ADDING VALUE TO PROPERTY DEVELOPMENT THROUGH PROJECT MANAGEMENT.

Uchenna Ebi, Ph.D., FNIVS, RSV
Department of Project Management
Babcock University, Ilisan-Remo, Ogun State.
ebiu@babcock.edu.ng ,

Abstract:
Pure project management when applied to property development in preference to matrix or line management organisations is bound to improve the project outcome. The study examined various causes of project failure in property development and proffered solutions to these through pure project management. The study examined actions taken during the implementation of property development of Nigerian Institution of Estate Surveyors & Valuers (NIESV) building at Alausa, Ikeja. It is action research, drawn from the researcher's participation during the implementation of the project. Project had schedule, budget and scope overruns but succeeded in terms of overall goal of the project owners, which was to own a building of their own. Causes of failure were identified as mistrust and suspicion, sectionalism, lack offunds, contractor's delay, call for cube test, and change of leadership at the national level. Recommendations were made on keeping to agreed terms, use of experienced property managers and use of pure project management function in place of matrix organisations in order to succeed in future projects and also preserve the life of the building.

Key words: property development, project life cycle, project managemen t, proj ect failure, succes~, matrix, implementation.

Introduction.

Physical development includes land acquisition, provision of infrastructure and subdivision into plots. Sometimes, it goes beyond land and infrastructure and includes construction of buildings and other structures. Project management involves actions that will bring all service contributions towards an undertaking in order to attain preset goal or set of goals. Often projects are completed on schedule, within preset quality but with high budget overruns. Sometimes too, a project is completed satisfactorily by the estimation of project participants but the project owner would not be satisfied. Certain project management functions need to be applied in order to add value to property development. These components include management of cost, quality, time, skills, health/ safety, human resources and scope.

Well managed projects most times, are delivered to the satisfaction of most stakeholders that some unavoidable overruns may not dampen the joy associated with the very successful delivery. In other circumstances, the overrun are worsened by other factors which could include politics, lack of communication and feedback actions and poor controls. Good project management practice will add value towards realising goal or set of goals of property development undertakings in the construction industry. This researcher seeks to address the issue of project failure in property development through property management.

This contribution aims to examine the various causes of project failure in property development in Nigeria and proffer solution to this through pure project management. To address this problem, various objectives will be necessary:

(i) To identify various aspects of project failure in property development;

(ii) To identify various causes of project failure in property development undertakings;

(iii) To suggest ways project management functions could be applied to mitigate the problem of project failures in property development undertakings in Nigeria;

Also certain questions may need to be answered In this research:

(i) What is project failure in property development?
(ii) What are the causes of project failure in property development undertakings in Nigeria?
(iii) What are the project management functions that could be applied to solve the problem of project failures in property development concerns in Nigeria?
(iv) How will the project management functions be applied to Nigerian property development industry in order to avoid project failures?

Certain factors may affect success of building projects in Nigeria. These include Pre-implementation planning in the form of feasibility /viability studies and valuation of costs and benefits may affect success of building projects in Nigeria; Poor implementation planning comprising budget estimates, network diagram and resource allocation may affect project realization in property construction industry in Nigeria; Poor project cost, quality and schedule controls may affect the successful outcome of property development projects in Nigeria.

2.0 Literature review.

According to Ukabam (2007), to those in property development industry, property development means the process of carrying out the construction works, which are associated with a change in the use of land or land with its buildings or with a change in the intensity of the use ofland or with alteration, erection or re-erection of buildings. Development also covers land, together with the construction works on it.

Bello and Agbatekwe (2002) view property development as the process of producing landed commodity through the allocation of resources in various forms or phases to achieve optimum utility or profitability. It is the use of land in its broadest sense to obtain a satisfactory environment, taking into account the social and economic needs of the society. They also describe it as the constructional work in such a way that a change in the use ofland and/ or its buildings is effected or sometimes merely to effect a reestablishment of an existing use.

Goodman (2014) views property development as a range of activities from the purchase ofland, development of facilities and buildings to meet the needs of the project owner.
The researcher view property development as a process of converting bare land into property built environment including all necessary infrastructure associated with the use and enjoyment of such property. It is a multidisciplinary process that involves various professionals and stakeholders ranging from the project owner, estate surveyor, project manager, land surveyor, architect, quantity surveyor, civil,structural and mechanical engineers and others in the built environment.
Project management however is also a process. It runs through planning, organisation, directing and monitoring (and controlling) subordinates in order that all service contributions can through coordination help realize goal of an undertaking.
According to Ebi (199 1), proj ect plans are sometimes based on the assumption that project environment is stable. In actual facts, stable environment can hardly obtain. Project plan can be affected by the client's change of taste, technology, political, social and economic changes, and contractor / subcontractor attitude or even by management.
Project management functions follow property development brief from beginning to end. It sometimes commences before property development process and ends later than it. For example, before other professionals are engaged, the project manager is already on ground to help in land acquisition and when construction activities are concluded, the project managerner.t may transform to product manager who sees to the marketing or disposal of the product.

Being a developing country with an expansive population estimated to be in the region of 160 million people, Project development in Nigeria have been undertaken by individuals, organisations, government ministries, agencies and parastatals, governments, property developers, schools and religious institutions. Individuals build for owner-occupier basis or letting (and leasing), while organisations, government ministries and parastatals build mainly for staff residential purposes and offices. Property developers build to sell or lease mainly for profit purposes, while religious institutions build for selfuse.

In all these, it is worth mentioning that there is shortage of housing supply. The deficit, estimated to be about 17 million units as at the moment (Administrator, 2012), is definitely caused by lack of finance. Property development is capital intensive and only few people out of the big population can afford to build, hence the need to rent.

Property development cycle commences from the need for it. When the need is established, either for owner-occupation, for profit or for various other purposes, the first thing is to engage an estate surveyor to source for land (or built property) at the location required. When bought, the lawyer perfects the document, depending also on the survey plan prepared by a licensed land surveyor. If it is a bare site, the architect will prepare a building plan and present for approval by the authorities, while a quantity surveyor does the costing and bill of quantities. Project manager, if not yet engaged, comes on board at this stage for proper coordination, monitoring and controlling of all project activities on site. If it is for profit purposes, the estate valuer, would be required to produce feasibility/viability appraisal to ascertain both the possibility (and practicability) and profitability of such projects. Participants are mobilised to the s'te for proper commencement of construction after neces~ary approvals have been obtained.

Construction methods applied will depend on the magnitude of the project. Babalakin and Co. (2014) identified some key constraints:

(i) Legislations and government control ofland.
State ownership of land could be traced to 1861 Treaty of Cession, which ceded the colony of Lagos to the British Crown, subject to customary rights of the local people. After Nigeria became a republic in 1963, land was vested in the Federal Government. Under customary law, land was vested in the communities and families in the South, but subject to compulsory acquisition through Acts, as Public Land Acquisition Act of 1917, Public Land Acquisition Law Cap 105 of Western Region 1958 to Public Land Acquisition Act of 1976. In Northern Nigeria, land was vested in the authorities for the use and benefit of the people. In 1978, Land Use Decree No.6 (now Act) was promulgated and land was vested in the State Governor. This harmonised land use rights throughout the nation, but 'came with various constraints hindering land ownership, possession and development.

(ii) Land policies.
Governments, through its ministries, parastatals and property development companies got involved in development of real estate. At Federal level, we have Federal Housing Authority (FHA), at Federal Capital Territory level, we have Abuja Investment and Property Development Company (AIPDC) and at State levels, we have Lagos State Development and Property Company (LSDPC) and the Lagos State Ministry of House developing and selling its own housing units.

Government projects are easily abandoned especially with change of government. They are also known to be inflated and expensive. Allocations are politically made and do not address the need fairly. Alternatively, private property development companies like UAC Development Company PIc and Victoria Garden City (VGC) are doing very well and have their properties hot in the market.

The role of government in property development should be limited to creating the enabling environment through provision of land parcels, infrastructure and services to private developers and promulgating enabling laws. Government tried to do this when it promulgated the Nigerian Urban and Regional Planning Decree of 1972. Although well intentioned, there were serious shortcomings, some by complicated definitions. It further complicated the problems developers were facing.

(i) Others.

Use of non-professional methods. Porter (1989) sums up a strategy for success in real estate development when he said, " .. .if you were in and were reasonably professional, you could make money. In fact you could make what some people would call unbelievable amounts of money'.

It is advisable to use a proj ect manager and various other professionals in the built environment.

Apart from those identified by Babalakin (2014) and Porter (1989), there are constraints created by lack of equity finance and high cost of borrowing. Also, finance for building should be long-term but we have only short-term loans existing in banks. There is also the problem of not specifically using project management technique. The line authority associated with government projects easily causes schedule and budget overruns and much more.

It is very necessary here to draw the distinction between projects and project management. According to Ntamere (1995), a project is an undertaking with a goal or set of goals (properly defined) with specific time of beginning and end, and must be unique with an estimated cost and quality attached to the end product. A project is non-repetitive, the moment it is completed, it comes to an end but another project can commence from the end product. It is an inter-disciplinary endeavour and one project may involve the services of various professionals in the built environment.

Hallin and Gustavsson (2012) described project as something temporary in nature which needs specific resource allocation to solve a problem or reach the goal.

Project management by the authors' definition, is the application of professional skill by those so qualified to execute undertakings efficiently in order to realise the goal or set of goals. It is the process and activity of planning, organising, motivating and controlling resources, procedures and protocols to achieve specific goals in scientific or daily problems- Wikipedia (2014).

Participants in any given project include all stakeholders and it is important for a project manager to know and recognise their needs, expectations and requirements from the start-up to shutdown. Omission of the needs and expectations of any stakeholder may in some stages, cause delays in schedule and cost overruns and cause termination. Stakeholders range from project team (mostly professionals and including project manager - a generalist), higher management, end user of the project's outcome and people affected by the project or its outcome. It is essential that a project manager should keep a stakeholder's register showing each holder's interest, involvement, expectations, influence, power, possible impact and communication requirement.

Project life cycle.

It is important to document the life cycle of a project in order to help break activities into tasks, work packages, work breakdown structures, budget estimates, and do a proper network diagram which shall show schedules and resource requirements per stage. Project life cycle includes project initiation, planning (pre-implementation planning and execution planning), project implementation, project monitoring and control and project shutdown.

STAGE	DESCRIPTION
1	Conceptualisation
2	Planning (pre-implementation and ~xecuti9n plann.ing]
3	Implementation (cost control, quality control, schedule control, inspection and sampling]
4	Monitoring and Feedback (earned value, compare actual to budget, variance analysis, further control)
5	Project shutdown

Figure I: General project life cycle.

APPLICATION OF PROJECT MANAGEMENT TECHNIQUES IN CONSTRUCTION PROJECTS.

Though various software exists in modern project management, manual applications are still very much in use in construction project management. It is advisable that the moment the project initiator conceptualises a particular undertaking, he should right away appoint a project manager who will be of tremendous value to him. The project manager will oversee the processes of land acquisition, survey plan production and necessary documentation, choice of building type (taking into account the project goal and the highest and best use principle), drawing of building plan and approvals, engagement of required consultants, pre-implementation planning, execution planning, actual implementation and monitoring and feedback actions.

Planning is a function of selecting the project goal and working out objectives necessary for achieving them. It is required in all phar.es but more attention should be paid on pre-implementation and investment (or implementation) decisions. Pre-implementation planning consists of feasibility /viability study to determine, given all factors on ground, whether it is practicable to carry out the project. It also concerns the decision on viability (goal realisability) of the project.

According to Chandra (2012), project work must be spelt out in detail, properly scheduled and sequenced. The information required for monitoring the project must be defined.

Implementation planning will concern a detailed work apportionment in terms of tasks, work breakdown structures, work packages, schedule milestones, budget estimates per task and package, and instituting resource levelling techniques should there be extended deadlines. Network diagram is a must as this will help trace the critical path, floats, resource allocation and schedule tracking. Constant analysis of the network is of immense value.

The actual implementation takes off after appointment of consultants and contractors/subcontractors, arrangement for finance, obtaining of necessary permits and approvals. The duty of the project manager is mainly that of monitoring, control (cost, quality and schedule) and feedback. By constantly doing this and communicating through site meetings, project is bound to achieve its goal.

Modern project management techniques have introduced safety methods in order to avert construction risks and impact assessments into construction projects.

Advantages and disadvantages of applying project management techniques to construction projects.

Advantages could be found easily on reaction speed. Project manager is a ready representative of the project owner and is always with the consultants/contractors at site or in liaison office. Decisions are easily taken through fluid or informal communication channels. Professionalism is the key to realisation of project goal. Project manager, though a generalist, coordinates the activities of all professionals and where in doubt of any quality, seeks help from external agencies through cube and other tests. An observant project manager will detect any connivance among given consultants at site meetings and will take action to stall their plan.

Some disadvantages are noticeable also. Apart from consultants who are retained on contract basis, project staff are rendered redundant the moment a project shuts down. This may give rise to unnecessary retention of personnel or pathetic termination of appointment of staff at shut-down. There may be no definable career path for project staff.

3.0 NIGERIAN INSTITUTION OF ESTATE SURVEYORS & VALUERS (NIESV) LAGOS BRANCH/NATIONAL BUILDING: A CASE OF APPLICATION OF PROJECT MANAGEMENT TO PROPERTY DEVELOPMENT PROJECT?

An attempt to apply project management can be seen in handling of the Lagos Branch/National Nigerian Institution of Estate Surveyors & Valuers (NIESV) office development. The project was conceptualised as 1 no.4-storey office building with a pent-floor but was completed as 1 no.3-storey office building. The author's firm was the project manager representing the national body, while a colleague's firm represented the Lagos State branch. A committee set up by the National Council appointed a colleague as the chairman.

In the project setting, the chairman of the building committee was to be seen as project owner, since the NIESV is not a person. The national project manager, (which incidentally was the researcher's firm), was the head of the project team, ably complemented by the State branch project manager.

3.1 STAKEHOLDERS.

The following stakeholders were to be seen in the undertaking:

(i) Project owner: This was a joint project of the national body and Lagos State branch of NIESV. In effect, the appointed chairman of the building committee represented the project owner so that the project manager liaised with him and the consultants. He in turn liaised with the National Council of NIESV, thus turning it to a matrix organisation.

(ii) Project manager: The author's firm was the project manager but was complemented by another firm representing the state branch. The project manager was the head of the project team which involved collation of reports from project team, chairing of periodic meetings, supervision of the entire consultants, contractors and workforce. He was the liaison between project team and the project owner (chairman of the building committee). He was also a signatory to interim payment certificates.

(iii) Architect: The architect acted purely on his professional calling, not as project manager, but as an architect, duly responsible for design, production, plan approval and supervision for construction according to specification. He was a signatory to payment certificates.

(iv) Quantity surveyors: The consulting quantity surveyor was responsible for costing and production of bill of quantities, cost of variations and release of interim payments.

(v) Electrical engineer: The consulting electrical engineer was in charge of all electrical designs, supervision of quality materials and usage, and was always present at meetings.

(vi) Mechanical, engineer: This role was under the su pervision of the electrical engineer. Not being a gigantic project and making use of the electrical/mechanical contractor who was able, the two roles were combined. This involved all plumbing works, sewage system, drainages and incidentally, generating sets, air conditioning and tiling of the project.

(vii) Accountant: The national project manager acted as the accountant since he was the national treasurer of the project owner. He worked closely, under the head, with the staff accountant at the head office.

(viii) Civil engineer: He was responsible for the actual supervision of the construction work, from foundation to finishing. He was always on site and worked with contractors (including artisans and labourers). He attended site meetings.

(ix) Structural engineer: He was responsible for structural design and drawings. Supervision of the foundation, columns, beams and other load bearing and infilling materials used in the project. He was at meetings until later part when load bearing activities had been completed.

(x) Main contractor and sub-contractors: Apart from the fact that there was a main contractor who was awarded the job, there was another sub-contractor for electrical and mechanical works.

3.2 PROJECT IMPLEMENTATION.

The project commenced in earnest in 2006 and ran for about six years. A formula for cost contribution and revenue (floor sharing) was agreed upon between the national body and the state branch. The state branch owned the land initially and that accounted as their part of their own equity. It was agreed that the national body would contribute and share 40% of total cost (and accruing revenue) while the state was to have 60%.

Contractor, sub-contractors and consultants were appointed throughajoint participation of both national and state representatives ofNIESV. Contractor and sub-contractors were mobilised. Consultants were also mobilised and designs were submitted for approval of project owner, after which approvals were sought and gotten from the appropriate state offices. Work progressed up to the stage the first floor was decked, then a problem set in.

4.0 CAUSES OF PROJECT FAILURE.

Chitcara (2012) gave seven reasons why projects fail, namely, client cost estimate failure, contractor's unrealistic cost estimate, improper contract management, inadequate project formulation, lack of project management skills, management failure and poor pre-implementation planning.

However, the problems ranged, among other things, from mistrust and suspicion, sectionalism, lack of funds, contractor's delay, project manager's call for test and change ofleadership at the national level. According to Khana (2011), successful projects are those that achieve their objective within specific time frame at specific cost and to specified quality. He went further to add that unfortunately, a large number of projects suffer from time and consequently, cost overruns.

(i) Mistrust and suspicion: The land belonged initially to one of the partners in the project. When the other partner (national body) came in, it was not easy for the first partner (state branch) to let go of its structures. For example, the state branch had appointed its own contractor and all consultants before the national body came in. All the national body could appoin t was electrical/mechanical sub-contractor, proj ect manager and chairman of the building committee. Since national body appointed the chairman, who assumed the role of the project owner, and also the main project manager, how come the state branch allowed it since, the state branch was a major shareholder owning 60% of the project? Questions arose and the players in the state branch management did not cooperate fully to smooth flow of implementation activities.

(ii) Sectionalism: The author did not see this as tribalism since different tribes are represented in the branch, and also in the national body. But agreements and disagreements were made on branch and national sections rather than on tribal lines. These disagreements delayed the project several times. Even to get the participation of the national body in the project was not easily approved. Opposition came from sub-sections of both the national body and the state branch.

(i}l) **Lack of funds:** The national body was naturally more buoyant than the state branch and was always willing to contribute its own quota but the state branch did not always pay up. This caused delays severally until the national body played the big brother.

(iU) **Contractor's delay:** The contractor either lost interest or was not keeping to schedule. The participants called to question his commitment. Eventually, the contract was terminated and this caused a lot of legal threats and delay.

(\i() **Project manager's call for cube test:** The project manager who at a time did not trust the contractor anymore called for a cube test in order for work to continue. Cube test was done by state government and it took a while before it was submitted. Certain recommendations made in the cube test were responsible for reducing the number of floors and removal of the pent-floor which was earlier included in the plan.

(ijo **Change of leadership at national level:** Project was abandoned for a while and the change in leadership was turbulent with legal actions arid focus was removed from the project. Eventually, the turbulence died down and the project was resumed in earnest.

(~]') **Use of matrix rather than pure project management:** The Chairman of the Building Committee, who was to be seen as project owner, was still reporting to the Council, thus turning the arrangement to matrix rather than pure project management.

All these factors caused schedule and of course, budget overruns.

4.1 **Project shut-down.**

With schedule overrun, budget overrun and of course scaling down of the size of the project, project was concluded and put to use in 2012 instead of the year 2008 which was proposed.

4.2 **Was project a success or a failure?**

Success of project can be rated mainly on terms of quality, budget, schedule and generally by achievement of goal or set of goals of the project owner, health/ safety, scope and skills. In terms of the three main components, namely, quality, budget (cost) and schedule (time), project is a failure for reasons of the overruns given above. Also project failed in scope. What was intended to be on four floors with pent-house, had to be reduced to three floors, without any pent-floor. However, in terms of overall goal of project owners (to own a building of their own), health/ safety and skills, project has succeeded.

5.0 RECOMMENDATIONS AND SUMMARY.

5.1 Recommendations.

Property is already completed and property is in use. However, there should be actions to be taken in order to ensure that the building is enjoyed by the two project owners.

(i) It will be beneficial to enjoyment of the occupants if all agreements between national body and the state are kept to, in terms of financial contributions and sharing of the accrued rental income.

(ii) Project owners should always use, as it is doing, qualified and experienced property management firm for its management. The management firm should be versed also in project management in order to appreciate all that took place during the construction of the property vis-a-vis cube tests and scaling down of the project.

(iii) Project management functions such as pre-implementation and execution planning, cost, quality and schedule controls, monitoring and feedback actions should be fully applied in property development projects in order to achieve proj ect success.

(iv) For matrix organisations to succeed, the chairman of the building committee should be the President of the Council who will be empowered to take immediate and authoritative actions when things go wrong during project cycle.

(v) Project owners should endeavour to appoint qualified project mangers immediately after the project is conceptualised to project shut-down. This will help the proj ect succeed and relieve the owners of all the hazards that take place within the project cycle.

5.2 SUMMARY.

A project succeeds more when pure project functions are applied. Some of the problems arose out of the complexity of ownership, sectional composition of the owners and financial limitations of one of the owners. However since project bas been shut down, it is good to observe the recommendations made above for the lifespan of the building to be prolonged.

4.1 Projee-'

REFERENCES

012), Housing Development and Provision in g e ria. R et r i eve d fro m w.foramfera.com/ ... /213 ... housing_... on 0/10/2014.

apital Real Estate Insight (2010), New Approaches to Property Development. Retrieved from www.howwemadeitinafrica.com ... / property. .. on 25/11/2014.

Babalakin and Co. (2014), Key Constraints of Real Estate Development. Retrieved from www.babalakinandco.com ... /key ... on 30/10/2014.

Bello, M.A. and Agbatekwe, A.C. (2002), Project Management in Property Development, The Nigerian Experience, Ibadan; University Press Plc.

Chandra, P. (2012), Projects Planning, Analysis, Selection, Financing, Implementation and Review, 7th ed., New Delhi; Tata McGraw Hill Education Private Limited.

Chitcara, K.K. (2012), Construction Project Management, 2nd ed., New Delhi; Tata McGraw Hill Education Private Limited

Ebi, U. (1991), Project Planning and Implementation in the Housing Sector: A Case of World Bank Assisted Urban Housing Project, An unpublished M.Sc. Thesis submitted to Federal University of Technology,Owerri.

Goodman (2014), Property Development. Retrieved from www.goodman.com/property/ d .... on 29/10/2014.

H2Uin, A. and Gustavsson, T.K. (20J 2), Project Management, Liber AB; Ola Hakansson.

Khanna, R.B. (2011), Project Management, New Delhi; PHI Learning Private Limited.

Lamudi (2014), Overview of the Nigerian Real Estate Market. Retrieved from www.lamudi.com.ng/ ... overview on 29/10/2014.

Ntamere, C.C. (1995), Project Management, Alphabet Nigeria Publishers.

Porter, M.E. (1989), Competitive Strategy and Real Estate Development. Retrieved from www.hbs.edu/ ... /porter_strategy_real... on 30/10/2014.

Real Estate Business in Nigeria - Investment in Nigeria. Retrieved from www.real-estate-investment_in_.... nigeria.co ... on 27/10/2014.

Ukabam, T.A. (2007), Aspects of Property Development, Lagos; T.A. Ukabam & Associates.

Wikipedia (2014), What is Project Management, PM!. Retrieved from en.m.wikipedia.org/ ... project. .. on 24/11/2014.