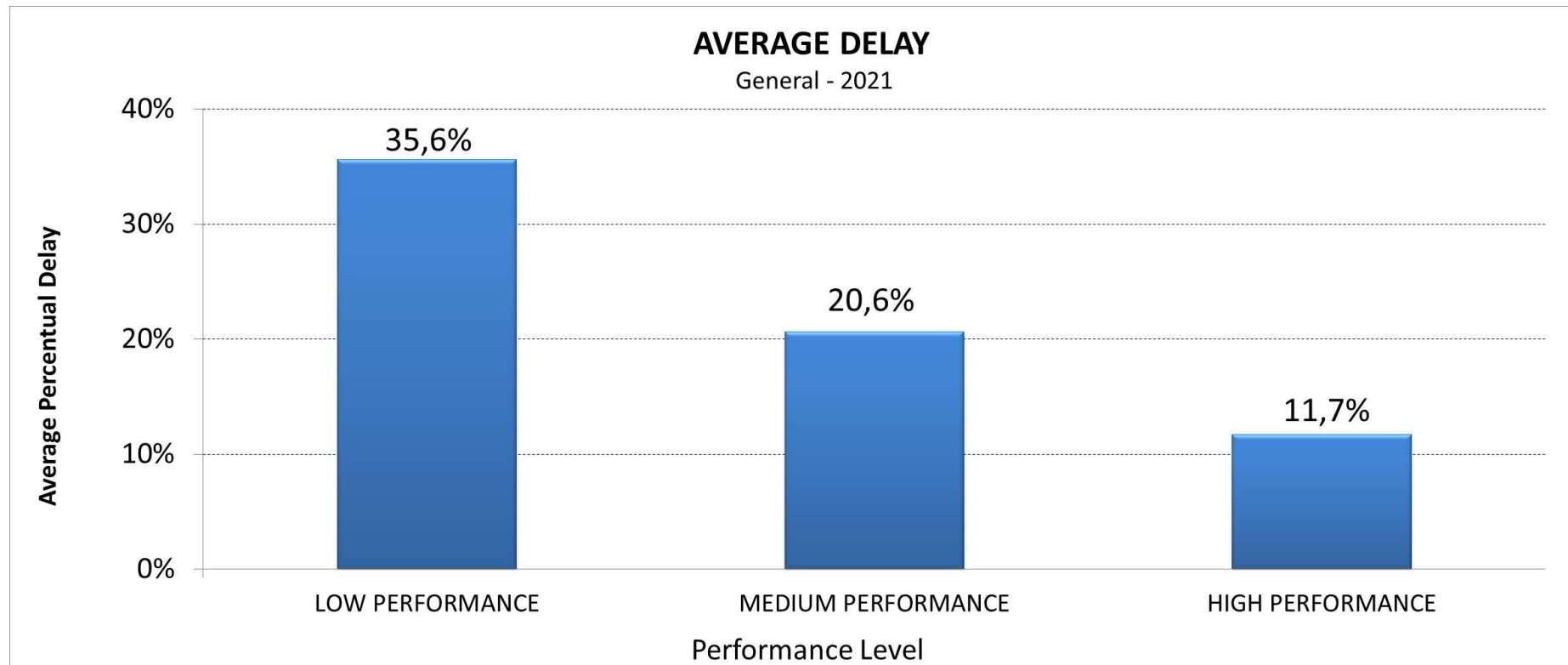
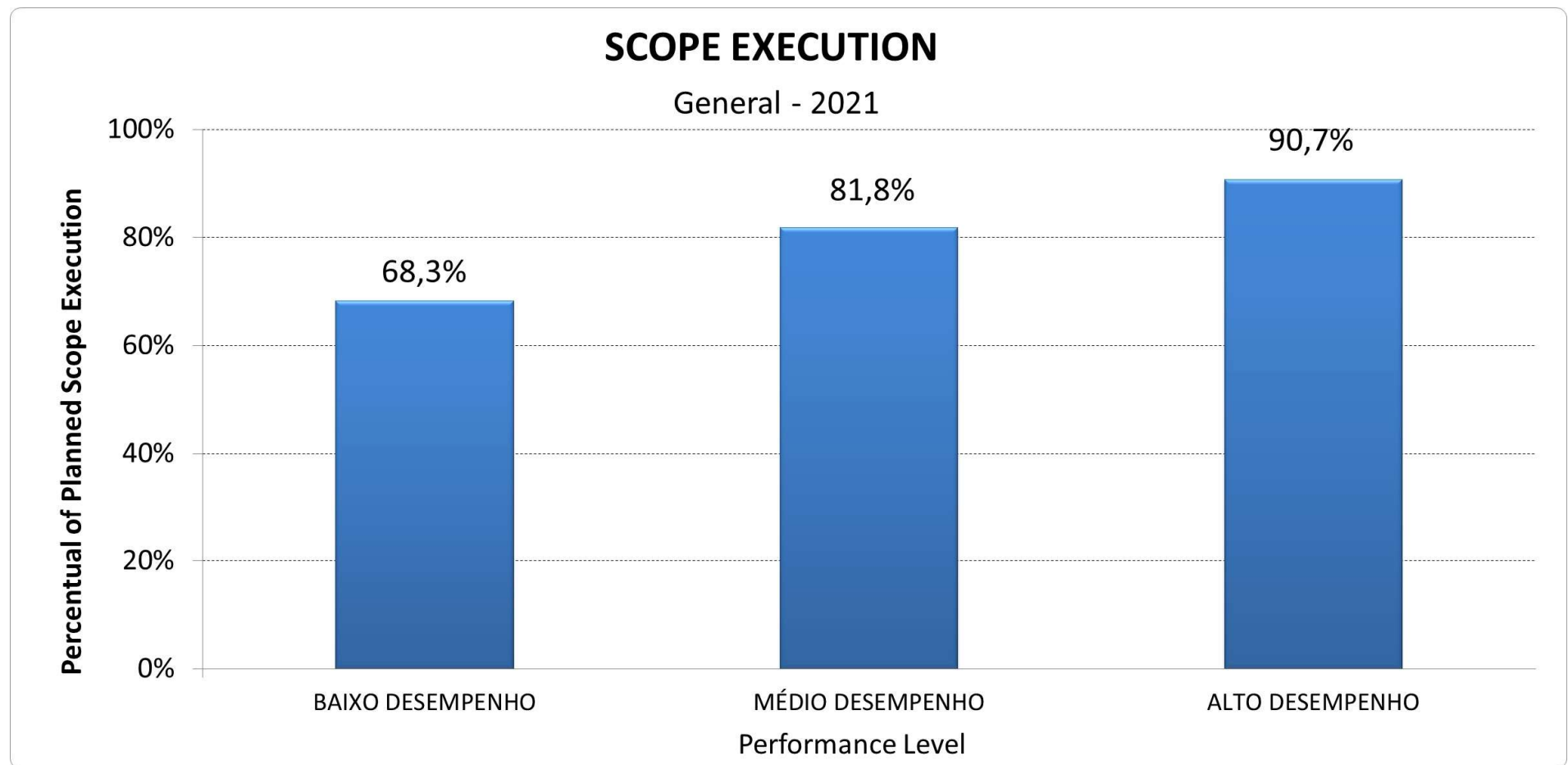Samples Size: LP: 62   MP: 68   HP: 41

High-performing organizations have a cost overrun of less than half that of poor performing organizations, and almost 30 percent below average performance.

AVERAGE COST OVERRUN

General - 2021
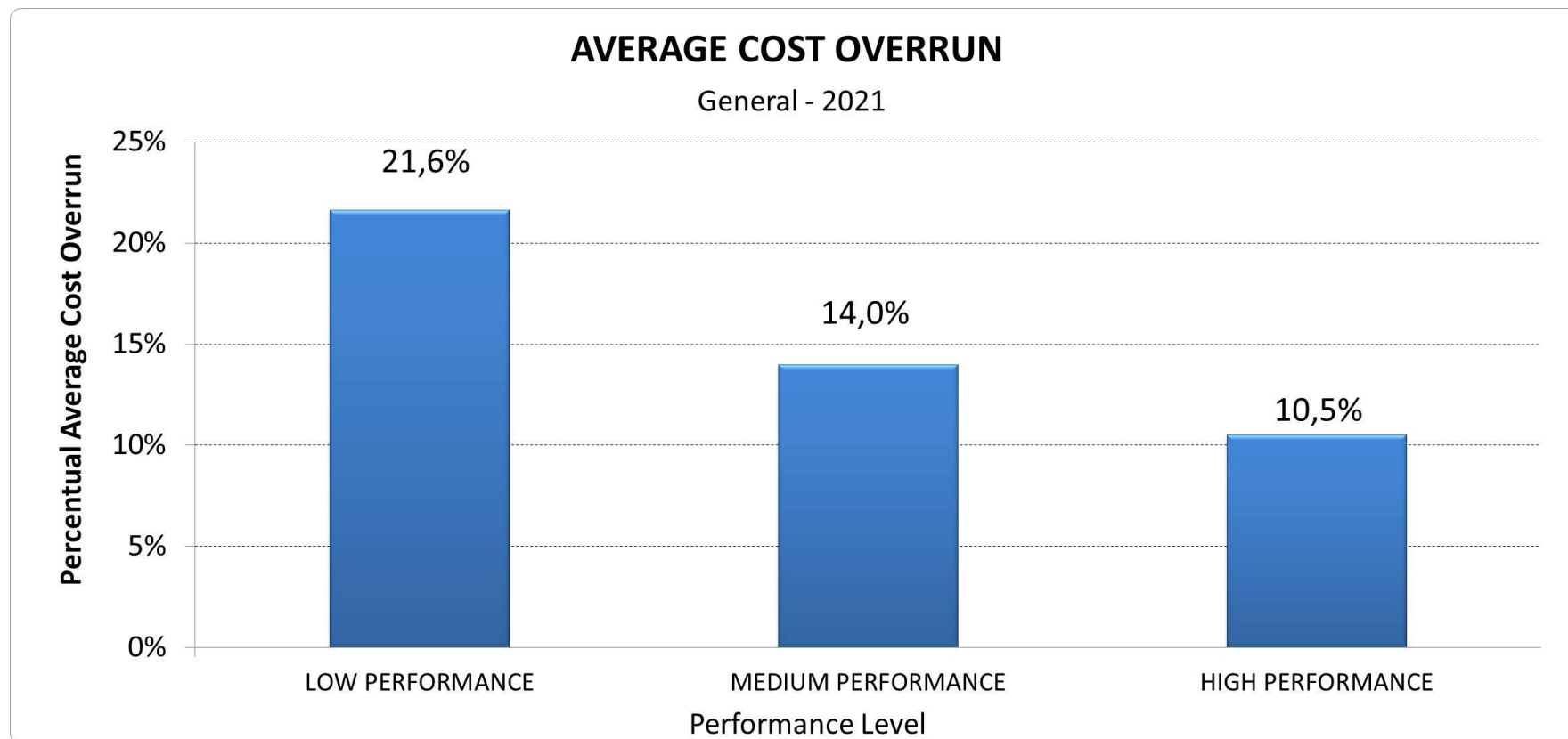
Samples Size: LP: 62   MP: 68   HP: 41

High-performance organizations can deliver nearly 40 percent more scope than low-performing organizations.

SCOPE EXECUTION

General - 2021

Samples Size: LP: 62   MP: 68   HP: 41

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About data and results presented in this report

As mentioned previously, we had a public of 181 participants in 2021. The main characteristic of this public is the **heterogeneity**, in other words, they come from different organizations types, projects categories, business areas, organizations sizes and Brazilian states. The reports we provide, present and allow many comparisons between performance indicators, but, in spite this, the reader must pay attention to these comparisons, as duly pointed in each report. For example, performance indicators from several Brazilian states are presented and, in this case, one must avoid drawing conclusions using only the presented values, without considering the specificities of projects portfolios of each state.

Therefore, we advise the reader to also analyze the reports that work with more detailed samples.

Our intention is to show and analyze the data as captured, presenting to the reader, with as much information as possible. As stated in our Principles Charter, our goal is to assist Brazilian organizations to evolve in Project Management.

Data Representativeness

Considering a research where stratifications are made and where there are samples of different sizes, these have different representativeness. Thus, if the total number of respondents for a given sample is high, the representativeness of the data referring to that number of respondents is also high. The interpretation of the representativeness of the data is totally governed by STATISTICS and, for the moment, we believe that it is sufficient to inform the reader of representative indications for different values of the total of respondents.

Total of Respondents	Representativeness
Above 30	Good representativeness
Among 17 and 29	Average representativeness. Analyze data with discernment.
Below 17	Low representativeness. Analyze data with discernment.

Note: The alert "analyze the data with discernment" is related to the fact that some populations are finite and, therefore, the representativeness criteria are differentiated. For example, if for the "Refractories" business we only have 5 companies in Brazil and if all of them participated in the survey, the results presented would be totally representative.

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Team who
developed this work

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Darci Prado is *FALCONI* consulting partner. Graduated in Chemical Engineering from UFMG, post-graduate in Economic Engineering from Fundação Dom Cabral and doctor from UNICAMP. He participated in the founding of PMI chapters in Minas Gerais and Paraná and was member of the PMI-MG Board of Directors between 1998-2002. He was president of the IPMA-BH Club between 2006 and 2008. He is the author of 11 books about project management. He developed the MEPCP methodology, the MMGP maturity model and the SISGEP software. He conducts a maturity survey on PM since 2005. Lately, he has worked internally with the FALCONI presidency, helping with strategic planning and project implementation.

Manuel Carvalho da Silva Neto is a Visitng Professor at Fundação Dom Cabral and Consultant in the areas of Project Management and Process Management. He holds a Master's degree in Administration from CEPEAD - UFMG and holds PMP Certification. He also obtained the titles of specialist in Economic Engineering (INEA / EEUFMG) and Financial Administration (FJP) and graduated in Mechanical Engineering from UFMG. He has 53 years of market experience, 47 of which in Projects. He has participated or directed more than 300 large and medium-sized projects in private and state-owned companies and public agencies. He was undersecretary of Planning and Budget of the State of Minas Gerais from 2007 to 2008.

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Russel D. Archibald (in memoria)

- MSC, PhD
- PMP, IPMA
- One of the PMI-USA founders
- Global consultant
- Listed in "Who is Who"

Darci Prado

- PhD
- *Qualis* member of IPMA-Br
- One of the PMI-MG, PMI-PR and Club IPMA-BH founders
- Senior Advisor at FALCONI

Team 2021

GENERAL COORDINATION
Darci Prado

SITE DEVELOPMENT AND MAINTENANCE
2x3 Organization

SITE DATA MAINTENANCE
Eduardo Motta

DATA BASE
2x3 Organization

DATA PREPARATION
Darci Prado, Eduardo Motta and Pedro Rocha

ANALYTICS
Paula Júlio

SITE
Falconi – Consultores de Resultados

LINGUISTIC SUPPORT
English Language: Lara Romano
Spanish Language: Jose Luiz Oliva Posada, José R. Miglioli, Maria
Eugenia, Dulce Morales, Gerardo Mendoza and Victor Bianchini

PUBLISIHING
Partnership with several entities

REPORTS
See author's name in each report

GENERAL SUPPORT
Carlos Eduardo Andrade, Fernando Ladeira, José Ricardo Miglioli,
Giselle de Laurentys, Manuel Carvalho da Silva Neto, Marcus Vinicius
Marques and Warlei Oliveira

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Prado-MMGP Maturiy Model

Brief explanation about PRADO-MMGP Model

MMGP - Maturity Model in Project Management

Prado-MMGP maturity model, created in 2002, is based on the experience of consultant Darci Prado in a world-class organization (IBM), teaching (UFMG) and consulting (FALCONI Results Consultants). He has more than 40 years of project management experience and has already had the opportunity to get involved with projects of the most different values and types, ranging from construction, information technology, new product development, equipment installation, etc.

The model proposes to evaluate the maturity of an organization sector and has the following characteristics:

> It includes 5 levels and 7 dimensions;
> It includes Processes, Tools, People, Skills, Structures and Strategies;
> It adheres to PMBOK (PMI), ICB (IPMA) and Prince2.

Maturity Research in Project Management - Brazil

Maturity research has been conducted in Brazil since 2005. It is led by Darci Prado and Russell Archibald and counts on the participation of several volunteers.

Maturity Levels

Level	Title	Characteristics
1	Almost Unknown	The company does not have a correct perception of projects and project management (GP). Projects are executed on the basis of individual intuition, "goodwill" or "best effort." Usually no planning is done and control is non-existent. There are no standardized procedures. Success is the fruit of individual effort or luck.
2	Started (isolated initiatives)	This level represents the awakening to the subject of project management. Its main characteristics are: • Introductory knowledge of Project Management. • Introductory use of tools (sw) for sequencing activities. • Isolated initiatives for the planning and control of some projects. • Each professional works in his own way, since there is no standardized Platform for Project Management, consisting of processes, tools, organizational structure, etc. • There is awareness of the importance of implementing each of the components of a project management (GP) platform.
3	Standardized	This level represents the situation in which a GP platform was implemented. Its main characteristics are: • Evolution in skills. • Existence of a standardized platform for Project Management • Use of baseline. • Performance measurement of closed projects. • Data capture of anomalies that impact project results (delays, overflow, etc.). • The platform has been in use by the key players for more than a year. • A significant number of projects used all methodology processes (start, middle and end).

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Level	Title	Characteristics
4	Managed	This level represents the situation where the GP platform really works and gives results. Its main characteristics are: • Professionals consistently demonstrate a high level of competence, aligning knowledge and practical experience. • Elimination (or mitigation) of manageable anomalies that hinder project results. • Area results (success rate, delays, etc.) are compatible with the expected level of maturity 4. • This situation occurs more than 2 years ago. • A significant amount of projects have already completed their life cycles in this scenario.
5	Optimized	This level represents the situation where the GP platform not only works and gives results but has also been optimized through technological and process innovation. Its main characteristics are: • Optimization of processes and tools. • Optimization of results (deadlines, costs, scope, quality, performance, etc.) • Highest success level. • Environment and working climate of efficiency, productivity and low stress. • High recognition of area competence, which is seen as a benchmark. • This has been happening for over 2 years. • A significant number of projects have already completed their life cycles in this scenario.

Maturity Dimensions

Dimension	Characteristics
Project, Program and Portfolio Management Competence	The main stakeholders involved with project management should be proficient (knowledge + experience) in aspects of project management, such as, for example, presented in PMI's PMBOK manual or IPMA's ICB manual. The competence level required depends on the role of each.
Behavioral Competence	The main stakeholders involved with project management should be competent (knowledge + experience) in behavioral aspects (leadership, organization, motivation, negotiation, etc.). The competence level required depends on the role of each.
Technical and Contextual Competence	The main stakeholders involved with project management should be proficient (knowledge + experience) in technical aspects related to the product (good, service or result) being created, as well as aspects of the organization (finance, its production / distributive model, etc.). The competence level required depends on the role of each.
Methodology	Existence of a methodology adequate to project management and that involves the whole cycle that needs to be monitored. Eventually this means not only the Implementation phase, but also the Business Case stage.

Dimension	Characteristics
Informatization	Relevant aspects of the methodology should be computerized and the system should be user-friendly and allow the right decisions to be made at the right time. Eventually the whole cycle initiated by the idea / need should be computerized.
Organizational Structure	An appropriate organizational structure should be in use, both for the Business Case and for Implementation. In the case of implementation, this structure generally involves project managers, PMO, sponsor and committees. The Organizational Structure should regulate the relationship of authority and power between the project managers and the various organization areas involved with the projects.
Strategic Alignment	The projects executed in the sector are in total alignment with the strategies of the organization. The processes in question (portfolio management) are executed with the necessary quality and agility. There are computerized tools and the organizational structure in question is appropriate.

Thanks

Special thanks to the volunteers of this research.

Thanks

- Support:

- Promotion:
  - Organizations and Associations:
    - CBIC: All affiliates (SINDUSCON, SICEPOT, SECOVI, etc.)
    - PMI: All *chapters*
    - IPMA-Br
    - CREA: MG and SP
    - FIEMG
  - Educational institutions
    - FGV, FUNDAÇÃO DOM CABRAL, IETEC, IBMEC, CPLAN, VANZOLINI, DINSMORE

THE END