Profuturo: FUTURE STUDIES PROGRAM
Scientific editor: James Terence Coulter Wright
Evaluation: Double Blind Review pelo SEER/OJS
Revision: Grammatical, normative and layout.

THE STRATEGY ESTABLISHMENT THROUGH A PROJECT: THE CARANDIRU CASE

Roque Rabechini Jr.

Universidade Nove de Julho roquejr@usp.br

Stefane Sabino

Universidade Nove de Julho misabino@yahoo.com.br

ABSTRACT

This paper presents one case study about strategic transformation with project. It was built a theoretical frame literature on the project management contingency theory. The case study methodology was used in the creation project of Parque da Juventude, the former Carandiru prison complex in the city of São Paulo, Brazil. As a result it was found the adoption of a traditional management practice with emphasis variables of high intensity and high complexity. Therefore, it was possible to give a practical contribution to understanding the contingency theory applied in the project management.

Key-words: Success in project. Contingency theory. Strategic project management.



Profuturo: FUTURE STUDIES PROGRAM
Scientific editor: James Terence Coulter Wright
Evaluation: Double Blind Review pelo SEER/OJS
Revision: Grammatical, normative and layout.

RESUMO

Este trabalho apresenta resultados de um estudo sobre os transformação de uma estratégia por meio de projetos. Foi construído um quadro teórico para o desenvolvimento desta pesquisa a partir da exploração da literatura sobre teoria contingencial em gerenciamento de projetos. A metodologia de estudo de caso foi a alternativa encontrada para o desenvolvimento deste estudo. Seu objeto foi o projeto de criação do Parque da Juventude, no antigo complexo penitenciário Carandiru, na cidade de São Paulo, no Brasil. Como resultado, verificou-se a adoção de uma prática gerencial tradicional tendo como destague as variáveis de alta intensidade e alta complexidade. Com isso, foi possível dar uma contribuição de ordem prática no entendimento da teoria sobre gerenciamento contingencial de projetos.

Palavras-chave: Sucesso em projetos. Gestão contingencial. Estratégia em projetos.

1 INTRODUCTION

The studies about assessment of success in projects involve at least two strategic aspects: one resulting from the critical factors approach; the other, resulting from the analysis of differentiated and independent factors that involve not only the project management but also the own projects results, represented by the products and services (Pinto & Mantel, 1990).

It is believed that the discussion on success in project is still far from being definitive. Studies on success in project (Morris & Hough, 1987; Pinto & Mantel, 1990; The Standish Group, 2010; Tishler et al., 1996) have largely been based on indicators or key factors used to show their performance, but there is a shortage of works that show *ex-ante-*made management alternatives, aimed at increasing the management conception in the pursuit of success.

Dvir, Lipovetsky, Shenhar and Tishler (1998) argue that the main cause of problems in projects may be the premise, embraced by some managers, of a universal theory of project management applicable to all types of projects. There are too many differences among projects which make it impossible to adopt a universal theory of project management and manage all of them in the same way. Carvalho and Rabechini Jr. (2007) corroborate this analysis and argue that e the professionals trained and certified in these normative models tend to adopt them in their entirety in a prescriptive way in the organizations that work without a reflection on the need of their adaptation and flexibility in the unique context of the organization. The authors emphasize that to understand and perform the contingential analysis of procedures and practices of project management, it is necessary that both the organization and those responsible for projects within companies have some mature degree.

In this regard, the contingency aspects must be taken into account before an effective development of a project, i.e., it is proposed to carry out an analysis that emphasizes the management real needs. For Dvir et al. (1998), despite the emerging literature that seeks typologies and classifications, none has become a standard and the literature still focuses on a universal set of functions and activities considered to be common to all projects.

For Sauser, Shenhar and Reilly (2009), the theory of contingential management in projects can provide new insights for a deeper understanding of failures in the projects. Studies dealing with alignments between strategy and projects, fuelled by the approaches of success and failure in projects, can be deepened with the contingential theory approach adapted to the field of projects study.

In order to understand the strategic issues of the success in projects under the contingential perspective, this paper analyzed the project which transformed the prison complex in the city of São Paulo (Carandiru) into a recreational area. A research issue guided the researchers contributing to the understanding of the strategic phenomenon of the success in projects: how the project management contributed to the implementation of the transformation strategy?

The reasoning used to consolidate the response to this question is grounded in the literature about projects strategic management, contingential theory applied to projects and projects critical factors. The response to this question will certainly help the academic community and the project managers to understand some important factors of strategy implementing, supported by means of ventures. By making use of the project propositions and analysis, the object of this study, it was presented an analytical table of comparison with relevant and current studies about the project management subject.

The project was characterized by transforming an area marked by violence and human aggression, widely reported in Brazil and the world, into a park (for the Youth) whose aim was to offer to the local community a recreational and social benefit area.

There are at least two major reasons for this case development. The first, it is to show the evidences of how the project placement in a complex environment can be useful to its management, aiming at the success. The nature of the study of an investigation in depth made possible to examine the management shortages. The second, it is to illustrate a paradoxical situation between the placement of a project holding a traditional character and the use of the contingential management concepts. Thus, this paper contributes towards understanding the phenomenon of the management suitable choice through the placement of the contingential management theory in force.

This paper development was structured in six sections, beginning with this introduction. Then, in section 2, we analyzed the relevant aspects of the literature on project management and success in projects. In section 3, the methodological aspects were addressed. In the next section we presented the object of this case study. In

sections 5 and 6, we presented, respectively, the case report and the review. The findings were set out in section 7, followed by bibliographical references.

2 THEORETICAL BACKGROUND

The current market competitiveness reflects directly in the need for success in projects. For this reason, many recent studies analyze conceptually the project through the success perspective. According to The Standish Group (2010), from the information technology projects, only 28% were successful in the traditional criteria (cost, time and quality) and commercials. And only one in every four products that went into development became a commercial success (Shenhar & Dvir, 2010).

Classical literature dedicated to the field of project management studies has not suggested new alternative approaches; it only observes the already existing forms (Kerzner, 2001; Cleland & Ireland, 2007; Gray & Larson, 2009).

The concept of success, seen through the achievement of results in the triple constraint of a project - time, cost and technical performance - is widely shared in the literature (Larson & Gobeli, 1989; Cooke-Davies, 2002; Kessler and Winkelhofer, 2002; Raz, Shenhar & Dvir, 2002). More recently it has been observed the addition of strategic aspects to the definition of success in projects (Kenny, 2003; Cooke-Davies, 2004; Lipovetsky et al., 2005; Yu, Flett & Bowers, 2005; Berman, 2007).

The definition of success, for Raz, Shenhar and Dvir (2002), proposes the separation of the project objective into two parts: functional and technical. So, for the authors, the dimensions for the success of a project are shown by the compliance with the functional specifications, the technical specifications, the schedule and the planned budget.

However for Kessler and Winkelhofer (2002), the success in projects can be subdivided in: the real accomplishment of the goal set previously for the project, the project funds planned in the form of budgets, and the capability or time used in accordance with the project.

Cooke-Davies (2002) argues that there are two distinctions regarding the term success in projects. The first involves distinguishing success in project - examining the fulfilment of the overall project objectives - and the project management success - examining the fulfilment of traditional performance measures, i.e., cost, time and quality. The second distinction relates to the difference between success criteria - measures through which the success or the failure of a project or business will be judged

- and success factors - inputs to the management system that will lead directly or indirectly to the project or business success.

Starting from the analysis of understanding the success factors, Poolton and Barclay (1998) propose to separate the critical factors in strategic and tactical. The tactical factors effectiveness - good internal and external communication, customer satisfaction, quality in managing and executing of tasks - depends on building a supportive environment, which occurs with the correct use of strategic factors: top management support, strategic vision focused on innovation, commitment to the most important projects, flexibility, risk acceptance and encouragement of entrepreneurial culture.

According to Cookes-Davies (2002), since the 1960s project management researchers have attempted to find out what factors lead a project to the success.

There are several studies that point as a trend the use of critical factors for success in project management (White & Fortune, 2002; Barber, 2004; Söderlund, 2004; Judgev & Müller, 2005; Thomas & Mullaly, 2008; Ika, 2009). The literature that studies the issue of success in projects points to the aspects related to structuring, to stakeholders and to the existence of an information system as relevant factors for success. The project structuring, for being one of the first steps in the planning, is a critical factor imperative for its management. In that structuring, it is included the definition of the project mission (Dai & Wells, 2004) and the definition of clear objectives (The Standish Group, 2010).

Aspects related to the support and to the involvement of several stakeholders are also important critical factors for success. Among them it may be highlighted the support of senior management (White & Fortune, 2002), the role of the project manager, seen as the integration member of the whole project (Archibald, 2003) and the involvement of the client itself or end user of the project (Dong & Zhai, 2004).

Owning a complete project management system (Kessler & Winkelhofer, 2002) with an appropriate formal methodology (The Standish Group, 2010) is also a critical factor for the operational success.

Rabechini Jr., Laurindo Carvalho (2002) add two factors of paramount importance to the success of a project: 1) the political will of those involved, without which the project may fail even before having started, and 2) the adequacy of the organizational structure, which aims to make the project management as smooth as possible.

The relationship among the project participants - as well as these relationships management (Dong & Zhai, 2004), the involvement of those interested in the projects progress and the satisfaction of the project end customer (Kessler & Whinkellhofer, 2002) - is also regarded as a critical factor of the success.

Differently, Gobeli and Larson (1989) present other factors that may affect the success of the project, such as the project structure, the project manager efficiency and the project size. Moreover, the project complexity issue, its priority within the organization and the consequent availability of funds also must be regarded as critical factors for organizational success.

Several studies have been conducted over the last decade, seeking to analyze how the success in projects can be measured (Gray, 2001; Dvir, Raz & Shenhar, 2002 and 2003; Bizan, 2003; Belout & Gauvreau, 2004; Kendra & Taplin, 2004, Lipovetsky et al. 2005; Besner & Hobbs, 2006; Repiso, Setchi & Salmeron, 2007).

With the proposal to measure the success in projects through criteria and metrics, Ling (2004) makes a division refining the elements of success in projects, by placing this success along with the good performance of the project's product, by meeting the standards of quality, as well as the complying with the time and budget targets.

In a study involving 110 projects of research and development in the area of defense in Israel, Dvir, Raz and Shenhar (2003) proposed four dimensions of success in projects using as measurement: (i) compliance with the set targets, (ii) benefits for customer, (iii) benefits for the organization which develops the project, (iv) benefits for the national defense and infrastructure. Through the information obtained with three different *stakeholders* of each project - the end user, the project manager and the contract manager - the authors showed that the most important aspect was the one concerning to the benefits to the customer. The second most important was the compliance with the set targets. In the analysis of the relationship between efforts in project planning and success in projects, the authors conclude that the success in projects is insensitive to the levels of process implementation and the management procedures. In other direction, success in projects was positively related to investment in requirements definition and development of technical specifications.

Gray (2001) argues, on the other hand, that a success in projects measurement system that compares specifications with final result may be too simplistic. He also argues that the contractual aspects of a project, i.e., those defined in the initial documentation, tend to lose their importance after its completion, when the success starts being measured on how well its product meets the needs of the end customer.

Thus, a system of measuring success in project should include factors beyond the project specification, since meeting or even exceeding the project specification may not produce the expected effects when the project is delivered. Accordingly, he proposes that the stakeholders' opinion be included as part of the measurement system of the success in project.

Another important metric in the category success in projects, considering its specific characteristics, is the training of those involved in its development. According to Rabechini Jr., and Laurindo Carvalho (2002), investments in training are essential so that employees can understand a new system and manage a project efficiently and effectively.

In summary, it was possible to verify based on the works visited in this review that when it comes to success in projects of, the most treated indicators were maturity and cost (Katz & Allen, 1985; Gobeli & Larson, 1989; Gray, 2001; Fortune & White, 2002; Ling, 2004). It is also a consensus the treatment to the financial issue (Ghasemzadeh & Archer, 1999; Thomas, Delisle & Judgev, 2002; Patah & Carvalho, 2007). The approaches of this theoretical thinking line on performance in projects emphasize the quantitative parameters (metrics) for guidance on the identification of success. Complementing, there are the parameters of success given by quantitative indicators. Along this line, some of these authors include concepts such as risks (Ghasemzadeh & Archer, 1999), stakeholders' satisfaction in obtained new projects and team performance (Thomas, Delisle & Judgev, 2002). There are also studies that provide a somewhat more distinct view when including the value as a function of the processes that the organizations generate (Ibbs & Reginato, 2002).

The proposition of a contingential management system for project, according to Rabechini and Cavalho Jr. (2009, is a significant challenge, having in view the projects multifaceted typology. A prescriptive proposition is virtually impossible, according to the authors, because of the large number of possible arrangements for different types of projects carried out in several different economic sectors. Based on the concept of evaluation by groups of variables or *clusters*, four-axis that are guiding and essential for projects, the authors proposed a model (Figure 1), in the format of four **Is** that mean integration, impacts, innovation and immediate.

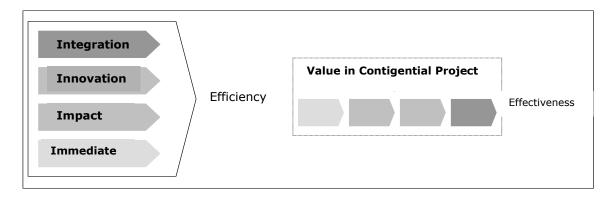


Figure 1: Contingential Approach in projects

Source: Rabechini Jr. and Carvalho (2009).

The authors present the following concepts for each axis:

- a. integration: related to projects that require to aggregate areas of an organization, multidisciplinary teams, items of various natures. These are projects whose teams are dispersed or in multiple locations, in that the number of participants is high, being necessary to connect them constantly;
- impacts: projects that affect the environment in terms of human behavior and the ethics of those involved;
- c. innovation: these are projects where technological inaccuracies, market and information inaccuracies, lack of convictions, technological difficulties and instability are prevalent;
- d. immediate: it refers to the restrictions / limitations of a project, i.e., it involves attention to targets of time, cost and quality.

However, it seems to be in the works of Raz, Shenhar and Dvir (2002) and Dvir, Raz & Shenhar (2003) evidence of a new successful approach, which takes into account the contingential management. Accordingly, for Shenhar et al. (2005), the theory that a single model of project management can adjust itself to all kinds of projects may be mistaken. There are evidences, according to these authors, that both, from the theoretical and practical point of view, the contingential approach must be considered for different types of projects. In Figure 2, there is the model in "diamond" format proposed by Shenhar and Dvir (2010).

Based on the pioneering studies by Lawrence and Lorsch (1967) on the contingential theory that involved analysis on how different rates of changes in

technology, science and the market used to impact the organizations' ability to deal with these changes, Shenhar (2001) proposed a conceptual framing for the theme: project management.

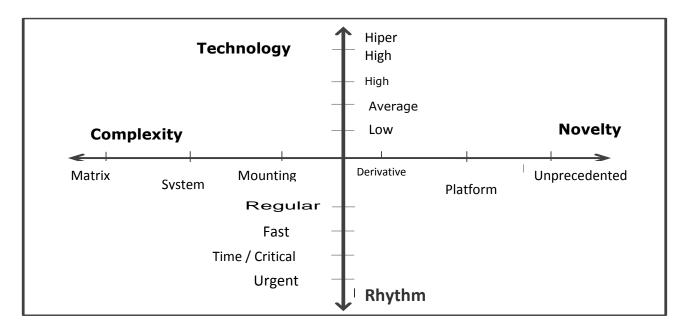


Figure 2: Practical Model of the "diamond" NTCP

Source: Shenhar and Dvir (2010).

Other authors are also worth mentioning because they were important to the formation of contingential theory tailored to the world of project management. Accordingly, the works of Thompson (1967) contained elements which have helped understand the impacts of uncertainty as one of the challenges (the principal, according to him) of complex organizations, whose main sources of uncertainty are the technology and the environment. Along with this line of reasoning, another author who is also worth mentioning for the formation of conceptual framing of the contingential theory focusing in projects was Perrow (1967). His work showed that the uncertainty and the complexity can be used as useful dimensions to assist in the projects typology as from a point of view integrated in technology and complex organizations.

The works of Shenhar and Dvir (2010) form a conceptual picture useful for framing and analysis as well as understanding of a particular phenomenon of a project, the subject of this case study.

3 METHODOLOGY

To accomplish this work, aiming at the understanding the phenomenon of the implementation of a strategy through projects, in a contingential perspective, we adopted the qualitative analysis as a methodological alternative and the case study as a method. In the impossibility of getting a sample of statistical significance, it was decided to adopt the single case study approach. According to Yin (2005), the case study is an empirical inquiry that investigates a contemporary phenomenon with its real-life contexts when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are used.

The alternative of case study for this work is justified since the researchers involved did not have access to replicable cases (Yin, 2005).

The case study object of the work was the project of transformation of a penitentiary complex in the city of São Paulo (Carandirú) in a recreational area. The project was chosen because it suited the requirements of management range and impact generated in the society in which it was carried out. Thus, this choice was justified because it takes into account the theoretical framing raised in the literature review. It is worth mentioning that the research method choice occurred for the compliance of the project, object of this case study. Thus, the research problem - understand the phenomenon of implementation of a strategy through projects - is best depicted by the method of case study.

A construct (Figure 3) was suggested to guide the research and provide conditions for researchers to conduct, to evaluate and to conclude the case.

As independent variables, there is the project management composed of typical actions of the traditional management versus contingential management or innovative managing projects. The project typology, its size, budget data and duration constitute the moderator variables of the construct. Finally, the dependent variables are presented in the far right, represented by success factors in the respective project.

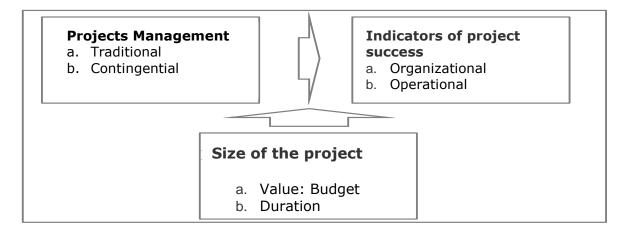


Figure 3: Structure of the research - construct

Source: Authors.

For information gathering it was used as tools for data collection: semi structured script interview, observation of researchers and access to documents. Thus, it was sought to provide consistency to the method by meeting the recommendations of several authors, among them, Eisenhardt (1989), for example. The author cites that researchers generally combine multiple techniques of data collection to build a theory. It is possible to use different methods of data collection, including the research in archives, interviews, questionnaires and observations. Yin (2005), when referring to the multiple sources of evidence, suggests the following: documents, records on archives, interviews, indirect observation, participative observation and physical artifacts.

The archival research in order to obtain secondary data was carried out as from the *website* of the company which hosted the project, specifically in publications about the project and internal documents made available to researchers.

There have been two interviews with the project executive manager, a civil engineer who has joined the organization approximately 10 years ago and has a 30-year-experience in the civil engineering of large size. The decision to choose the interviewee occurred because of his participation in the project throughout the lifecycle, as from the management company hiring - except for the conception phase, which had already been determined by the architecture office which won the public tender drawn up by the state of São Paulo.

It was used as an instrument of data collection a semi-structured guide divided into three parts: (i) the interviewee data, (ii) the company general features, (iii) information on management and performance aspects in project. In this last part, two sets of information were sought: first, regarding verification of the organization's methodological and management scenario in which the project was developed; the

second, on the identification, on specific points, about the impact of the use of project management techniques and tools aiming at identifying if the main critical factors and success metrics were achieved.

With this information, it was possible to organize the data analysis. Initially it was envisaged to examine the project object of study through information on management concept, i.e., to present and discuss aspects of the project structure, objectives, scope and group of work. Then the analysis focus was the management performance and the technical performance, in order to clarify the assessment through the organizational and operational factors. The management aspects expected to be examined involved the managerial activity organization, the communication plan establishment, the concerns about the project team motivation, the tools used, the technical development, the stakeholders' assessment and the requirements and changes management. From the technical performance point of view, it was predicted to analyze the project technical performance as well as the recognition of its final product and the customer satisfaction.

The information analysis forecast took into account the technique of comparison of data collected in this study with data relating to academic studies and researches on the subject: contingential management and the aspects of success in project management. Thus, it was envisaged to proceed according to the typology proposed by Shenhar et al. (2005) - Diamond model.

Specifically, the analysis planning considered that, with the information about the project management coming from block 3 of the instrument for data collection about technology, pace, complexity and technology, it would be possible to fit the project according to the model Shenhar and Dvir (2010 .)

4 CASE REPORT

On this section, it is intended to present the case, object of this study, considering initially its origin, place and purpose. Then it is showed the main work groups regarded in the scope and it is discussed the aspects of management and success.

4.1 THE OBJECT OF STUDY AND ITS BIRTH

The project, object of this case study, had as a declared purpose, the "establishment of a leisure park in the former prison complex - Carandiru, located in the city of São Paulo." The project was part of a broad strategy to restructure an area defined by the government, to solve a problem of social nature.

With an area of 240 thousand square meters, the site, according to the collected historical data was occupied by the 'Casa de Detenção de São Paulo' (São Paulo Prison Complex) - opened in 1920 and later known as Carandiru. The prison model adopted was the European one, considered at that time a milestone for the Brazilian criminal justice system, as it was intended to abandon the infamous penalties and to adopt the behavior correction alternative through "treatment."

In terms of capacity, as from the 1940s, evidence of overcrowding could already be observed, followed by slow and successive degradation of the site. The consequence of these effects was the episode known as the "Carandiru Massacre" in 1992, in which it was officially accounted, the death of 111 prisoners. Thereafter, studies were carried out to disabling this prison complex, once the site had been marked by aggression against human rights, violence and urban decay.

Through a political decision, it was decided, in 2002, for its disabling. Demolishing took place in 2005, involving most of the buildings, although some buildings have been reused.

4.2 RESULTS: PROJECT INFORMATION, PURPOSE OF THIS STUDY.

The strategy of disabling the Carandiru complex was implemented through an extensive program of ventures that involved the following working groups: (i) decision on the boundaries to be deployed to restore, (ii) public tender for the choosing of the architectural project aiming at the establishment of a cultural center, (iii) demolition of selected buildings, (iv) installation of a leisure park (v) delivery to the population. The subject study of this work is restricted to the working group responsible for installing the leisure park (later called the Youth Park).

Initially it was possible to verify the schedule of two works of project conception and of scope identification, following thus an orientation of traditional approach for project management.

In terms of scope, according to documentary information, it was possible to identify the existence of three lines of action that formed the thematic elements / the conceptual fundaments for the transformation of the complex in a leisure park. The first line consisted of deploying a space for recreation and for sports, foreseeing the establishment of courts, area for skateboarding and rollerblading, jogging tracks, among others.

The second line was intended for the establishment of a recreational and contemplative area-, consisting of hiking trails, gardened paths, walkways, and other elements that addressed to the more traditional idea of a park.

The third line, of cultural character, consisted of a technical school, a college of technology, libraries, theaters, cinemas, among other leisure elements. In this regard, it was noticed the existence of several political actions carried out to allow the transformation of the old prison complex.

To reach the goal and carry out the deliveries scheduled in the lines of operation perceived on the field information, the researchers identified the institution responsible for the project management - an organization of mixed economy, linked to the State Department of Economy and Planning. This institution is characterized by the engineering solutions directed to the bodies of direct and indirect administration of the São Paulo state government. It is, according to the company website, an organization structured in a functional way, with strict hierarchy, represented by departments, like most Brazilian public companies.

It was possible to notice that, having been the project, object of this case, a work of great size, its organization took place through the establishment of a dedicated task force and, according to the report of the interviewee, it was formed with strong support from senior management. Management actions in terms of establishing criteria for monitoring, evaluation and measurement of project success, consisted basically in the meeting of deadlines and costs. Concerning costs, it is worth mentioning that - as the financial issue was directly related to the allocation of man/hour at work, including those of foreseen subcontracting, and to the delivery of the *deliverables* defined among the members of project management and the architecture office responsible for the concept of the Project - the success in this case was seen as an action typical of the traditional approach for project management.

A significant change in the project department was necessary in order to facilitate the development of the project through the task force grouping. Thus, since the existing organization, in addition the project, had earlier contractual obligations, it was formed a mixed structure, maintaining, on the one hand, its departmentalization in which professionals played their routine activities and on the other, developing the project in a necessary living-together, but not always without conflict.

The formation of a structure characterized by a task force dedicated to the project, although being an important decision from a management viewpoint, it did not constitute, by itself, an intentional strategy of contingential management.

4.3 RESULTS ABOUT THE PROJECT MANAGEMENT ASSESSMENT AND ITS PERFORMANCE

In managerial terms, the following points were considered: (i) organization of managerial activity, (ii) establishment of the communication plan, (iii) concern about the motivation of the project team, (iv) tools used, (v) technical development (vi) stakeholders' assessment, (vii) management of requirements and changes. In terms of the project performance perceptions it was observed: (i) technical evaluation of the project, (ii) recognition, (iii) customer satisfaction.

The managerial activity organization started with a schedule, based on the scope defined in the agreement between the Secretary of State (Youth, Sport and Recreation) and those responsible for the project. It is important to highlight at this time the effort in establishing prerequisites for developing a work system in partnership with the architecture company responsible for the conceptual project. The management planning was based on activities such as internal meetings, updating of the physical progress of the project, feedback of the initial planning, backlog and corrective actions.

A communication plan was established, encompassing the most diverse channels. Among the members of the staff and the project management, it was observed that there was an informal communication. It used to be generated minutes and documents that fed the management process as from the weekly meetings and / or those held due to some specific reason, from the internal meetings and / or with external partners. Project Network Diagrams, list of delivery dates, and Responsibility Matrices were placed in visible places with easy access to the members of the task force, as well as the mid-project milestones and the project performance reports.

The formality level of communication followed the rules and conditions that already existed within the public company that took over the project. Thus, both the schedules and plans, as the controls and the meetings, due to legal requirements, had to be formally documented. Documents surveyed by the authors of this study prove this assertion.

It was also possible to examine the use of informal information by the project team. The existence of this type of information is very usual in such projects and the organizational structure set up to develop the project facilitated this type of practice. The communication between the project team and senior management, according to the

same interviewee, occurred directly, causing that the actions resulting from decisions of such type of communication were taken effectively.

As a tactical alternative for motivation and integration of team members, there were the lunches together with all members - especially on weekends - as well as the scheduling of small events extraneous to the work intensive routine, promoting the cooperative atmosphere for the compliance of all the partial deliveries set out previously.

Training in project management tools such as the project manager of Microsoft (MS-Project) and the program for delivery control of the management company, among others, were given by selected members of the teams in order to strengthen their knowledge of the project.

Gaps in technical expertise demanded in the project development that could not be treated with the trainings were filled by contracting external office. Among such gaps, it stood out the areas of HVAC and automation as well as some occasional consultants, such as in the area of soils - for specifying the new buildings foundations - of structural recovery, sound reinforcement, among others.

The results showed that the stakeholders' management had deep commitment of third parties. Although it was one of the elements that make up the organization knowhow, it eventually became one of the most striking items in the project final results, given the number of companies, materials and technical solutions, functionalities, etc. involved in its development. For this it was designated a coordinator whose main activity was to organize the bidding activities and procurement activities for goods or services to the project.

In management terms, considering the project complexity and the amount of stakeholders, the freezing timing of the product requirements became a crucial milestone taking into account the life cycle of the project. Broadly speaking, the requirements have not undergone through many oscillations since its identification was preset and provided the basis for the project team selection. Its management, according to the interviewee, took place without any major problems and there was the need of changes in its structure where there were technical conflicts.

Another paramount point, yet on the issue of project management, is the management changes, especially when the changes requested are relevant and impactful in the project. Documentary information revealed the existence of a major change in the project scope. It was about the need to eliminate the construction of a theater in the central area. This fact occurred after the completion of the architectural

conception work, at the time when the technical structure and foundations area presented arguments concerning the technical unfeasibility of that work group in the project. This event was the largest occurrence for the change management team.

The managerial elements presented so far showed that the attention of the manager and his team towards the project administration was intense throughout the life cycle and this has had consequences on the project technical performance. According to of the interviewee's statement, "everything went on without any major deviations from the plan originally drawn up" (Smith, 2009). This occurred because the works involving uncertainty, i.e., those with a degree of technical innovation throughout the project life cycle were very well explored in the planning phase. According to the same interviewee the deviations, when they occurred, did not impact intensely the technical performance and, when this occurred, it represented something around 1/6 of the value and the deadline originally agreed.

In terms of technical awards, it was possible to verify the quality of some products of the project. The landscaping, for example, received an international award in Japan and came in second place in the ranking of the 41 best parks in the city of São Paulo, in a research carried out by the National Union of Architecture and Engineering Advisory (Sinaenco). Among the assessed items as "very good", are: the accessibility, green areas, playgrounds, drinking fountains, restrooms, sporting spaces, such as courts and fitness equipment, jogging tracks and hiking trails.

Another evidence of the project product recognition was the growth in the participation of the community on their daily routine. It has gone from 50,000 goers per month in 2006 to 150,000 per month in 2009.

One of the possible reason for this growth is the provision of free services: lessons for sports like football, handball, basketball, tennis, gymnastics, taekwondo, kickboxing and skateboarding, as well as programs for the elderly, such as dance classes, music and choir.

Finally, it is time to examine the item: the user satisfaction, the satisfaction of those who attend the park, i.e., the final product of the project.

Documentary information present positive statements about its beauty, care, safety, maintenance and activities offered. It was not possible to do a satisfaction survey in order to deepen this aspect, nor was made available a document which presented the criticisms to the operation of the park.

With these arguments, it ends the presentation of the collected results and it starts its assessment section.

6 RESULTS ASSESMENT

Through the results presented, it was possible to frame the project, object of this study, taking into account the aspects approached by the literature on contingential management and success in projects.

Initially it is necessary to examine the decisions evidenced by the collection of information as well as the impressions taken from the project manager. In structural terms, the formation of an organization characterized by a task force dedicated to the project, although it is an important decision from a management viewpoint, it does not, by itself, constitute an intentional strategy of contingential management.

It was noticed that the project management was developed in a normative form complying with the management practices listed in most guidebooks and books of traditional management (Table 1).

Vision of success in projects					
Elements of Analysis	Reference Theoretical	Assessment			
Success critical factors: operational					
Compliance with the Cost	Traditional approach with emphasis on the	Index of additional cost considered low in view of the complexity of the project.			
Compliance with the Deadline	factors of the triple constraint (Kerzner, 2001;	Index of extending the deadline considered low in view of the complexity of the project.			
Adaptation x technical issues	Cleland & Ireland, 2007; Gray & Larson, 2009)	Technical compliance with the requirements of the project scope.			
Formal system and methodology in project management	Kessler and Winkelhofer (2002), The Standish Group (2010)	The system and the methodology of the organization management were strengthened and complemented with the development of this project - contribution to the lessons learned.			
Success critical factors: organizational					
Political willingness of	Rabechini Jr., Carvalho and	· · ·			

those involved	Laurindo (2002)	importance of the customer – the State of São Paulo.			
Adaptation of the organizational structure		Alteration of functional structure: option of task force.			
Management of relationship among participants	Dong and Zhai (2004)	Both between external partners and in-house staff, the relationship was based on a professional approach.			
Support of the Upper Management	White and Fortune (2002)	Strong support from senior management.			
Performance of the project manager	Archibald (2003)	Managerial performance with appropriate autonomy and authority.			
Success Metrics					
Fulfillment of the goals set out previously		The scope targets were hit - the product has been delivered in full.			
Benefits for the customer	Day Chaphar and	The State has reached its "expectation".			
Benefits for the organization	Raz, Shenhar and Dvir (2002)	The organization had its business expanded after completion of this project.			
		project.			
Benefit for the user		The society has profited socially from the project.			

Table 1: Project Carandirú: aspects of the success

Source: Result of the data analysis.

It was observed, for example, that the management actions were not stemming from an initial framing in one of the contingential management models presented in the theoretical survey of this work. It means, it was not clear the managerial concern with the success of the project towards the end user. An example that reinforces this

reasoning refers to the managerial concern in the establishment of a closed scope. Criticism of those who advocate the theory of contingential project management (Shenhar, 2002; Lipovetsky et al., 2005; Raz, Shenhar & Dvir, 2002, among others) have been directed to projects that do not present an initial management framing (Table 1).

The framing of the project, object of this study, in accordance with the theory of contingential management approach can be seen through the diamond model of Shenhar and Dvir (2010) as shown in Figure 3, characterized by the predominance of the vectors complexity and pace, with little incidence in the vectors of novelty and technology.

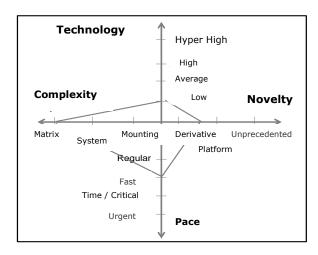


Figure 3: Project Carandirú: Diamond Model of Shenhar and Dvir (2010)

Source: Result of field research.

The element complexity observed in the project, object of this case study, conceptually, is taken to the extreme, presenting the characteristic of matrix, according to the diamond proposal of Shenhar and Dvir (2010). Its high intensity was justified by the scattershot collection of systems (and systems that have been aggregated) that worked together to achieve common goals. Moreover, it was found that the project did not have a single locus, its systems were scattered throughout the Youth Park.

The delivery of the project product in a appropriate time suggested to researchers the establishment of a moderate intensity in terms of pace. Although important, it was noticed that the delivery time would not jeopardize the success of the project. The suggestion to frame it as *fast* occurred by because of the concern about the effects of the project impacts could generate in the community.

Regarding the elements of novelty and technology, there were no information that would justify an intense presence.

The definition of a project grounded in the explored literature can give relevant information to project managers, preventing management problems and increasing their chances of success. A look at the project through such framing is part of a new management approach - contingential management of projects.

In order to close the argumentation the authors show in Table 2 an assessment proposal on two managerial dimensions: traditional x adaptive, as proposed by Shenhar and Dvir (2010).

Approach	Analysis	Assessment
Project Target	Although there was a deep concern in meeting the deadlines, costs and requirements indicators, the customer satisfaction and recognition were items observed in the management and in the post-project performance.	•••
Project Planning	In terms of management, the project plan tried to address the triple constraint.	0000
Plannning	There was redesign, but it was not identified the use of the rolling wave planning technique.	•000
Management Approach	Focused on the initial plan, with little concern on change management.	•000
Project Work	Work with many interfaces, but predictable.	•000
Environment Effect	It presented an interface with the project. This caused the manager and his staff to care about the stakeholders' administration.	•••
Control	In general, the project control was based on planning, always taking into account the project getting back on the right track.	•000
Distinction	Projects of this nature are considered equal.	•000
Management Style	There was no concern on assessing the projects typology and to choose a suitable management approach.	0000
Labels:	 Fully traditional Predominantly traditional Traditional and Adaptive 	

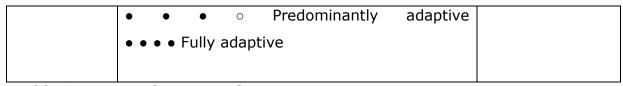


Table 2: Approaches to project management

Source: Result of data analysis.

Three aspects were taken into account in this table, the suggested approach for analysis, the proposal final analysis and the proposal final assessment. We proceeded, for each item, to an examination, followed by an assessment considering five levels depending on the observed management through the data obtained from the project - traditional management or adaptive management. A label at the bottom of the table shows the five different levels and the corresponding assessments between the projects management, traditional and adaptive.

7 CONCLUSIONS

In order to understand the phenomenon of the success according to the contingential perspective, this study investigated the Carandirú project.

Two framings were carried out based on the current literature on contingential management projects. The information collected for the purposes of this case study show that the project presented, according to the diamond model of Shenhar and Dvir (2010), relevant characteristics about the complexity and pace, with low technology intensity and novelty.

The project, object of this case study, showed strong characteristics of project complexity and not of the product complexity.

Using the information presented and discussed during this narrative, it was possible to understand the issues of success in a defined project. Accomplished through a framing proposal, the analysis was backed by the contingential theory. With that it was possible to answer the research question formulated at the beginning of this work.

It was possible to notice through this analysis, that the case demonstrated the existence of traditional management project practices, which are grounded by the theoretical literature in force. There were no evidences of the use of additional practices that could be classified as innovative techniques of project management guided by contingential theory. Furthermore it was possible to present a picture that showed the managerial adherence to the expected kind of success, appropriate to the kind of project

identified, both by the traditional theory and by the contingential theory. It is believed that for other project, with different typology, such as innovation projects, the need for an initial framing guiding the management for individual cases could be impose by itself. This is therefore a recommendation for further researches in this field of project management.

It is believed, thus, that this work has achieved the original objectives, answering the formulated research question and bringing a scientific contribution by demonstrating a case study in the light of the projects contingential theory, considering that it incorporates the traditional theory. Accordingly, in practical terms, the project managers will be able to extract strategic information to adopt in managing their projects. However, from an academic viewpoint, the case study approach brings restrictions as to the generalization.

As a suggestion for the research continuity it is worth exploring projects in innovative sectors where the need for contingential management is more intense. Another important aspect to be explored in future studies is the management approach with emphasis on sustainability issues.

Finally, it is believed that, coupled to these suggestions, the increased number of cases may bring more contributions to the study of projects contingential management and to the success in projects assessment.

REFERENCES

- Archer, N. P. & Ghasemzadeh, F. (1999). An integrated framework for project portfolio selection. *International Journal of Project Management*, *17*(4), 207-216.
- Archibald, R. D. (2003). *Managing high-technology programs and projects*. New York: John Wiley.
- Barber, E. (2004). Benchmarking the management of projects: a review of current thinking. *International Journal of Project Management*, 22(4), 301-307.
- Belout, A. & Gauvreau, C. (2004). Factors influencing projects success: the impact of human resource management. *International Journal of Project Management*, 22(4), 1-11.
- Berman, J. (2006). *Maximizing project value defining, managing and measuring for optimal return*. New York: Amacom.
- Besner, C. & Hobbs, B. (2006). The perceived value and potential contribution of project

- management practices to project success. Project Management Journal, 37(3), 37-48.
- Bizan, O. (2003). The determinants of success of R&D projects: evidence from American-Israeli research alliances. *Research Policy*, *32*(9), 1619-1640.
- Carvalho, M. M. & Rabechini Jr., R. (2007). *Construindo competências para gerenciar projetos* (2a ed.). São Paulo: Atlas.
- Cleland, D. I. & Ireland, L. R. (2007). *Gerenciamento de projetos* (2a ed). Rio de Janeiro: LTC.
- Cooke-Davies, T. J. (2002). The "real" success factors on projects. *International Journal of Project Management*, 20(3), 185-190.
- Cooke-Davies, T. J. (2004). Measurement of organizational maturity: what are the relevant questions about maturity and metrics for a project-based organization to ask, and what do these imply for project management research? In D. P. Slevin, D. I. Cleland & J. K. Pinto, *Innovations project management research*. Pennsylvania: Newton Square.
- Dai, C. X. & Wells, W. G. (2004). An exploration of project management office features and their relationship to project performance. *International Journal of Project Management*, 22(4), 523-532.
- Dong, C. K. B. C. & Zhai, L. (2004). A study of critical success factors of information systems projects in China. In D. P. Slevin, D. I. Cleland & J. K. Pinto, *Innovations project management research*. Newtown Square, Pennsylvania: Project Management Institute.
- Dvir, D., Lipovetsky, S., Shenhar, A. & Tishler, A. (1998, December). In search of project classification: a non-universal approach to project success factors. *Research Policy*, Amsterdam, *27*(9), 915–935.
- Dvir, D., Raz, T. & Shenhar, A. (2003). An empirical analysis of the relationship between project planning and project success. *International Journal of Project Management*, 21(2), 89-95.
- Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review*, *14*(4), 532-550.
- Gray, R. (2001). Organizational climate and project success. *International Journal of Project Management*, v. 19(2), 103-109.

- Gray, C. F. & Larson, E. W. (2009). *Gerenciamento de projetos: o processo gerencial*. São Paulo, McBooks.
- Ibbs, W. & Reginato, J. (2002). *Quantifying the value of project management*. Newtown Square, Pennsylvania: Project Management Institute.
- Ika, L. A. (2009). Project success as a topic in project management journals. *Project Management Journal*, Four Campus Boulevard: Project Management Institute, *40*(4), 06-19.
- Jugdev, K. & Muller, R. (2005). A retrospective look at our evolving understanding of project success. *Project Management Journal*, *36*(4), 19-31.
- Katz, R. & Allen, T. J. (1985). Project performance and the locus of influence in the R&D matrix. *Academy of Management Journal*, *28*(1), 67-87.
- Kendra, K. & Taplini, L. (2004). Project success: a cultural framework. *Project Management Journal*, *35*(1), 30-45.
- Kenny, J. (2003). Effective project management for strategic innovation and change in organizational context. *Project Management Journal*. Maryland: Project Management Institute, *34*(1), 43-53.
- Kerzner, H. (2001). *Applied project management best practices on implementation*. New York: John Wiley & Sons.
- Kessler, H. & Winkelhofer, G. (2002). *Projektmanagement: Leitfaden zur Steuerung und Führung von Projekten*. Heidelberg: Springer.
- Larson, E. & Gobeli, D. (1989). Signicance of project management structure on development success. *IEEE Transsactions on Engineering Management*, *36*(2), 119-125.
- Lawrence, P. R. & Lorsch, J. W. (1967). *Organization and environment: managing differentiation and integration*. Boston, MA: Harvard University.
- Ling, F. Y. (2004, August). How project managers can better control the performance of design-build projects. *International Journal of Project Management*, 22(6), 477-488.
- Lipovetsky, S., Tishler, A., Dvir, D. & Shenhar, A. (2005). The relative importance of project success dimensions. *R&D Management*, 27(2), 97-106.
- Morris, P. W. & Hough, G. H. (1987). *The anatomy of major projects.* New York: John Wiley.
- Patah, L. A. & Carvalho, M. M. (2007). Quantifying the value of project management:

- the actual situation in the it market in Brazil. Ankara: Euroma.
- Perrow, C. (1967, April). A framework for comparative organizational analysis. *American Sociological Review*, Washington, *32*(2), 194-208.
- Pinto, J. K. & Mantel, S. J. (1990, November). The causes of project failure. *IEEE Transactions on Engineering Management*, New Jersey, *37*(4), 269–276.
- Poolton, J. & Barclay, I. (1998). New product development from past research to future applications. *Industrial Marketing Management*, *27*(3), 197-212.
- Rabechini Jr., R., Carvalho, M. M. & Laurindo, F. J. B. (2002, maio-agosto). Fatores críticos para implementação de gerenciamento de gerenciamento por projetos: o caso de uma organização de pesquisa. *Revista Produção*, *12*(2), 28-41.
- Rabechini Jr., R. & Carvalho, M. M. (2009). Gestão projetos inovadores em uma perspectiva contingencial: análise teórico-conceitual e proposição de um modelo. *Revista de Administração e Inovação*, 6(3), 63-78.
- Raz, T., Shenhar, A, J. & Dvir, D. (2002). Risk management, project success, and technological uncertainty. *R&D Management*, 32(2), 101-109.
- Repiso, L., Setchi, R. & Salmeron, J. (2007). Modelling IT projects success: emerging methodologies reviewed. *Technovation*, Article in Press.
- Sauser, B. J., Reilly, R. R. & Shenhar, A. J. (2009). Why projects fail? How contingency theory can provide new insights a comparative analysis of NASA's Mars climate orbiter loss. *International Journal of Project Management*, *27*(7), 665–679.
- Shenhar, A. J. (2001). One size does not fit all projects: exploring classical contingency domains. *Management Science*, Providence, *47*(3), 394-414.
- Shenhar, A., Dvir, D., Milosevic, D., Mulenburg, J., Patanakul, P., Reilly, R., Ryan, M., Sage, A., Sauser, B., Srivannaboon, S., Stefanovic, J. & Thamhain, H. (2005). Toward a NASA-specific project management framework. *Engineering Management Journal*, 17(4), 8-16.
- Shenhar, A. & Dvir, D. (2010). *Reinventando gerenciamento de projetos: a abordagem diamante ao crescimento e inovação bem-sucedidos*. São Paulo: M. Books.
- Soares, Magno. (2009, fevereiro). Entrevista com Paulo Pavan, diretor do Parque da Juventude. *Jornal Norteando*. Recuperado em junho de 2010, de http://www.copiadorazonanorte.com.br/norteando /n26_especial. html.

- Söderlund, J. Building theories of project management: past research, questions for the future. *International Journal of Project Management*, 22(3), 183-191.
- The Standish Group. *Chaos Summary 2009*. Recuperado em maio-agosto de 2010, de http://www.standishgroup.com.
- Thomas, J., Delise, L. & Jugedev, K. (2002). *Selling project management to senior executives*. Newtown Square, PA: Project Management Institute.
- Thomas, J. & Mullay, M. (2008). *Researching the value of project management*. Newtown Square, PA: Project Management Institute.
- Thompson, J. D. (1967). Organizations in action. New York: McGraw-Hill.
- Tishler, A., Dvir, D., Shenhar, A. & Lipovetsky, S. (1996, February). Identifying critical success factors in defense development projects: a multivariate analysis.

 Technological Forecasting and Social Change, New York, 51(2), 151-171.
- Website Oficial do Parque da Juventude (Portal do Governo do Estado de SP).

 Recuperado em junho-agosto de 2010, de

 http://www.sejel.sp.gov.br/parquedajuventude/index.html.
- White, D. & Fortune, J. (2002). Current practice in project management an empirical study. *International Journal of Project Management*, 20(1), 1-11.
- Yin, R. K. (2005). *Estudo de caso: planejamento e métodos* (3a ed.). Porto Alegre: Bookman.
- Yu, A., Flett, P. & Bowers, J. (2005). Developing a value-centred proposal for assessing project success. *International Journal of Project Management*, Article in Press.