# A Quantitative Analysis of Portfolio Governance Management for Product Innovation in Organization Management Systems

Un análisis cuantitativo de la gestión de la cartera de gobierno para la innovación de productos en sistemas de gestión de la organización

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## **ABSTRACT**

This paper presents a quantitative analysis of portfolio governance management for product innovation in organization management systems. With only access of certain resources in a competitive environment to mange several projects many organizations are using project portfolio management in these days. To improve the results there is need to implement the strategies, as limited success of existing techniques. With use of limited number of resources by using this approach multiple projects can mange in a better way. It can be successful by using the portfolio governance management. There is need to understand the governance by organization when it is applied to programs, portfolios and project before achieving the objective of organizational strategy. In the strategic initiative and success of portfolios the particular governance management plan is consider as a major factor.

Keywords: Project portfolio management, multiple projects, governance management, organization management system.

#### **RESUMEN**

Este documento presenta un análisis cuantitativo de la gestión del gobierno de la cartera para la innovación de productos en sistemas de gestión de la organización. Con solo acceso a ciertos recursos en un entorno competitivo para gestionar varios proyectos, muchas organizaciones están utilizando la gestión de cartera de proyectos en estos días. Para mejorar los resultados es necesario implementar las estrategias, como el éxito limitado de las técnicas existentes. Con el uso de un número limitado de recursos mediante el uso de este enfoque, varios proyectos pueden gestionar de una mejor manera. Puede tener éxito utilizando la gestión de gobernanza de cartera. Es necesario comprender el gobierno por organización cuando se aplica a programas, carteras y proyectos antes de alcanzar el objetivo de la estrategia organizacional. En la iniciativa estratégica y el éxito de las carteras, el plan de gestión de gobernanza particular se considera como un factor importante.

Palabras clave: gestión de cartera de proyectos, proyectos múltiples, gestión de gobierno, sistema de gestión de la organización.

#### **RESUMO**

Este artigo apresenta uma análise quantitativa do gerenciamento de governança de portfólio para inovação de produtos em sistemas de gerenciamento organizacional. Com apenas acesso a determinados recursos em um ambiente competitivo para gerenciar vários projetos, muitas organizações estão usando o gerenciamento de portfólio de projetos atualmente. Para melhorar os resultados, é necessário implementar as estratégias, como sucesso limitado das técnicas existentes. Com o uso de número limitado de recursos usando essa abordagem, vários projetos podem ser gerenciados de uma maneira melhor. Pode ser bem-sucedido usando o gerenciamento de governança do portfólio. É necessário entender a governança por organização quando aplicada a programas, portfólios e projetos antes de atingir o objetivo da estratégia organizacional. Na iniciativa estratégica e no sucesso das carteiras, o plano de gerenciamento de governança específico é considerado um fator importante.

Palavras-chave: Gerenciamento de portfólio de projetos, múltiplos projetos, gerenciamento de governança, sistema de gerenciamento organizacional.

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Recibido: 26/07/2019 Aceptado: 15/09/2019

## I. INTRODUCTION

How an organization look the portfolio management is determined by Portfolio governance management (Lappi et al., 2019). The main concern of Portfolio governance management is the areas in which portfolio activities are done (Matallín-Sáez et al., 2019). It can say that it is the subset of corporate governance's activities (Goul, & Zhang, 2019). It has to be ensuring that the project delivered efficiently and the project portfolio is working according to the objective of organizations for making an efficient portfolio governance management (Michael et al., 2019).

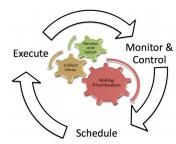


Figure 1: Portfolio Governance Management

All decision-making activities that are done by the governance body it has to be ensuring that the portfolio is optimized authorized and defined in support of those activities (Derakhshan et al., 2019). For investment analysis it can use as a guide to Portfolio governance management:

- 1. Identification of opportunities and threats
- 2. Performance target should achieved
- 3. Prioritize, select and schedule the activities
- 4. Dependencies, impacts and Assess change



Figure 2: Framework of project governance

# II. PROJECT PORTFOLIO MANAGEMENT

The optimum set of project-oriented initiatives that give maximum investment return and business value that uses the continuous process of managing and selecting is known as Project Portfolio Management. For getting the best results with the maximum use of resources focus on the projects that achieve the business objective and goals, the Project Portfolio Management is consider as dynamic decision-making process. It can create the portfolio for IT projects in which fall and investment can measure, risk can mange or can increase the value and return.



Figure 3: Project portfolio management

## III. PORTFOLIO GOVERNANCE MANAGEMENT PROCESS

The industry in which PPM developed it depend the process of portfolio governance management. For board of directors of organization serves as a guide to governance of portfolio management

Main components of project governance management are as follows:

- 1. Sponsorship of project
- 2. Reporting and disclosure of project
- 3. Direction of portfolio
- 4. Management capability of project

The project governance management follows the 4 processes. They are:

- 1. A plan development for portfolio management
- 2. Define the portfolio
- 3. Optimizing a the portfolio
- 4. Providing portfolio oversight and authorizing a portfolio

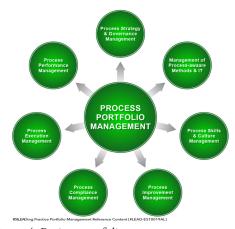


Figure 4: Project portfolio management process

For a specific portfolio implementing a management plan a is a iterative process in portfolio governance management (Maceta & Berssaneti, 2019). This process includes updation of portfolio management plan and development of portfolio management plan (Joslin, 2019). The management plan of governance should be aligned with objective strategy and charter authorization of portfolio (Honey et al., 2019). The plans that are related to risk management, communication and performance the Portfolio management plans integrate to subsidiary plans (Ahriz et al., 2018).

## IV. PORTFOLIO defination

It is more than a process of identifies the appropriate portfolio component within the context of portfolio governance management to define the portfolio (Knapp, 2018). To use the scoring model and rank components for evaluating, on the basis of a common set of decision filters in a portfolio components are categorized (Sirisomboonsuk et al., 2018). These are the key activities included in portfolio definitions.

#### V. OPTIMIZING PORTFOLIO optimization

For better performance and value delivery there is need to optimize the portfolio governance management (Danesh et al., 2018). The key activities that performed on components of portfolio include:

- 1. The components of highest priority should be determined
- 2. Expected value and benefits should be evaluated
- 3. Risk analysis should be performed
- 4. Activities should be balanced and rebalanced
- 5. Components of the portfolio should be evaluated
- 6. Constraints, capability and capacity of resources should be determined

# VI. PORTFOLIO authorization

By resource allocation to execute or activate components of portfolio is authorized in portfolio governance management. The resources that are allocated follow after authorizing the components of selected portfolio. For components of portfolio it may come from terminated and deactivated components for resources.

RELIGACION. VOL 4 Nº 19, Septiembre 2019, pp. 262-267

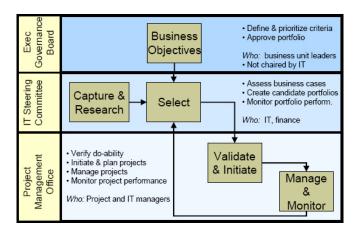


Figure 5: Project portfolio management

## VII. PORTFOLIO OVERSIGHT

It has to be ensure that the components of portfolio should be aligned with the objective and strategy of organization, and it should be avoided the oversight. In response to a portfolio performance to making decisions of governance, needs for investments and future, risks, issues, funding allocation, resource capacity, resource capability, changes and proposals of portfolio components providing portfolio oversight is also geared.

## VIII. PROJECT PORTFOLIO GOVERNANCE

Within the business of organization to prioritize, monitor, identify and select the projects it used the project portfolio governance. The previously mentioned processes are often guided by the foundation. Oversight and ongoing portfolio governance management will find the objective when the foundation is firm. And for reaching the objectives, project portfolio managers navigate the strategic destination.

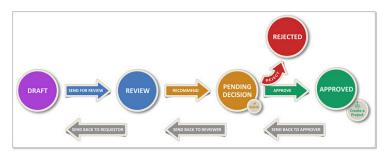


Figure 6: Project portfolio Governance

For an effective portfolio governance management it includes the following factors:

- By unobstructed information flow and clear reporting it provide the data availability (Maseleno et al., 2016)
- 2. What is the scope of portfolio governance management, financial authorities and stakeholders are defined through transparency.
- 3. Portfolio governance management implementation should be integrated, also observe etiquette and ethics.
- 4. At an organizational and business level to adapt the changing needs the ability demonstrating the flexibility in a dynamic environment (Maseleno et al., 2017).
- 5. Everyone included accountability. It establishes clear roles, accountabilities and responsibilities.

# IX. BEST TOOLS FOR PROJECT PORTFOLIO MANAGEMENT (PPM)

Some tools for project portfolio governance management are given beow:

- 1. Acuity PPM
- 2. monday.com
- 3. Sciforma
- 4. Wrike
- Oracle Primavera

- 6. Hansoft
- 7. Accelo
- 8. 10,000ft
- 9. Celoxis
- 10. Clarizen

# X. PORTFOLIO GOVERNANCE MANAGEMENT METHODOLOGY

Rules for governance is known as the methodology in portfolio governance management, to achieve organizational strategic objective these rules are provide necessary framework.

- 1. The responsibilities and role determination that will provide to members and stakeholders
- 2. Portfolio accountability and ownership
- 3. In the right direction defining the committee structure

## XI. ELEMENTS OF A PROJECT GOVERNANCE FRAMEWORK ELEMENTS

In the management structures that support effective governance of programs and projects number of key elements are needs:

- 1. Programs and Projects: the measure of an effective governance system is requiring for effective management of programs and projects (Maseleno et al., 2018).
- 2. Project management objective: strategic reporting capabilities and oversight provided
- 3. Project Sponsorship: between program manager and executive it provide direct link, leading to the value of delivery it focused on the complete project lifecycle.
- 4. Management of portfolio: for supporting to strategy and terminating selecting the right programs and projects should focus.
- 5. Inputs of senior management: career management, methodologies, opportunity identification, best practices, skills development are included as aspect of senior management.

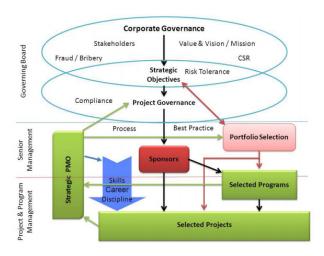


Figure 7: Project governance Framework

## XII. CONCLUSION

With just access of specific assets in a focused situation to mange a few ventures numerous associations are utilizing project portfolio management in nowadays. To improve the outcomes there is have to actualize the procedures, as constrained achievement of existing systems. With utilization of predetermined number of assets by utilizing this methodology various activities can mange in a superior manner. It tends to be effective by utilizing the portfolio governance management. There is have to comprehend the administration by association when it is connected to projects, portfolios and task before accomplishing the goal of hierarchical technique. In the key activity and achievement of portfolios the specific administration the board plan is consider as a main consideration.

#### **BIBLIOGRAPHIC REFERENCES**

- Ahriz, S., El Yamami, A., Mansouri, K., & Qbadou, M. (2018). Cobit 5-Based Approach for IT Project Portfolio Management: Application to a Moroccan University. IJACSA) International Journal of Advanced Computer Science and Applications, 9(4), 88-95.
- Danesh, D., Ryan, M. J., & Abbasi, A. (2018). Multi-criteria decision-making methods for project portfolio management: a literature review. International Journal of Management and Decision Making, 17(1), 75-94.
- Derakhshan, R., Turner, R., & Mancini, M. (2019). Project governance and stakeholders: a literature review. International Journal of Project Management, 37(1), 98-116.
- Goul, M., & Zhang, Z. (2019, January). Introduction to the Minitrack on Big Data, Data Science and Analytics Management, Governance and Compliance. In Proceedings of the 52nd Hawaii International Conference on System Sciences.
- Knapp, M. (2018). Portfolios and Governance. In Enterprise Portfolio Governance (pp. 37-88). Springer, Singapore.
- Lappi, T. M., Aaltonen, K., & Kujala, J. (2019). Project governance and portfolio management in government digitalization. Transforming Government: People, Process and Policy.
- Matallín-Sáez, J. C., Soler-Domínguez, A., Tortosa-Ausina, E., & de Mingo-López, D. V. (2019). Ethical strategy focus and mutual fund management: Performance and persistence. Journal of cleaner production, 213, 618-633.
- Maceta, P. R. M., & Berssaneti, F. T. (2019). Comparison of project portfolio management practices in the public and private sectors in Brazil: Characteristics, similarities, and differences. International Journal of Managing Projects in Business.
- Maseleno, A., Hardaker, G., Sabani, N., & Suhaili, N. (2016). Data on multicultural education and diagnostic information profiling: Culture, learning styles and creativity. Data in brief, 9, 1048.
- Maseleno, A., Huda, M., Siregar, M., Ahmad, R., Hehsan, A., Haron, Z., ... & Jasmi, K. A. (2017). Combining the previous measure of evidence to educational entrance examination. Journal of Artificial Intelligence, 10(3), 85-90.
- Maseleno, A., Huda, M., Jasmi, K. A., Basiron, B., Mustari, I., Don, A. G., & bin Ahmad, R. (2019). Hau-Kashyap approach for student's level of expertise. Egyptian Informatics Journal, 20(1), 27-32.
- Michael, S., Michael, B., & Thomas, S. (2019, April). IT Service Management Frameworks Compared–Simplifying Service Portfolio Management. In 2019 IFIP/IEEE Symposium on Integrated Network and Service Management (IM) (pp. 421-427). IEEE.
- Petro, Y., Ojiako, U., Williams, T., & Marshall, A. (2019). Organizational ambidexterity: using project portfolio management to support project-level ambidexterity. Production Planning & Control, 1-21.
- Sirisomboonsuk, P., Gu, V. C., Cao, R. Q., & Burns, J. R. (2018). Relationships between project governance and information technology governance and their impact on project performance. International journal of project management, 36(2), 287-300.