

Temporary organization: The dominant approach in project management activities

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Abstract: The nature of project activities has been one of the important topics discussed among project management experts for the past few decades. The importance of identifying the nature of the project is due to its impact on determining organizational characteristics such as organizational structure, strategies, communications, and so on. Accordingly, the main purpose of this paper is, first, introduce further the nature of project activities based on different schools particularly the Scandinavian school of management, then identify the characteristics that determine the temporary or permanent nature of projects, and finally, emphasize the supporting theories prevailing in project activities. For this purpose, a review method was used. Based on this method, first the relevant sources were searched, then the relationships among the key concepts were plotted using VOS viewer, and finally the sources were selected in several steps. The results are presented in the form of answering research questions. Thus, it can be said briefly, a project is a temporary organization, but not every temporary organization is a project. That is, the scope of temporary organizations is wider. On the other hand, various factors and characteristics emphasize the temporary nature of projects, but there is a consensus on four factors: time, task, team, and transfer. Finally, considering the characteristics of the project as a temporary organization, it can be concluded that their supporting theories are different from permanent organizations. So, this paper focuses on the structure of adhocracy.

Keywords: adhocracy, operations, project, permanent organization, temporary organization.

1. Introduction

What is the nature of project activities? Are these activities mostly temporary or permanent? What determines the temporary or permanent nature of project activities? What are the dominant support theories in project activities? Although it may be a little difficult to answer these questions in a paper, in addition to brief and appropriate answers to these questions, an attempt has been made to provide a basis for thinking and further research in this field by presenting the factors that shape the nature of project activities.

The nature of current organizations is such that it may not be possible to categorize them into specific formats and express the same characteristics about them, but despite this diversity, management scholars have tried to classify organizational plans and compositions from different perspectives. The division of organizations into two general types, fixed basis, and temporary basis, is an example of these categories.

Background review of the organization and management theories show that mainstream organizational theorists proffer theories that assume that organizations are or should be eternal or permanent. Furthermore, "organization theories are generally seen as incremental as they only refer to changes that are gradual and their focus is mostly on repetitive tasks and decisions within a "going concern" assumption (IKA, 2011). Obviously, this is not the case of temporary organizations because these organizations are established to deal with or eliminate problems that have arisen in certain circumstances, and usually by solving that problem in the long run, they lose their legitimacy in one area and move to unknown areas in the field of development activities. Since, projects are temporary complex organizations, as supported by the Scandinavian school (Bérubé & Gauthier, 2017), they fall into the second category, and will have all the characteristics of temporary organizations. These features are implicit in its definitions.

Generally, a project is seen in the definitions as a task (a temporary, complex, and unique task individually or in groups), but in today's literature it is seen as a special type of temporary organization. Therefore, it can be said that the organizational project consists of smaller temporary organizations with the following characteristics:

- 1) It has a non-routine and repetitive process that results in non-routine products and generally involves indeterminate technical tasks (Shenhar & Dvir, 2007).
- 2) It has a predetermined time frame; that is, the work involves a time limit and consequently a time pressure (Lindkvist, Soderlund, & Tell, 1998).
- 3) It has performance evaluation criteria such as time, cost, quality, value creation and profit.
- 4) In terms of activities, roles and internal affiliations are complex and uncertain that require conscious organization (Shenhar & Dvir, 2007).

- 5) It has a dynamic and organic structure with informal behavior, and they have a flat and horizontal structure in terms of expertise, and they work in the form of decentralized work teams (Mintzberg, 1993).

Furthermore, Morris and Hough (1987), and Pinto and Prescott (1988) agree that projects are:

- 1) unique, with once in a life-time task,
- 2) with pre-determined end date,
- 3) constrained by performance goals, and 4) have a number of complex and inter-dependent activities (Packendorff, 1995). Accordingly, the project managers are chief executive of the temporary organization, and thus their roles in objective setting and motivating team members are emphasized over their role in planning and executing work (Turner & Müller, 2003).

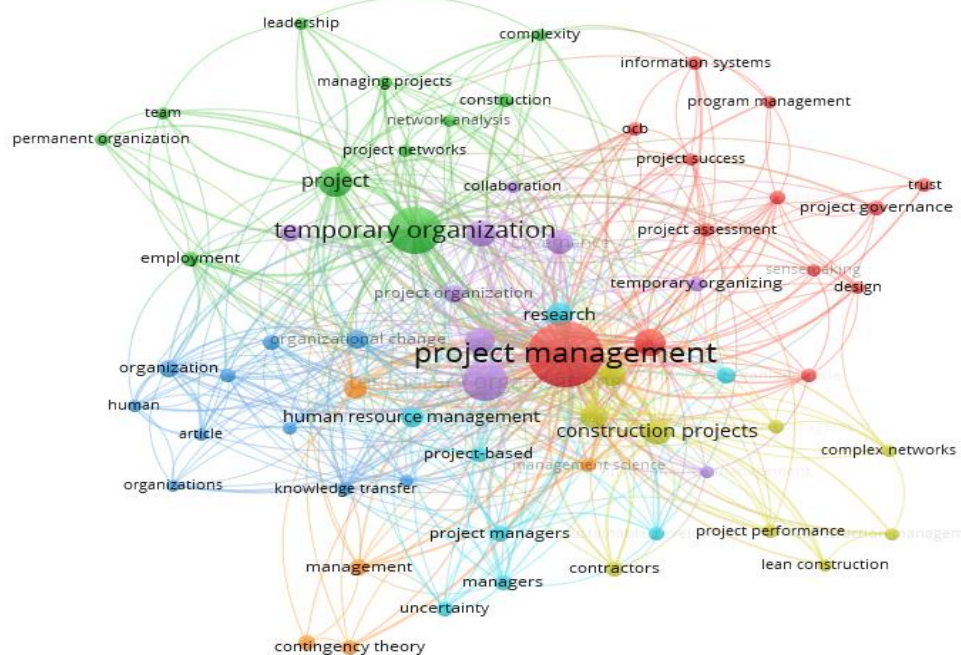
Lundin and Söderholm (1995) identified four concepts, time, task, team and transition, that separated a temporary organization from a permanent one (Lundin & Söderholm, 1995). In short, temporary settings have a time limitation, they are assigned to a project specific task in which several organizations bring their own expertise and members, it has a certain level of complexity and has the aim to develop or change the current situation. The time, task, team, and transition aspects of the temporary organization are related to each other. This is of course obvious. The definition of a task may put limits to time. Likewise, time limits may impede certain tasks. Task definition also implies expectations about transition and team size etcetera. The one influences the other and the other way around. Therefore, it can be said that every temporary organization is a complex entity.

In this paper, based on the characteristics of project activities or project-based organizations, the concept of adhocracy or temporary organizations, which is introduced by Alvin Toffler (1970) in the book "Future Shock", is examined as a live and dynamic idea or approach. Accordingly, we believe that adhocracy can be one of the best solutions in emphasizing the time, task, team, and transition in projects as a temporary organization, and as well as strengthening communication, increasing HR motivation and commitment, managing project complexity, and increasing efficiency in projects. However, it should be noted that adhocracy can not replace all permanent organizations. In other words, it is not suitable for all organizations, in all circumstances, but it is a temporary organization that can be selected and employed based on a temporary and transient task and function.

2. The methodology

To review the published scientific materials, the systematic literature review method has been used, which is suitable for reviewing a large amount of information (Petticrew & Roberts, 2008), carefully collects resources and offers suggestions for future research plans (Rousseau, Manning, & Denyer, 2008). This method in a transparent and systematic way and by presenting coherent and comprehensive results, increases the knowledge about a phenomenon in scientific texts and directs the executive actions in the real world. To construct a systematic search that attempts to identify all studies, the research subject was broken down into two keywords including "temporary organizations" and "project management". In addition, most reputed keywords in the past studies have been considered, and to have more valid results, both automated and manual searching options were used for each single bibliographic database. After finding research terms, for identifying relevant studies, the electronic databases are searched which contains millions of international articles from hundreds of different international publishers: Google scholar, ScienceDirect, and Scopus. All databases were selected with attention to coverage of the scientific literature and level of overlaps. In addition, Endnote (version X9) used for storing and managing different publications, and VOS viewer (version 1.6.15) was utilised for cataloguing, organising, analysing, and synthesising the set of data. This software was especially useful since it made it possible to conduct content analysis of a vast number of resources and was subsequently instrumental in identifying the connections among publications. Figure 1 shows the output of the software including the main concepts, sub-concepts, and their connections.

Figure 1 General map of literature keywords relationships



Source: the author

To select the sources related to the research topic, six steps were considered.

- 1) The resources should cover the opinions of experts from the 1980 to the present.
- 2) The publications should be available full text in the databases in English or French.
- 3) Publications should include all articles in reputable journals related to economics.
- 4) The resources are written by knowledgeable authors and researchers and are affiliated with reputable universities and scientific and research centers.
- 5) The abstracts, keywords and citation information were downloaded, and duplicate publications were deleted.
- 6) Final filtering was undertaken and articles having most congruence with the research title were selected. According to these indicators, initially 264 papers were found related to the main concepts. The papers' abstracts were carefully read and at last, 53 papers were selected that addressed the research title.

3. Nature of projects: theoretical lenses

A review of the literature shows that, although the phenomenon of temporary organization is not new, it has attracted much attention over the last two decades. This increased attention is related to the assumption that organizations with a predefined termination point, such as project activities, are a crucial form for contemporary economic organizing (Grabher, 2002), and they are involved in a wide range of economic and social activities and in a wide range of industries.

According to Bryman et al. (1987), not much research has been done on temporary organizations until the late 1980s, but many research efforts have been carried out by researchers in the last two decades. This research covers a wide range of topics, however, there are still other very important questions that remain unanswered so that according to Janowicz et al. (2008) these shortcomings have been one of the main obstacles to the development of a full-fledged theory of interim organization. Also, there is still no consensus on many issues related to temporary organizations such as what the temporary character of temporary organizations exactly entails Janowicz et al. (2008). Based on this, it can be said that the authors have looked at this phenomenon with different lenses, the most important of which are discussed.

3.1. Project as a complex task

Some people, especially those who are new in project management, may be confused about the meaning of tasks and projects. A task is a single unit of work that needs to be accomplished within a project. Michael Long (1985) believes, a task is "a piece of work undertaken for oneself or for others, freely or for some reward" (Long, 1985), while a project is the entire series of tasks that need to be completed together to accomplish a single outcome or goal. For example, the whole process of creating a new product is a project, while prototyping

is a single task in that project. So, tasks and projects are the main blocks in project management that allow us to track and organize our work (Wrike, 2021).

In non-project areas, Brown et al. (1984) distinguished among three different types of tasks which they presented as ranging from easy to difficult. The first type, static tasks, was proposed as the easiest type. In this kind of tasks, all the information to be exchanged is presented to the person in the materials for carrying out the task. The second type, dynamic tasks, also present the person with all the information in stimulus materials, but the tasks can present problems. The last type, abstract tasks, is the most difficult one since the stimulus material does not contain the content to be communicated. It involves making reference to abstract concepts, establishing connections between ideas, and providing reasons for certain statements or behaviours (A. Anderson, Brown, Shillcock, & Yule, 1984). In determining the level of complexity of tasks, Prabhu (1987) stated that: "working with concepts is more difficult than working with objects or actions" (Prabhu, 1987), thus suggesting the degree of abstractness can make tasks easier or more difficult. Table 1 indicates criteria suggested by Prabhu to determine task complexity.

Figure 1 Criteria to determine task complexity

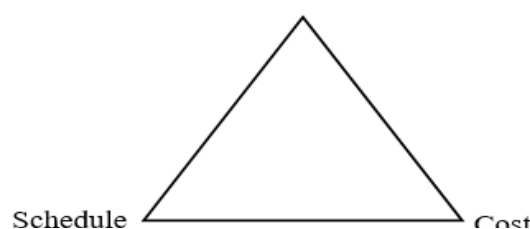
-	Degree of difficulty	+
Few elements	Amount of information	Many elements
Few steps	Amount of reasoning	Many steps
Precise terms not needed	Degree of precision	Precise terms needed
Unfamiliar	Degree of familiarity	Familiar
Objects and actions	Degree of abstractness	Concepts

Source: (Prabhu, 1987)

In the field of project management, complexity is one of the main features of projects, especially large construction projects (Brockmann & Girmscheid, 2007), and it is included in its definition. Traditionally, projects are defined as unique, complex tasks (Golpîra, 2013), whereby complexity is defined as technical complexity and the relation between its parts. Since World War II, project complexity has been progressively increasing (Baccarini, 1996). Nowadays, many of construction projects have high degrees of electrical and mechanical installations, employ sophisticated structure systems, and serve diversified requirements of different end-users (Xia & Chan, 2012). Furthermore, rapidly changing environment increases risk and uncertainty in projects (Oyegoke, Khalfan, McDermott, & Dickinson, 2008). It often leads to increased time and cost, and it affects project planning and control. It can affect the selection of an appropriate project organization form, or it can even affect project outcomes (San Cristóbal, Carral, Diaz, Fraguela, & Iglesias, 2018).

The task approach to the project has a relatively long history so that examples of it can be found in the classical school. So, many of the classical project definitions stress the role of a production function (Turner & Müller, 2003). On addition, a project as a task which is characterized by rationality (Borum & Christiansen, 1993) represents a Taylorian way of thinking (Turner & Müller, 2003) and is based on the prevailing perspective before 1950, the so-called economic man (*homo economicus*), who is completely self-seeking, completely rational and completely informed (E. Anderson, 2000). Following this approach, various definitions and analyzes are provided. For example, the definition by Cleland and King (1983) is a classical one. They developed a first theory of project management which is based on the premises like: 1) The project delivers against objectives of time, cost, and scope (functionally), set outside the project, 2) Project management methods such as critical path analysis and work break down structure are essential for projects, 3) Projects move through a life cycle, 4) The project organization is a temporary matrix and resources are drawn from the company (Huemann, 2016). Thus, the relevant objects of consideration to manage in projects are schedule, cost, and scope, represented in the so-called iron triangle. The iron triangle, also known as the triple constraint, is presented in figure 2, and is considered the basis for traditional project management (Huemann, 2016).

Figure 2 Iron triangle
Scope



Source: (Huemann, 2016)

3.2. Project as a temporary organization

Although interim organizations have been the most studied in the last two decades, their definitions can be found from the last half century. In one of the first definitions, Goodman (1976) considers a temporary organization in the form of a system as “a set of diversely skilled people working on a complex task over a limited period of time” (Goodman & Goodman, 1976). In some industries, a temporary organization is the regular method of doing business. Accordingly, Cambré, Bakker & Keith (2009) define temporary organizations as “groups of permanent organizations collaborating towards the accomplishment of a joint task with the duration of the collaboration explicitly and ex ante fixed, either by a specific date or by the attainment of a pre-defined state of condition” (Marchi & Sarcina, 2011). They can be intraorganizational, occurring within the context of a non-temporary organization, or interorganizational, comprising several organizations (Kenis, Janowicz, & Cambré, 2009). Therefore, the existence of a temporary organization may not be necessary after its goals have been achieved, and as a result it may be dissolved or relocated.

Many temporary organizations come in the form of projects or project-based organizations, but the concept goes beyond the project which including joint ventures, consortia, presidential commissions, court juries, election campaigns, rescue operations and disaster relief organization. Thus a project may be defined as a temporary organization, but not every temporary organization is a project (Huemann, 2016). Accordingly, Cleland and Kerzner define a project as “a combination of human and non-human resources pulled together into a temporary organization to achieve a specified purpose” (Turner & Müller, 2003). The temporary nature of projects means that a project has a specific start and end time. The end of the project is achieved when the project goals are met or when the project is terminated because its goals can not be met, or when there is no need to continue the project. Temporary project does not necessarily mean that the project lasts for a short time, and this feature does not apply to the product or service, or the result created by the project, as many projects are done to produce a sustainable output (such as a bridge project, a dam, or a mall) (Asheim, 2002). Also, projects can have social, economic, political, and environmental impacts that will last far longer than the project.

Given the importance of these organization, in 1995, Rolf Lundin edited a seminal special issue of the Scandinavian Journal of Management with the theme “temporary organization and project management” and positioned the project as a temporary organization. This special issue set the ground for defining projects differently, not as tasks but as temporary organizations. Inspired by Godman and Godman (1976), Lundin and Söderholm (1995) offer a theory of the project as a temporary organization. They base it on action theory and institution theory. They differentiate temporary organization from other kinds of organizational settings such as permanent organizations. For the differentiation of temporary and permanent organizations they use time, task, team, and transition (Lundin & Söderholm, 1995).

1. Time - Time is one of the most important criteria for distinguishing between a temporary organization and a permanent one. One obvious reason for this is that “temporary” implies something that exists for a limited time and, normally, this time aspect is well known from the beginning (Turner & Müller, 2003). Because time is considered a scarce resource, a temporary organization faces more time constraints than a permanent one. In a permanent organizational setting, the focus is on survival rather than time (Huemann, 2016). Therefore, time management is more complex in temporary organizations. For a temporary organization, time is always running out, because it is limited from the beginning, but in a permanent organization, the future is considered as eternity (Lundin & Söderholm, 1995) and therefore the limitations time is not felt.

Studies show that time pressure in temporary organizations affects group interaction and performance. For example, Kelly & Loving (2004) research showed that time constraints related to a particular task affect group focus. When a group experiences time pressure, they will focus on different elements of the environment than they would have if such time pressure was not present. This results in a different perspective of the goals, which in turn changes the way people interact with each other and process information. The main effect of time limits is an increase in the focus to task completion. In absence of such time pressure, significantly more focus is placed on interpersonal interaction. Thus, it can be said that temporary organizations have less interpersonal interaction and are more concerned with efficiency (Kelly & Loving, 2004). This leads to certain communication issues regarding knowledge transfer which it will be addressed in the next section.

2. Task - Although there is a time pressure in temporary organizations to perform tasks, they are primarily concerned with accomplishing the purpose of the current task. In fact, it is the task that legitimizes the existence of a temporary organization (Jacobsson, Burström, & Wilson, 2013) because in most of the times, the main motivation for creating a temporary organization is doing the tasks. So, task-related activities are of major importance in the development of temporary organizations (Lundin & Söderholm, 1995). The studies indicate that task itself is more important to participants in temporary organizations than it is to members of permanent organizations (Katz, 1982). According to McCarthy et al. (1993), this is not to say that the task is

always completed (McCarthy, Schoorman, & Cooper, 1993), but that it represents the main motivation for the creation and development of a temporary organization.

Generally, there are two types of tasks in the organizations. Repetitive task is something that is constantly repeated and includes actions or elements that are repeated many times; thus, it is boring. This task is made up of operations that are similar in length, the amount of strength required, or the physical action involved (Tyosujelu, 2021) while unique task is something that is not repetitive, and it is always new. "When the task is unique, nobody has immediate knowledge about how to act. Visionary, flexible, and creative actions are consequently needed in addition to a more deliberate search for experiences from other areas" (Lundin & Söderholm, 1995). These tasks, which are often challenging, are a feature of projects. Each project produces a unique product, service, or result (PMI, 2021). Although repetitive components may be present in some project deliverables, this repetition does not change the uniqueness feature of a project. For example, in a construction project, buildings and structures are built with the same materials, but the location of each project is unique and is done with different conditions or different contractors. Thus, Project Uniqueness is a characteristic of a particular project that has special or unequalled parameters that determine the project's originality and authenticity. It describes an absolute state of the project as compared to other projects (Health, 2019).

3. **Team** - Teams are made up of human members, each with different beliefs, attitudes, and expectations. These different characteristics affect their teamwork. According to Saunders and Ahuja (2006), team members in temporary organizations know that their teamwork will not be repetitive, but that team members will split as the project progresses (Saunders & Ahuja, 2006). So, the interaction of individuals with team members in temporary organizations will not be sustainable. While, because permanent teams do provide an opportunity to develop social relationships through the repeated exchanges over time, they are likely to be more fulfilling than temporary teams (Saunders & Ahuja, 2000).

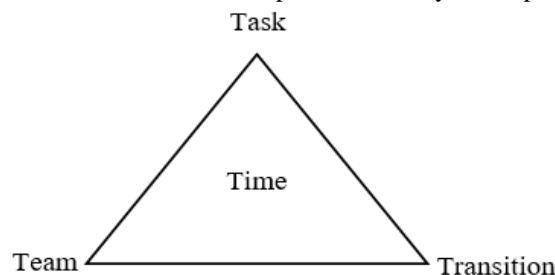
Accordingly, it can be said, permanent teams have the time needed to develop roles and norms, establish deeper trust, develop communication patterns, and resolve sources of deep-lying conflict, but temporary teams focus their attention on the task-related interaction rather than social interaction (Kelly & Loving, 2004). This is one of the reasons for the low level of satisfaction in temporary teams. In addition, "temporary assignments normally mean that individuals have other "homes" before, during and after being involved in a temporary organization, which means that the team is dependent on other organized contexts besides the current temporary organization" (Lundin & Söderholm, 1995). Thus, in the long run, development of trust based on interaction and experience is necessary.

4. **Transition** – Understanding transition helps to understand the temporary organization as a transient unit in the permanent organization. According to Lundin and Söderholm (1995), transition is the aim of the temporary organization, and the success of the temporary organization relies on this transition. They believe, within permanent organizations, temporary organizations are created when there is a need for change because the focus of the permanent organization itself is on stable production and continual development (Lundin & Söderholm, 1995). According to action orientation, as a result of the existence of a temporary organization, something must transform or changed, and this change must occur before the organization ends. Therefore, experts in temporary organizations consider the actions that lead to transformation as something necessary and desirable.

A review of the literature shows that there is no consensus on the transfer criteria. While Lundin and Söderholm (1995) had time as the central theme for the temporary organization, Jacobsson et al. (2013) place transition in the center and suggest that transition is the foundation for demarcations between the temporary and the permanent. They view the temporary organization as a transitory unit in which transition affects the three other themes. Lundin and Söderholm (2013) responded to this by acknowledging the importance of transition and by introducing the concept of end states, which they argue better captures the uncertainties and changes in the environment of temporary organizing. The studies also show, transition seems to be an especially central theme in the construction industry as new buildings involve changes not only in relation to the built environment but in relation to many aspects of the client organization. Accordingly, Boyd and Chinyio (2008) argue that buildings are not about building but rather about changing and developing the client organization. This is because investment activities are a result of the client's desire to change or satisfy a need (Vestola, Eriksson, Larsson, & Gustavsson, 2021).

The general connections among the basic concepts are illustrated in figure 3. Time is in the middle of the figure to emphasize its role as the most important of the basic concepts (Lundin & Söderholm, 1995).

Figure 3 Interrelatedness of the basic concepts in the theory of temporary organizations



Source: (Lundin & Söderholm, 1995)

Based on what has been said, it can be summarized the differences between temporary and permanent organizations as table 2.

Table 2 Unique and repetitive tasks

Characteristic	Temporary organization	Permanent organization
Time	<ul style="list-style-type: none"> • Time is limited and pre-defined which create deadlines • Time is perceived as linear, with distinct phases between “birth” and “death” • Time does not have to be limited but is dependent on the finishing of the task 	<ul style="list-style-type: none"> • Time is infinite • Time is formed around the calendar year • Focus on long-term survival, not limited time
Task	<ul style="list-style-type: none"> • One, or a limited number of, defined tasks, which can be unique or repetitive • Repetitive tasks are unique to some extent • The task comprises time-limited goals that focus on action • The task should be completed during project duration 	<ul style="list-style-type: none"> • Tasks are repetitive and continuous for an infinite period of time. Long-term goals drive decision-making • Overall goals concern stability, core values and long-term development
Team	<ul style="list-style-type: none"> • Cross-functional team formed around the task • Time-limited participation where participants have other permanent “homes” • Are unfamiliar with one another’s skills 	<ul style="list-style-type: none"> • Any group of people, must not be formed around the task • Based on competences and continuous participation, enhancing participants’ familiarity • Defined as working organization rather than team
Transition	<ul style="list-style-type: none"> • The project work in itself or the outcome concern progression, achievement or accomplishment • The temporary organization is a transitory unit • Possible to measure progress and accomplishment based on transition • Little or no challenge to the legitimization of the team members 	<ul style="list-style-type: none"> • Any group of people, must not be formed around the task • Based on competences and continuous participation, enhancing participants’ familiarity • Stable production processes and continual development • Relation between the individuals and the team environment: legitimization of team members can sometimes be challenging

Source: (Dwivedula, Bredillet, & Müller, 2012; Huemann, 2016; Lundin & Söderholm, 1995)

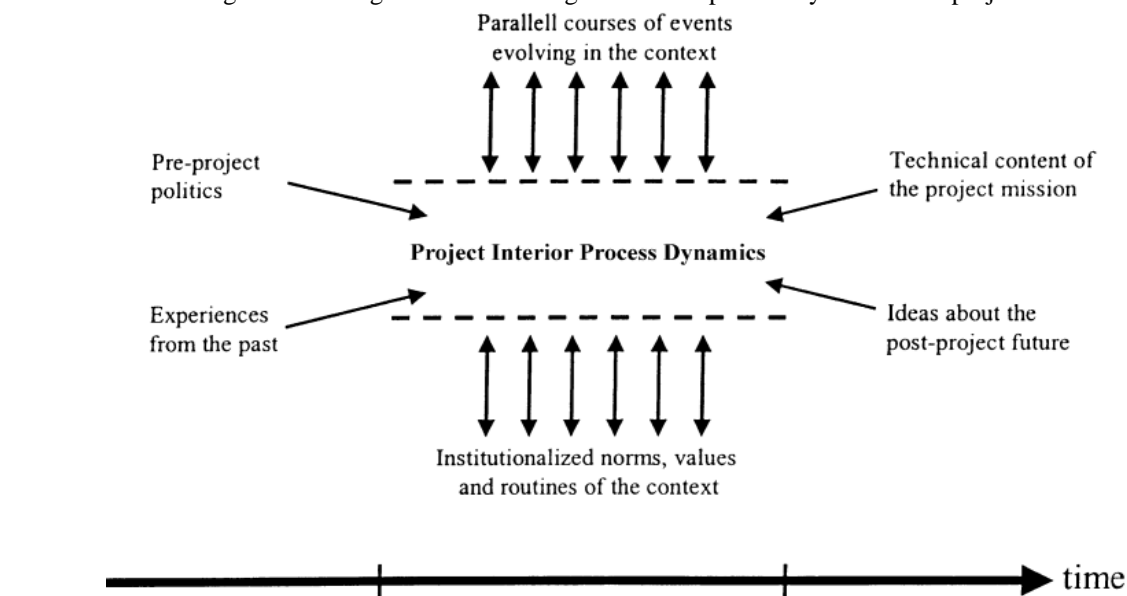
3.3. Project as a social system

Projects are formed in environments in which, in addition to technical systems, human and social systems are also considered. In other words, an important part of the projects are human beings who have certain ideas, thoughts, tendencies that shape the social approaches in the projects. According to Gareis (2005), a project is a temporary organization and thus it can be perceived as a social system. In Merriam webster (2020) social system is defined as “the patterned network of relationships constituting a coherent whole that exist between individuals, groups, and institutions”. A social system is a complex set of human relationships interacting in

many ways. Within a single organization, the social system includes all the people in it and their relationships to one another and to the outside world (Umpa, 2017). Accordingly, there is the same situation in the projects' environment.

A project as a social system clearly differentiation itself from its environments and has relations to these environments. So, a project requires boundaries (Sahlin-Andersson & Söderholm, 2002). Engwall (2003) states, "no project is an island" (Engwall, 2003), but he suggests that any project is dependent on events and expectations outside the project. In contrast to the traditional view of projects in isolation, Engwall extends the perspective of the context using a time dimension as well as the organizational context. Accordingly, projects are as history dependent and organizationally embedded, as shown in figure 4 (Huemann, 2016).

Figure 4 Contingencies influencing the interior process dynamics of a project



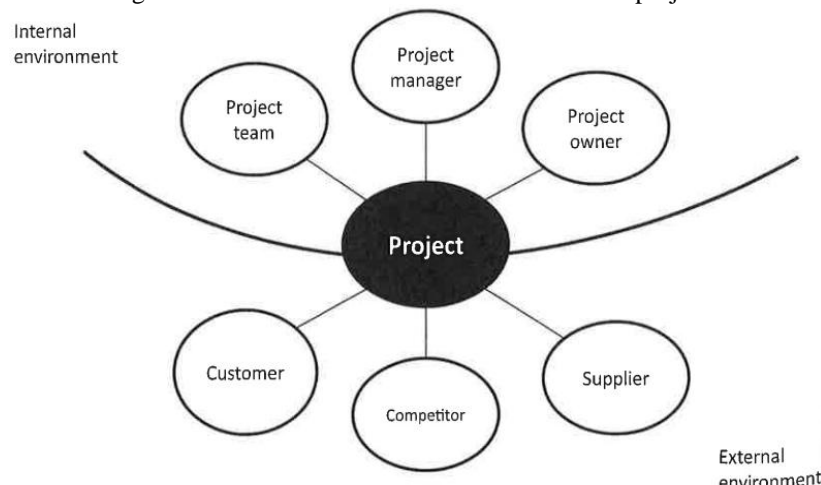
Source: (Engwall, 2003)

In the projects, boundaries are created based on the social characteristics. For some, boundaries are the demarcation of the social structure that constitutes an organization (Santos & Eisenhardt, 2005). Others equate the boundaries of an organization or project with the barriers that separate work teams and departments, causing people who are supposed to be part of a team to face each other (Lencioni, 2002). Sahlin-Andersson, K., & Söderholm, A. (2002) believe, project boundaries do not appear automatically when a project is founded, they need to be created. As projects are dynamic, these project boundaries are not set in stone once and for all, but can change during the course of the project (Huemann, 2016). Heitger and Sutter (1990) "described a project as a social system by the following characteristics:

- The project must relate itself to many different project stakeholders,
- Normally, there is a high diversity and lack of clarity of expectations of the projects stakeholders towards the project,
- Predictability of what happens, if is rather words, uncertainty and risk are rather high,
- Concrete definition of project success is difficult and determined from the specific point of view from the particular project stakeholder" (Huemann, 2016).

Based on what has been said, the social context comprises relevant social environments, more commonly labeled as project stakeholders, as shown in figure 5. As the figure indicates, "social environment can be differentiated into project external and project internal social environment project external environments are for instance clients, users, suppliers, project partners, competitors, and so on. Internal project environments comprise the project personnel such as the project manager, the project team members, and the project owner. The relationships between the project and these players need to be explicitly managed and this is closely related to project HRM" (Huemann, 2016).

Figure 5 External and internal environments of a project



Source: Huemann, 2016

It should be noted that in addition to the three approaches mentioned, others have been proposed, but in this paper, it is sufficient to mention these three. As Turner and Müller (2003) mentioned in their article, the project as “a production function”, “an agency for change”, “an agency for resource utilization”, and as “an agency for uncertainty management”. They state, “many of the classical definitions of projects emphasize the role of a project as a production function, just as the earliest definitions of the firm in classical economics. According to these definitions, the project is a collection of plans, presided over by a manager, who buys and sells the project’s inputs and outputs on the open market, and tries to maximize the benefit to the owner. The benefit is the net present value of the project, discounted for risk” (Turner & Müller, 2003). These two based on the definition of projects by Andersen et al. (1987) emphasize that “projects deliver change. Traditional organizations adopt projects as a vehicle (or agency) for change. They create the temporary organization to deliver a coherent set of change objectives, because projects are better suited for managing change than the functional organization” (Turner & Müller, 2003). Also, several definitions (Cleland & King, 1975; Turner & Müller, 2003; Woodward) emphasize the role of the project as a vehicle (or agency) for assigning (or organizing) resources for completion of the endeavour or task. They state, “projects have been used as an organizational form to provide a vehicle for assigning resources to the delivery of change in organizations since the 1950s, and this can be taken as a measure of its success” (Turner & Müller, 2003). Finally, Turner et al. say that “uncertainty of the product and process is one of the key consequences of the features. They developed a taxonomy for projects based on uncertainty of product and process” (Turner & Müller, 2003). In addition, Turner and Keegan suggest that “the need to manage configuration and the reduction of uncertainty is the main transaction cost associated with projects. Thus, the project as an agency for uncertainty management implies something about both the scope and structure of the project” (Turner & Keegan, 2001).

4. Theoretical analysis of the project as a temporary organization

In general, temporary organizations are the reality of today's world, and a large part of economic activities, both production and service, are carried out through them. The main manifestation of the mission of temporary organizations is seen in project activities. Because most theories of organization are developed gradually and assuming organizations are permanent (Ika, 2011), their application in temporary organizations is not very common and effective. In other words, because temporary organizations are different from permanent organizations, the concepts and theories that define them must also be different. According to IKA (2011), “Permanent organizations are more naturally defined by goals (rather than tasks), survival (rather than time), working organization (rather than team) and production processes and continual development (rather than transition)”. Therefore, theorizing about temporary organizations should be done by considering these differences as well as the characteristics of temporary organizations.

A review of the literature shows that in general, the theories of temporary organizations are based on the four basic concepts, time, task, team, and transition, which are well-known among the project researchers and experts. These concepts are the basis for the development of other sub-theories in the field of temporary organizations. For example, in projects as temporary organizations, “practitioners use sequences and phases in order to introduce the sequencing concepts” (IKA, 2011). Inspired by these concepts, processes, steps, and project timelines are formed and lead the practitioners “often have a linear conception of time regarding

temporary organizations that they manage”. Being linear in a project does not mean that everything is fixed and never changes, but it does mean that measurement criteria in temporary organizations are more accurate than in permanent organizations. In other words, despite the importance of time in both types of organizations, project management must pay close attention to it.

These organizations are formed temporarily based on special needs and are disbanded or relocated after the end of the mission. There is no set time period for them; Their activities may last a day, a month, a year, or more. These organizations are task oriented (Janowicz et al. 2008). It can be said that “tasks define and create temporary organizations” (Ika, 2011), and they are more important in these organizations than in permanent ones. In addition, team is a distinguishing factor between temporary and permanent organizations because the temporality of activities makes it difficult to create motivation, commitment, and legitimacy in temporary organizations. Therefore, managing teamwork in project activities is more difficult than normal activities in permanent organizations (Huemann, 2016). Temporary organization, also, is action based (Lundin & Söderholm, 1995). It means, willing to take practical action to deal with a problem or situation. Thus, “action is the essence of temporary organizations” (Ika, 2011).

These conditions require that activities in temporary organizations be performed quickly, and on time, but with appropriate quality, to achieve the ultimate goals. Achieving this, in addition to the technical factors not discussed in this paper, requires an efficient and effective organizational structure supporting time, tasks, team, and transfer. Such a structure must first avoid being hierarchical because dividing employees into teams at different levels can weaken the relationship between them. In a hierarchical structure, different managers and supervisors are considered for each department, and employees, instead of communicating with an executive manager, only must report to their superior manager and communicate with him /her (Daft, 2007). In addition, each of the managers run their team or department in a different way; This means that each of them is likely to follow their own set of rules and regulations for doing things. For this reason, in many cases, different sets of rules and regulations can confuse employees and thus slow down communication in the projects. Second, the use of a hierarchical structure allows the organization to divide its employees into teams, groups, or departments with specific specializations (Robbins, 1990). These different departments can ultimately make decisions that only benefit their own team and are not in line with the overall goals of the project or organization. This may even create unhealthy competition among different teams or divisions; Because each part is separated from the other to do the work independently. This competition can damage the overall work ethic of the project and lead to an unsuitable work environment.

Furthermore, the speed of decision-making in projects is reduced by considering different leadership roles in a hierarchical structure. The greater the number of managerial roles involved in decision making, the more difficult to reach a consensus and make a unified decision (Daft, 2007). This means that each of the managers has different personalities, and this leads to differences opinion among the leaders and the presentation of different ideas in the projects. These differences ultimately slow down the decision-making process in projects. In addition, using a hierarchical structure means having multiple departments in the organization, and this allows a large number of managers (Andersson & Zbirenko, 2014) to be considered for each department or team; Therefore, the amount of salaries paid to managers and, as a result, the annual salary of the organization will increase because higher job plans usually require higher wages (Kuhn & Weinberger, 2005). From the above, it can be concluded:

1. Horizontal relationships are more effective in projects as the temporary organizations because, as mentioned earlier, these organizations have a skilled and highly specialized staff. They believe in fluent communication and tends to communicate effectively with employees of the same level in different units while in vertical structures, communication is slower and controlling is more intense, and this is not desirable for skilled manpower.
2. Temporary organizations are used to meet needs in turbulent and changing conditions. A hierarchical structure does not respond to such an environment in these organizations. Therefore, to respond to the environment and full adaptation, the hierarchy in temporary organizations should be established at minimum level.
3. Because projects, as temporary organizations, have skilled, specialized, and experienced manpower, the need for direct supervision is low. They are professionals and experts who exercise self-control over their tasks. Also, the expected behavior of the manager from his employees is institutionalized in them. So, the presence of managers and supervisors in these organizations is often for coaching employees.
4. Due to time pressure in temporary organizations, decisions must be made quickly. According to management experts (Daft, 2007; Hatch, 2018; Robbins, 1990), the organization must be decentralized to flexible and make quick decisions. Decentralization leads the project managers have enough authority to make decisions in various affairs.

5. In addition to changing circumstances, due to the special nature of each project, high complexity is one of their characteristics (Brockmann&Kähkönen, 2012). Therefore, temporary organizations need continuous innovation to overcome these challenges and find appropriate solutions. It is clear, hierarchical structures do not allow this due to high standardization.
6. Documents, procedures, and instructions in projects are to guide staff, expedite works, and ensure that activities conform to standards. In other words, in these organizations, rules and regulations are very flexible and are updated according to needs.

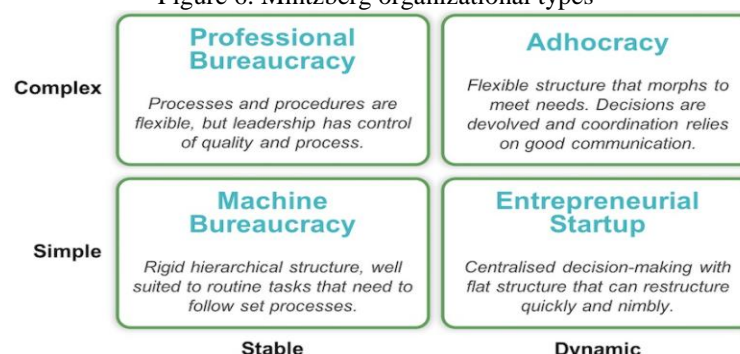
The structural feature corresponding to such an organization is nothing except adhocracy structure which will be addressed in detail in the next section.

5. Adhocracy: A suitable approach for project as a temporary organization

As mentioned in the previous sections, projects are introduced with different approaches due to their specific characteristics, such as “temporary organizations”, “complex tasks”, “social systems”, which were discussed in this paper, and also as “a production function”, “an agency for change”, “an agency for resource utilization”, “an agency for uncertainty management”, and etc. which were not addressed to avoid prolonging the discussion. Different approaches have led to the development of different organizational structures to achieve the goals of the project and the organization. Very early organizational structure were often based either on product or function (Lunenburg, 2012). Although matrix organization structure crossed these two ways of organizing, due to the changing environment of the projects and their temporary nature, experts introduced a new structure that is not really a structure; Its title is adhocracy.

Britannica dictionary (2022) defines adhocracy as “an organizational design whose structure is highly flexible, loosely coupled, and amenable to frequent change”. This concept was first introduced in 1970 by The American futurist, Alvin Toffler, due to the need of formal organizations to be able to identify, understand and solve problems in very complex and chaotic environments. Toffler states that he coined adhocracy “to define an emerging system of organization appropriate to a world of swiftly advancing technology and of societal impatience with the multilayered authority structure of the typical hierarchy” (Desveaux, 2019). Later, in 1979, Henry Mintzberg more fully described democracy as a structure, discussing its status as an important addition to the well-known forms, such as the simple structure, the professional bureaucracy, and the divisionalized form of organization. He classified organisational structures into four types, depending on the complexity of the organisation’s operations, and the pace of change it needs to accommodate, one of which, as Figure 6 shows, is adhocracy.

Figure 6. Mintzberg organizational types



Source: (Desveaux, 2019)

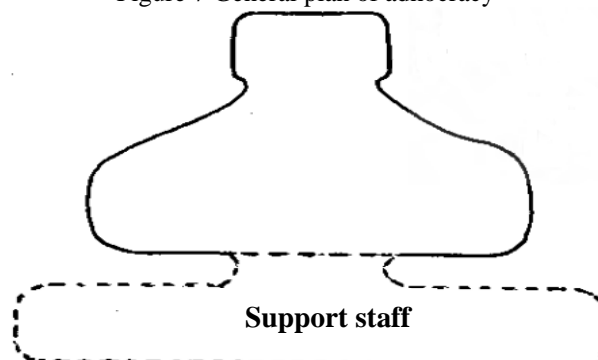
Adhocracy tends to be far less hierarchical than other formal structures are. This is for two reasons. First, because adhocracy's purpose is to address specific, often urgent problems that other organizational types have failed to solve, more decisional authority rests with highly trained technical experts whose reputations identify them as both skilled problem solvers and as unconventional. Second, the units and work groups of the adhocracy in which experts operate are fairly fluid. Adhocracy tolerates and sometimes even promotes ongoing changes in its subunits. Consequently, incumbent authority is accorded relatively less status in the adhocracy than in other formal organizations (Desveaux, 2019). Accordingly, it can be said, adhocracy is a temporary organization affiliated with non-fixed groups to perform predetermined tasks. Such workgroups are led by a project manager and move from one project to another, never staying in one place for routine long-term tasks.

To create a more tangible picture than what has been said, a construction project can be considered in which the project management brings together different teams, including designers, topographers, engineers,

executors, contractors, suppliers, inspectors, etc. to be completed the project affairs. These teams do not follow a regular and consistent organizational structure in the project, so that there are no formal rules and regulations like those in a bureaucratic organization. In such a project, there are certainly pre-designed plans for construction, but most plans are modified and changed based on unpredictable considerations. Project team members may work together for months, or years, but their work is temporary, and they know it. Also, unlike bureaucratic organization and divisional structures, there is no precise and unchangeable hierarchy in the project so that team members can freely communicate with each other at the same level and higher. Thus, close and informal relationships within groups and their relative independence allow them to adapt quickly to environmental changes. Although in construction projects, because of their complexity, all technical and construction activities are performed according to standards, standardized methods are not considered much in running project affairs. Power in the project with adhocratic structure depends on expertise and does not necessarily follow the position of the individual. That is, the more expertise, the more power and influence in the project.

All of these indicate that adhocracy is different from any formal structure, such as that found in non-project or permanent organizations. As Henry Mintzberg (1993) shows in his book, "*Structure in fives: Designing effective organizations*", because the adhocracy has very low standards and few formal aspects, the technical staff is almost non-existent (figure 7). Also, because middle managers, support staffs, and operating bodies are made up of professionals and experts, the traditional distances and differences between supervisors and employees, line and staff, and hierarchies disappear. As a result, in an adhocracy, treasuries of specialized abilities are created that can be used to take innovative and creative actions, solve specific problems, and perform different and unstable activities.

Figure 7 General plan of adhocracy



Source: Mintzberg, 1993

In this way, adhocracy can be envisioned as groups of professionals working in flexible units without conflicting with formal rules or standardized and unchangeable methods. In this structure, coordination among the members of the teams is done through an agreement among them. In these teams, as conditions change, so do tasks. So, this adaptation is one of the prominent aspects of adhocracy compared to other structures. Of course, in order to determine how to achieve the goals of the project or temporary organization, different units in the adhocracy are also envisaged, but the members of the units can communicate horizontally with each other and break organizational boundaries to perform their tasks and duties.

Although almost half a century has passed since the introduction of adhocracy as a structure, it is still used in many project activities and temporary organizations. In other words, when adaptability, creativity and initiative are important in a project or temporary organization, when many specialists from different fields must work together in coordination, and when there are technical, unplanned, and complex tasks in the project, adhocracy can show its benefits well. Of course, as mentioned earlier, advocacy groups will not necessarily replace the permanent structures of an organization that is organized according to tasks, but individuals focusing on this type of approach, to fill the narrow and fixed gaps in specialized organizations, continue their efforts with great speed. Accordingly, Toffler concludes in his theory that there is clearly nothing new in forming a group to solve a particular problem and then returning it to its original state when the task is completed, but what is new is the number of times and repetitions that the main organization must equip itself with these projects and temporary organizations. Therefore, the seemingly permanent structure of many large organizations, often due to resistance to change, is now under the influence of these temporary nuclei.

6. Conclusion

This paper seeks to answer some important questions about temporary organizations based on the Scandinavian school approach. From what has been said, it can be concluded that, first, a project is a temporary organization, but not every temporary organization is a project. The scope of temporary organizations is wider, so that in addition to projects, they also include other formats such as joint ventures, consortia, presidential commissions, court juries, election campaigns, rescue operations and disaster relief organization. Therefore, a project has the characteristics of a temporary organization. Second, to understand the nature of a project, experts have looked at it from different perspectives. Some have focused on the technical aspects, such as “project as a production system”, and some on the social aspects, like “a project as a social system”, but in any case, a project is temporary in nature, and it is felt by all project managers and staff.

By accepting the temporary nature of projects, in the next step for their effective management, it is necessary to determine the difference between temporary and permanent organizations. A review of various sources revealed that although there are different factors to differentiate them, most well-known authors, and experts, especially in the Scandinavian school of management, have emphasized the four factors of time, task, team, and transition. In short, a project as a temporary organization has a certain start and end time, but the time in a permanent organization can be infinite. In addition, in projects, there are special, specific, and occasional tasks, the main purpose of which is to perform them, but in a permanent organization, the tasks are repetitive, and they are always repeated. Feeling temporary in projects may negatively affect the motivation and commitment of team members, although these conditions can also lead to their growth due to competition for job retention.

Finally, given the characteristics of the project as a temporary organization that distinguish them from permanent ones, it can be concluded that their supporting theories are not the same. In other words, since theories of organization, assuming that they are permanent, have been gradually developed, they will not be very effective in managing temporary organizations. They need to theorize according to their conditions and characteristics. Thus, this paper focuses on the structure of adhocracy that can be suitable for projects.

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