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Project Management: Implications of its Conceptual Infrastructure on a Single Point of Contact 'SINPOC'

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Abstract

The continuing misinterpretation and consequent misuse of the twin concepts of a project, and project management, have been identified as a major problem of project management in Nigeria. The paper further identified the idea of a single point of contact as the conceptual infrastructure of project management as a philosophy. It concluded, among other things, that the above idea needs to be properly and fully appreciated by all project contributors (actual or potential) if the inherent principles are to be correctly applied, its benefits fully appropriated and organizational objectives successfully achieved.

Keywords: project, project management, construction, contributor, and infrastructure.

1.0 Introduction

The phenomenon called a project has been defined by reference to several characteristics ranging from the simple to the complex. Representing the simple definitions is that it is a temporary endeavor undertaken to create a unique product or service (Oladapo, 2003). The middle of the spectrum is represented by the view that it is an activity characterized by risk, involvement of participants, temporary organizations, dynamism or flux/change, and procurement methods (Seeley, 1996). The more embracing definitions are represented by the idea that it is a one-time-only configuration of related activities, people, resources, tools, management, and expectations (Kerzner, 2003). In order words, a project can be said to be a consciously initiated one-time-only configuration of reasonably finite set of activities related by a set of prioritized objectives to be achieved within specified or specifiable quantitative and qualitative constraints.

Similar to the concept of a project, project management has been differently defined leading to interchangeable, and sometimes complete misuse and of course misinterpretation (Waterhouse, 1995).

An early view saw it as a management form designed to pull together a combination of human and material resources into a temporary organization to achieve a specified purpose (Cleland and King, 1988). A clearer view rightly thinks that it simply entails to focus the responsibility and authority for the attainment of the goals of a project on a small group (the project management team) or individual (the project manager) (Meredith and Mantel Jr., 1995). Project management is therefore aimed at providing a single point of contact 'SINPOC' for the client. In this work it is seen as the formal and/or conscious investiture in, and acceptance of same by, a relatively small group or an individual, of the sole responsibility and absolute authority for project success or failure. It can then be seen that the dual investiture of responsibility and absolute authority to ensure success drives project management as a philosophy and as such provides its conceptual infrastructure. If infrastructure denotes a basis (Homby, 1995) for facilitating activity then the concept of a single point of contact or responsibility performs this same function in project management.

Although awareness about project management seems to be on the increase, projects continue to experience failure for which many factors have been blamed. The factors include the lack of cost consciousness on the part of professionals (Inyang-Udo, 2002), environmental effects outside the

control of the project manager (Oladapo, 2003) and brief inadequacy (Walker, 2002). Another relevant factor is the non-availability of managerial and technical know-how, locally, to match the demands of the typical project, especially in Nigeria (Ebong, 1987). Related to the above is poor management and use of traditional practices (Fernando, 2002), and a negative attitude to innovations (Morledge and Knight, 1999).

There is no doubt that the very common non-use of the project management approach and of course the project manager especially in construction, is a traditional practice that predisposes projects to failure. To this study the most relevant factors contributing to failure seem to be the following: misinterpretation/misunderstanding of the twin concepts of a "project" and "project management"; lack of full authority for the project manager (where used); and outright non-use of qualified personnel (especially project managers) (Waterhouse, 1995).

At this point it is deemed important to explore the need to understand the proper use of project management and hence, the basic idea of a single point of contact 'SINPOC' as stated earlier. In this direction it can be said that however it is looked at, one thing is certain and that is that within all the efforts made to advance organizational goals, projects abound and can be clearly identified even if least understood by the client organizations themselves.

It is also to be noted that in recent times, projects are increasingly being characterized by the following: long time spans, integral involvement of the state, alliancing and partnering (Merdith and Mantel Jr., 1995), requirement for large quantities of diverse resources, and integrated procurement and ownership structures such as was evident in the Channel Tunnel project.

In the same vein, clients are currently and increasingly adopting, the projectized model as a recurrent business strategy in meeting organizational objectives (Zack, 2004). In the construction sector especially, the above approach is represented by the preference by clients for the provision of either one multi-disciplinary package of construction services or a single point of responsibility, one-stop shopping for professional services or one-stop procurement, (Morledge and Sharif, 1994; Garner, 1999; Westcott and Burnside, 2003).

In an increasingly complex and cmpetitive business environment, it is therefore vital that clients make the correct and informed choice of project procurement method (Seeley, 1996). Moreover trusting project participants (especially the consultant) to deliver the desired outcome has been identified as a point of clients' vulnerability (Munns, 1995; Morledge, 1999) that predisposes projects to failure. It is not a surprise then that clients now want a complete understanding of the procurement process (Powell, 1999).

Although other project roles may be additionally designated 'project manager', the activities implied by such titles as contract manager/administrator, etcetera, do not, in reality, have the client's interest as their main concern (Walker, 2002). In this wise therefore such roles fall short of expectations of project management as a philosophy as shall be shown in the following sections using the example of construction projects.

2.0 Construction and Construction Projects

There are many types of projects and these can simply be grouped into research and development, maintenance, administrative, and construction (Bubshait, 1990). Physical products, reports and performances have also been used to characterize projects (Coates and Jarratt Incorporated, 1999). This is more or less a physical output viewpoint. Construction, which is the focus has been seen here as the group of inter-related production activities involving the erection, maintenance and repair of physical structures

(Fapohunda, 1987)or the building, fitting or putting together (Hornby, 1995) of materials and structures (National Association of Women in Construction, 1996).

It is interesting to note that whereas 'production' as above may signify progressive action, demolition (Murdoch and Hughes, 1996) and deconstruction (Powell Centre for Construction and Environment, 2000) have been added to the scope of construction activities and can be likened to "deceleration" versus "acceleration" in motion physics. It has actually rightly been said that the external boundaries of 'construction' are unclear (Murdoch and Hughes, 1996) especially when seen not only from the perspective of the contributors but also from the point of view of abstract or conceptual structures such as mathematical, flow and/or logic models.

Given the foregoing wide involvement, the focus on construction (projects/industry) in this paper is clearly justified for its importance to the economic growth of nations especially in developing economies where the government is easily the biggest client (Seeley, 1996; Suhanic, 2001; RICS, 2001), and it's continuing use as an economic regulator (Woodward, 1998).

A summary of the major characteristics of construction presents the following as highlights: demand, mode of production, level of unemployment, and main construction inputs, nature and level of risks, and responsibility for the finished product (The World Bank, 1984). In other words, demand, production and resource consumption are sporadic/seasonal (Nunnally, 2004) and the sector experiences a high rate of business bankruptcy.

Production is diffused and involves many contributors (Hendrickson and Au, 1998) even though it is seen as a panacea for complexity (Froese, 1994). Resource consumption is mainly irreversible (Nunnally, 2004) resulting in products of physical/permanent nature while the work types are simply new, and rehabilitation/maintenance, work that pass through the stages of conception, design, documentation, tendering and estimating, construction and commissioning (Kwakye, 1994). The products which may simply be classified as building or civil (The World Bank ,1984) are often large in physical size with some actually qualifying as mega structures (National Geographic Channel, 2006) and take a relatively long time to produce using fairly stable technology (Pillai and Tiwari, 1995) in an industry that is traditionally conservative and a combination of art and science (Nunnally, 2004)

3.0 Traditional Construction Roles.

As already noted, construction projects and by extension the industry involves a large number of contributors and skills (Walker, 2002) hence the need for a proper organizational structure the lack of which has already been seen as a cause of project failure. To deal with this aspect there is need to look at the general composition and nature of manpower and the model for project delivery in terms of inter-relationships, authority and responsibility. The above approach has become necessary not only because of the conservative nature of the industry (Nunnally, 2004) but also considering the relative recency of the recognition, and adoption/utilization of, and still evident resistance to, project management as a philosophy.

The shortcomings expressed in the above paragraph can be blamed, in part on inadequate knowledge in a place like Nigeria where the industry remains clearly highly underdeveloped.

In fact, our experience in Nigeria is that most people such as public/civil or armed service retirees as well as other persons tend to perceive participation in the industry as needing no special skills other than requiring socio-political contacts encouraged of course by the 'mobilization fee' syndrome that is itself an aberration foisted on the use of the standard lump sum contract form in Nigeria. It

needs to be noted at this point that a discussion of construction roles implies a discussion of the nature and composition of the construction industry especially the aspect relating to manpower. It also needs to be said that a comprehensive and exhaustive enumeration of roles here will not only distract from our focus but will also be unnecessarily lengthy hence our recourse to some sort of salience that provides direction in presenting these roles based on the "major interest groups" (Murdoch and Hughes, 1996).

It is in the above regards therefore that there can be three main categories-clients, consultants/ professionals, and contractors (Wahab, 1990) or employees, firms, manufacturers/distributors of materials and the professions (Lichfied, 1956). Another grouping presents the contributors as builders, designers, regulators, purchasers, and users (Murdoch and Hughes, 1996). A more comprehensive grouping has the client, professionals, construction team (main contractor, specialist firms, material suppliers) manufacturers/suppliers of materials and plant hire firms, public authorities, legal profession, financiers and ultimate consumer (Kwakye, 1994) as the main contributors in construction projects.

3.1 The Client

The simple term client is actually a very complex concept (Walker, 2002) since it may refer to an individual, corporate or public body or even a part of such a body. It is therefore important that the structure of the client's organization in terms of authority, decision-making and implementation be clearly understood. For instance a central government may allocate funds for a local government project but may reserve the right of final approval of both design and expenditure. It is also important to understand the client's relationship to other stakeholders as well as the client's philosophy (Walker, 2002).

In practice, the project team will tend to recognize the client as the person/body which possesses the authority to approve project expenditure, form and timing and probably fund disbursement. Desirable as it is, the vesting of all these authorities in one person is a rare occurrence and a number of suggestions have been made in this regard (Gabriel, 1994).

It is the responsibility of the client to analyze and collect all relevant information so as to give the lead/prime adviser/consultant (traditionally the designer) and other consultants the clearest and broadest picture of his requirements in terms of location, space, use, time, cost limits, etcetera. Upon receipt of consultants' view on type, size, cost, procurement strategy, etcetera, he should decide whether the project should proceed, a contractor will be used and if so, agree to the contractor and tender figure if decision is positive. He should also formally endorse the relevant contract(s) and effect their conditions including the granting of the necessary rights and privileges such as rights of way, rights to patents, site possession, etcetera, as may be the case.

During execution and/or contract and at relevant times stipulated in the contract, the client should meet necessary payments due to the project executors/constructors. On completion, the client honours the relevant and due payment claims on the project (certificates extra-contractual, etcetera) if any, accurate and agreed in addition to professional fees.

Several labels have been applied to the client such as customer (Burton and Mills, 2002), sponsor (Morledge, 1992), employer (RICS, 1998), occupier, developer, owner (Wearne, 1985), initiator, promoter (Morledge and Sharif, 1994), champion (Turner et al, 1995) and user (Murdoch and Hughes, 1996). Suffice it to say that the client is that person who owns, and reserves the final decision on, the project or better still, the bonafide purchaser, of the project management process (Walker, 2002).

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belongs to a subset of constructors. There are different forms/types of this role – main, and subcontractors – based on number of employees, and nature/size of work (Seeley, 1997) or general, specialist and prime contractors (Nunnally, 2004).

Another classification can be based on the designer/prime consultant (in the traditional contract) formally nominating and naming or not doing so (in the contract document), the subcontractors/ suppliers. Where action as above is positive, (that is named/nominated), the subcontractor is called a nominated subcontractor/supplier (Joint Contracts Tribunal, 1980) and remains just a subcontractor/ supplier if action is negative.

Strictly speaking the constructor's major responsibility is to draw-up a work programme, assemble and allocate labour, equipment and materials to the project in a manner that will achieve completion at maximum efficiency in terms of time, quality, cost and other parameters as much as possible, according to the approved work programme prepared by him.

Inherent in the above responsibility is the need to control workmanship, quality of materials, and the co-ordination and efficient management of the project's physical environment or "site" (Murdoch and Hughes, 1996) while maintaining relevant channels of communication.

It needs to be stated however that the construction contributor commonly referred to as the contractor only assumes that role after a successful tender exercise with one tenderer being preferred, chosen, and formally invited for a firm agreement with the purchaser of the project management process, and a contract properly executed. In a very strict sense therefore, tendering (estimating and submitting estimates for project execution, especially in competition) for the potential client's consideration/ choice, is not a contractor's responsibility since the tender is really an offer based on the potential client's invitation to treat.

During project implementation the constructor does the pre-construction planning taking into account available resources, conditions of execution/contract and work components of subcontractors and other contributors as may be represented by the programme which of course is not usually a contract document (Joint Contracts Tribunal, 1980). Upon completion of the project, the constructor provides all the necessary information required by the cost engineer/quantity surveyor or the appropriate client representative to prepare the final accounts and to work out extra-contractual payments as may be necessary (the traditional option).

3.5 The Public/Regulatory Authorities

The duties and responsibilities of the various agents of the state are clearly specified in the different statutes establishing these bodies and therefore need not be detailed here for lack of necessity and space. Called regulatory, and sometimes, statutory undertakers (Murdoch and Hughes, 1996), this role is usually best identified in most societies with the development, supply and/or management, mainly by the public sector, of the aggregate of physical assets called infrastructure services (Irwin, 1999) which facilitate the proper and efficient functioning of society.

The main responsibility engendered by this role is that of ensuring that set standards are met while serving in some instances as statutory providers and/or suppliers of services/utilities such as communication, power/energy, water, sanitation, security, etcetera. It is actually in this last capacity that this group is properly referred to as public authorities/utilities.

At other times, these authorities may act as constructors/suppliers of parts or components of, or even the entire project as may be prescribed by law. This is clearly the case in Nigeria where the new Power Holding Company of Nigeria (PHCN) is responsible for public electric power generation,

transmission as well as accounting for the relevant tariffs.

In summary, these public authorities have responsibility not only to the client in ensuring that construction conforms to the set standards but also to the public and community at large. To do this, they enforce the various Acts of parliament and consequent delegated legislations that control construction. These legislations are effected through the appropriate officers and affiliate organizations in each locality.

3.6 The Project Manager's Role – Rationale

Compared to the other participant-roles dealt with above, that of the project manager can be said to enjoy a relative recency of occurrence, especially in developing economies such as that of Nigeria. The above position of ours agrees with the unnecessary doubt in some quarters about its continued relevance in relation to the general body of knowledge known as management into which some proponents (Turner et al, 1995) think it will eventually be absorbed.

It may be necessary at this point to note the needs that generated the different roles within the construction project environment. The need to represent the client's ideas or requirements on paper gave rise to the designer while demand for integration and co-ordination of technological complexity led to the role of the general contractor.

When the measurement and valuation of work-in-progress, and cost planning became a need, the cost engineer/quantity surveyor was born. On the other hand specialized understanding of new technologies generated the structural and services engineer/designer role. The maintenance of standards and protection of the interest of the society gave rise to regulatory authorities in addition to providing services of a general and public nature.

Lastly, the need for overall control of the procurement process gave rise to the role of project manager –a role accentuated by the increasing blurring of consultancy and contracting services (Westcott and Burnside, 2003).

There is no doubt that other titles such as construction manager, contract manager/administrator, design manager, are roles often designated 'project manager'. Unfortunately the activities implied by such titles do not, in reality have the client's interest, as their main concern (Walker, 2002) nor does the decision 'buck' stop with such roles. Since seen as the third important characteristic of project management (Pinto and Slevin, 1988), the person and position of the project manager deserves a special mention for a number of reasons.

First, is that as stated earlier, it represents a critical premise for project management as a philosophy, since the role provides the hub for the management of all facets of a project. Second, the position, ordinarily, presents no role conflict, role incompatibility or role ambiguity unlike other roles especially that of other consultants. This position of ours derives from our accepting that performance in a role depends on two main things. The "forces in self" which include personality, attributes and skills, is one of the things while the "forces in the situation" is the other thing (Handy, 1999).

Whereas the imbalance/instability or conflict of the "forces in self" can be catered for by proper training or manipulated or even remain unnoticed by an outsider, the "forces in the situation" are more difficult to manage especially because of their differing nature, sources, magnitude, timing, etcetera, all of which may be poorly understood even by the role player.

Third, the role involves no entrepreneurial interest in the project (Walker, 2002) such as may focus attention

on objectives that do not truly represent those of the project or direct loyalty to a participant-group and not to the client or total project.

Fourth, the incident functions seen in terms of responsibility, authority and accountability, defy rigid functional boundaries – since focus is on the right person and not the position, and on what works not on the formal or usual process. These reasons may explain in part the mistrust and doubt which functional/line managers have towards the scientific and systems approach engendered by this role. In contrast, the reliance of functional managers on an "old" system in the "present age" in their claims of success has since been viewed as simply dubious (Edmeads, 1972).

Finally, the scenario emerging from the present competitive business environment is that clients are continually and increasingly choosing to ignore traditional professional demarcations in favour of one-stop procurement (Westcott and Burnside, 2003). In support, roles in standard contract forms are changing exemplified by the GC/Works/1 (3rd edition), which now has the "project manager" (PM) in place of the "supervising officer" (SO) as the client's principal representative in some of its sections with duties affected accordingly.

Similarly, the Joint Contracts Tribunal standard form of contract now has the contract administrator (CA) as the prime consultant/adviser in the project's contract phase (Murdoch and Hughes, 1996). The foregoing section clearly presents the need for the role of project manager and hence the further need to understand his functions.

3.7 The Project Manager's Functions

It has been suggested that traditional construction roles are deeply embedded in cultures (Ferry, 1991), and given the relative recency of utilization of the project management approach, it may not be easy nor is it desirable here to present the project manager's functions in all conceivable circumstances.

Historically and notwithstanding the above view, the real project manager has been the client who himself conceives and sets the initial project objectives and of course priorities, often before contact with the first professional adviser. It has been thought that the role should ideally be exercised by the client himself (Walker, 2002). Be that as it may, many clients do not have the expertise to manage their own projects and this remains the dilemma for both clients and project management. Beyond this view, the project manager is seen as that independent professional who will stay by the client's side from the earliest glimmering of an idea through commissioning and occupation (Chubb, 1993). The last view is at variance with the seeming perception that the role occurs only "prior to execution" with planning and scheduling as the project manager's functions (Kazie, 1980). That both functions above are continuous and iterative in nature with their effectiveness/efficiency best determined during the execution phase negates the above timing of the project manger's role and of course the incident functions.

Earlier contributors (Edmeads, 1972; Wood and Sauer, 1982; Ademoroti, 1988) had attempted describing the responsibilities/functions of the project manager but in near-vague terms such as to achieve project objectives, meet the targets or just communication, integration, and interface management.

To the above functions have been added conflict elimination/resolution and promoting loyalty to the project rather than to functional groups (Pinto and Slevin, 1988). More specifically, the project manager is actually responsible for defining goals/objectives including time, cost, and performance constraints and administrative policy (Bent, 1988). Significant for presenting more functions are two other views. The first summarizes

the functions as technical direction with planning, integrating and executing plans as the most important components. The functions are further dichotomized into the explicit, and the implicit (Kerzner, 1995) with the explicit comprising the following: produce end item, meet contractual profit objectives, make all decisions, and act as customer (external) and upper-level and functional management (internal) focal point. As an explicit function therefore communication must involve consulting and discussing (Kolawole and Owor, 1993) with all stakeholders as and when due and negotiating with functional disciplines and resolving conflicts if possible. The implicit functions are interface, resource, planning, and control management.

The second view referred to above is significant for being more direct, self-explanatory and seemingly ordered thus: establish client's objectives; design project organization structure, identify how the client is to be integrated into the project (Walker, 2002).

The remaining functions include: advise on the selection/appointment, and establish the terms of reference, of project contributors; translate the client's objectives into a brief and see to its transmission; prepare the project programme; activate the framework for contributor's relationships.

The project manager is also to establish the appropriate information/communication structure; convene and chair meetings of appropriate contributors at all stages, monitor and control feasibility studies, design and production in line with the brief. Lastly, he is to contribute to primary and key decisions/make operational decisions; recommend and control implementation of disposal/ management of the completed project including commissioning, operation and maintenance, evaluation of project outcome against objectives and provide interim and final reports including advice on future strategies.

3.8 The Project Manager's Education/Training

To function effectively in a role entails the possession/acquisition of appropriate skills, attributes/ personal characteristics, education/ training. In the above regards, the project manager is required to demonstrate the implicit skills of interface, resource and planning and control management (Kerzner, 2003).

On the other hand, specifying the right qualifications may not be simple and straight forward since selection of the project manager in practice is often based more on personal characteristic than on the formal job description. However, the consensus emanating from the literature (including job adverts) and practical appointments seem to generally favour a technical first background either via formal education or experiential learning relevant to the project type to be managed (Schwalbe, 2004).

In the above direction, it has been suggested that the twenty-first century project manager needs an understanding of technology as a minimum primary requirement within a spectrum spanning technical, quantitative, problem solving, behavioral, and business conceptual skills (Kerzner, 2003). A closer scrutiny of the last source in particular, in fact, further suggests a minimum of 4 out of a scale of 10 for technical and quantitative abilities combined, and this value can increase if the third requirement – problem solving, is rightly viewed as incomplete without some degree of technicality or quantification.

In view of all the above, it is considered necessary that the project manager ideally acquires, at the least, a basic qualification (first degree/equivalent) in a discipline of technical or quantitative nature in addition to further studies or sustained varied industrial experience in core project management, laced with a balanced content of business/legal/behavioral nature.

The above inclination is compelled by findings of research, not the least that partly involving a comparison of the Bodies of Knowledge (BOKs) of two major professional groups – the Project Management Institute (PMI) and the Association of Project Managers (APM) (Morris, 1999), with the BOK of the latter shown to more closely correlate with the philosophy of the global International Project Management Association (IPMA).

The prescription of specific subjects and mode of study should obviously be a matter for curriculum development in terms of policy and objective(s), and preferred instructional approach contextualized within the manpower development agenda in a given economy. It must be noted that the current and increasing trend of offering lower or first degree/equivalent curricula must be balanced against the need for 'depth' and 'spread' requiring early choice of option areas and heavier academic load (heavier than standard degree programmes) if products of such curricula must meet national and international standards of academic and professional competence.

4.0 Summaries and Conclusion

This paper has reviewed the concepts of a project, and project management and highlighted the idea of a single point of contact as the underlying concept in project management as a contemporary procurement philosophy to which clients are now increasingly having recourse as a business model (Zack, 2004).

The concept of a single point of contract is however epitomized by the peculiar role and functions of the project management team or project manger who is fully responsible for project success or failure for which many causes have been blamed.

One of the causes that have been strongly and consistently blamed for the failure of projects is the misinterpretation and consequent misuse of the twin concepts of a project, and project management (Waterhouse, 1998). A further consequence of the above unfortunate situation is the use of improper organizational structure and/or project procurement model (Akpan and Ukairo, 1998).

Since the overall job of a project manager is to create within the organization an environment which will facilitate the accomplishment of its objectives, we can then say that the project manager's functions can be summarized as planning, scheduling, communicating, interfacing and integrating. In particular, communication involves accurately and rapidly evaluating, condensing and acting on information while interfacing entails identifying, documenting and scheduling, communicating with, and monitoring interfaces relating to both the project and the project's product.

On its own, integrating entails ensuring that the material, non-material and structural components of the project come together as a whole within the agreed/approved or preferred, and prioritized quantitative and qualitative performance measurement parameters and criteria, according to plan and with minimum conflict.

Having highlighted the need for project management and the project manager, and contrasted the latter's role and its associated functions with those of the traditional project contributors using the construction project as an example, a number of conclusions logically result.

First and foremost is that the twin concepts of a project, and especially project management are still being misinterpreted and hence misused in practice and seemingly more so, even in curriculum development, in a place like Nigeria where surprisingly only one tertiary institution of learning has an accredited undergraduate programme (National Universities Commission, 2006), and the first professor has just been appointed, in the area.

Second is that projectization is increasingly becoming the preferred business model among clients of these contemporary times and therefore the implications of 'a single point of contract' as the conceptual infrastructure of project management need to be properly appreciated if the inherent principles are to be correctly applied and organizational objectives successfully achieved.

Third is that the conscious and/or formal investiture, and acceptance, of the sole responsibility and full authority for the success of the total project is the only panacea for the organizational dilemma currently being experienced where appropriate expertise is not widely available to clients, projects and project management in Nigeria.

It is finally concluded that it is only through the proper functioning of the project manager along the lines prescribed above that firms in developing economies especially will be able to effectively compete.

The above conclusion is further underpinned by the nature of the modern economy in which the customer has not only remained the 'king' but is also increasingly opting for the one-stop procurement route and requiring a full understanding of the whole process accentuated by unrestricted access to global project information and contributors via information and communication technology as epitomized by the current vogue of the virtual organization or office.

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