



NEED OF AN ENERGY EFFICIENT FACILITIES MANAGEMENT IN BUILDING CONSTRUCTION - A QUALITATIVE RESEARCH STUDY

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ABSTRACT

Office the board is a term which is firmly connected with building the executives. All the more extensively, office the board ought not exclusively be perceived as broad structure the executives associated with ordinary structure activity yet it ought to likewise remember long haul arranging and center for its clients. This should as of now be fundamental in the preliminary period of speculation measure zeroed in on development of building itself. Significant piece of activity expenses and adequacy of office the board measures is characterized as of now at venture of building. A significant factor is additionally the biological part of building effect on the living climate because of materials utilized for its development just as energy utilization fundamental for its activity. There is a lot of proof that green structure which is at first accepted to be the answer for tackle the issues of environmental change and energy emergency can't proceed true to form. The way that green structures devoured more energy and emanate more CO₂ than anticipated during the genuine activity is because of the issues of shortcoming in building activity and upkeep. Offices the board coordinates the whole segment of the assembled climate including individuals, cycle, spot and innovation to ensure that the fabricated climate framework works ideally. It offer significant commitments to address the test of shortcoming as far as building activity and upkeep subsequently make offices the executives business become one of the quickest developing industry on the planet. By doing a writing survey, this paper expects to see more about the acts of offices the executives in various piece of the world. It is discovered that there is a conspicuous difference in the improvement of offices the board rehearses in the western nations when contrasted with that in the eastern nations. The business of offices the executives is moderately new and the examination identified with that field is as yet restricted hence give a tremendous chance to create it later on since the significance of this field is progressively perceive.

Keywords: faculty management, need of management.



INTRODUCTION

These days environmental change and energy emergency has gotten one of the world's greatest concerns. IEA, 2015 expressed that the structure area (counting private and business) burns-through more than 33% of the world's absolute essential energy; those number is the most noteworthy contrasted with the energy utilization of other area. Notwithstanding that, IPPC (2014) contend that populace development, movement to urban areas, and expanding levels of abundance and way of life changes universally can possibly twofold or even significantly increased the energy utilization and outflow of the structure area by the mid century. Green structure is one of the methodologies that are required to tackle that issue. Sadly there is a lot of proof to make reference to that many green structures perform inadequately and radiate considerably more CO₂ during real activity. Besides, OECD/IEA (2013) features that many green structures which have been planned and inherent an exceptionally effective advances and right now been perceived with unique excellence grants like LEED Platinum, likewise perform most exceedingly terrible as far as energy utilization. The energy utilization of those structures are regularly a lot higher than anticipated. Those realities uncovers the chance of the structure area to lessen the energy utilization and to beat the ecological issues brought about by ozone harming substance outflows just as relieving the worldwide environmental change in the long haul.

The hole between the anticipated energy utilization and genuine energy execution in green structure might be brought about by numerous things including the distinction between the structure plan and the as-assembled working regarding the specialized workmanship and establishments, decision of gear and material during the development stage, just as the energy conduct of tenants, which has been ignored in the energy recreation measure. The higher the innovation applied to a structure, the better inhabitant understanding in transit the structure works and how to keep up it become more fundamental so the structure can proceed true to form. Inhabitant is the one that utilization the structure and work it consistently that is the reason the accomplishment of an energy saving methodology in a structure relies extraordinarily upon how the tenants comprehend and collaborate with the structure's frameworks and innovation notwithstanding tenant's better understanding in the operational stage, a decent and appropriate upkeep framework is additionally required so a structure can be work ideally true to form in the plan stage. At the point when the strains between energy execution and upkeep rehearses are adjusted, structures work productively. An appropriate support is likewise significant since it generally acknowledged that it costs up to multiple times more to work and keep a structure than to build it.

As expressed previously, the proficient structure activity will bring about the diminished of energy utilization, the upkeep costs just as the decreased in the natural emanations. Lamentably, the productivity in the structure activity and support is as yet an issue in the vast majority of the nations on the planet that may be the primary caused which makes green structure can't proceed true to form..



FACILITY MANAGEMENT, A WAY TO ENERGY AND COST EFFICIENCY OF THE BUILDING

Offices the board (FM) may offer significant commitments to address the test of shortcoming regarding building activity and upkeep. Office administrations is a type of resource the board which incorporate the entirety of the segment of the constructed climate including individuals, cycle, spot and innovation to ensure that the assembled climate framework works ideally. Taking into account that building or assembled climate is an unpredictable framework, so as far as conveying its capacities, office the board includes multidisciplinary information including design, structural designing, conduct, bookkeeping, the executives, etc.

Before, offices the board is known as the field that serves just on the structure activity and support field. Nonetheless, as the business is developing quickly the assistance of offices the board has become boundless these days. Teicholz expressed the 41 duties set by the International Facilities Management Association (IFMA) which are gathered into eight classes covering land, arranging, planning, space the executives, inside arranging, inside establishment, design or designing administrations, and building support and tasks.

As office the board includes an exceptionally wide scope of administrations, offices the executives is viewed as a factor that has a significant part to the achievement or disappointment of the viability of building execution so it very well may be ideally proceeds as its planned. Actualizing a productive support technique is needed to oversee assets adequately and decline the expenses of fixes and substitutions, notwithstanding lessening by and large danger and hardware disappointment. A decent office the board framework will guarantee that each innovation and office prepared inside a structure is as of now well capacity and fulfill the guideline. The office the board will likewise put together individuals who are include in the structure activity and upkeep to ensure that the structure can perform ideally and proficiently as far as cost, tasks, and support just as satisfy the customer needs and highlights.

OBJECTIVE OF THE STUDY

1. To determine the Typical use of the set up energy the board apparatus.
2. To determine the need of an energy proficient offices the executives in building development.

TYPICAL APPLICATION OF THE ESTABLISHED ENERGY MANAGEMENT TOOL

Energy reviews evaluation instrument this strategy can be utilized as a source of perspective guide for future work just as for building proprietors/chiefs when completing an energy review (Haji-Sapar, 2003). Different structures for building energy execution appraisal and reviewing system have been created to help and guide the structure proprietor, office supervisors and designers in giving the vital and required structure data and information. This is to survey and



reviewing the structure energy execution of the common place of business in Singapore. This is shown plainly in Figure

Building energy benchmarking tools

Utilizing the set up benchmarking bends created because of the investigation, the all out energy saving capability of a structure can be determined utilizing the aggregate/landowner/inhabitant energy execution benchmarking bends. An exhibition target might be set for a short-or long haul execution of the structure. On the off chance that administrations framework' energy information are accessible, a structure can likewise decide the saving feasible from every one of the frameworks utilizing framework benchmarking bends. When the framework's saving potential is set up, a structure proprietor can focus on an energy retrofitting project as indicated by the degree of saving every framework can accomplish.

Energy benchmarking is all around perceived as a significant apparatus in distinguishing the current and future energy necessity of a structure or office. There are accessible online benchmarking frameworks offered by government and business ventures, yet such information is often nullified.

There are a few difficulties in applying proactive upkeep that is looked by the offices the executives professionals in USA and Europe. The principal challenge is because of the troublesome progressing measure from customary receptive upkeep to proactive support which includes the headway of innovation as well as expertise. The following test is the sloppy structure information from the plan and development stage subsequently make the proactive upkeep measure become hard to do. The improvement of the most current Building Information Modeling (BIM) programming which is being utilized in the plan and development stages will permit the information dividing among office the executives and plan experts. Notwithstanding, in view of the examination in the USA and the Nordic Europe found that there is an information and innovation hole among plan and office the board experts. Now and again, the office supervisory crew may not introduce themselves during the plan and development stage, in this way the architect don't know precisely on what sort of data that they ought to remember for the BIM data set that will be required for the support reason later. Thusly a superior practices and innovations are expected to convey such data with the comprehension of offices the executives' necessities. Other test in the developing help area of offices the board the Europe is the way to manage administration quality. Despite the fact that FM rehearses in Europe and USA are now furnished with ISO standard yet some way or another there is still holes between the offices the board specialists and customers as far as the administrations need. Since quality is perhaps the most anticipated viewpoints by clients of practically all assistance items. About consumer loyalty and the post inhabitation assessment become the significant activity.

Energy efficiency leads to better managed buildings

The most evident advantage of energy productivity through a very much arranged energy the executives program is that it brings down running expenses, adding up to generally enormous



investment funds over the existence of the structure. Nonetheless, decreased discharges and less utilization of normal assets have now become more significant long haul benefits. Improving energy proficiency can likewise prompt better structures with more prominent solace, a superior workplace, more fulfilled inhabitants and improved profitability as branch off advantages.

Energy proficient structures need not expense anything else to work than a "standard structure". Coordination of the texture and administrations configuration can introduce freedoms to diminish capital expense. For instance, the expense of outside concealing can be counterbalanced by limiting cooling plant limit.

Giving better kept up and maintainable structures will improve the remaining of offices experts, bringing about more prominent consumer loyalty and a more noteworthy picture. Energy proficiency is the critical course to lessening outflows from structures prompting huge advantages for government, building experts, customers, proprietors and inhabitants.

BENEFITS OF ENERGY MANAGEMENT

The national government is the biggest single energy client in the United States. The numerous postal offices spread all through each side of the nation offer the Postal Support with an exceptional chance to impact the public energy the board methodology. By giving initiative in this beneficial exertion, Postal Service offices can set a profoundly noticeable model.

Energy preservation is truly improved energy the board. Energy the board doesn't mean essentially killing the switch, it implies utilizing energy all the more proficiently to give the equivalent or an improved degree of advantages at lower cost. The energy the board program assists offices with managing asset limits without lessening operational capacities, efficiency, or the personal satisfaction for Postal Service staff.

Energy the executives conveys a wide scope of substantial just as elusive advantages. Substantial advantages incorporate dollar reserve funds coming about because of the improved working productivity of energy-utilizing frameworks. The improved efficiencies bring about decreased working expenses just as diminished energy cost

FOUR STEPS FOR INTEGRATING ENERGY AND NEED OF FACILITIES MANAGEMENT

Ensure energy and facilities management strategies are aligned.

Our meetings show that the absence of an incorporated procedure and storehouses between pass on lease groups are blockers for the combination of energy and offices the executives. Creating offices advancement methodology will require an office wide dynamic methodology considering the effect of office wide and lifecycle costs. Offices streamlining additionally requires a methodology that joins in business measurements not typically considered in land and offices choices, for example, prosperity and solace. When growing such systems, offices and



energy directors ought to include a scope of partners, for example, staff, site administrators, resource proprietors, overseeing specialists and occupants to guarantee that coordinated projects can get installed into every day tasks so reserve funds are kept up in the long haul. Re-appropriated suppliers that can uphold these coordinated methodologies on a progressing premise can likewise quicken reception of best practices.

Leverage a software system to gain a single, holistic view 2 of all energy assets.

To run energy the executives programs and focus on offices improvement projects, associations need a united and standardized view into energy utilization from sources, for example, energy meters and sub-meters. To do this efficiently requires an endeavor level programming application – attempting to finish this assignment physically or by means of accounting pages will burn-through tremendous measures of time as information needs be purified and coordinated before investigations can be rushed to recognize operational improvement openings. There are many venture energy the executives programming applications accessible in the market that can help computerize these undertakings.

Bring in expert partners that add value.

Numerous associations work with rethought offices the board suppliers as they hope to diminish the working expenses of structures. The meetings show that there are openings for associations to work with rethought suppliers that have capacities to incorporate energy and offices the board inside their administrations to open up additional expense reserve funds. Today, a considerable lot of the biggest offices the board firms have dispatched energy the executives abilities by building up little energy administrations groups. Purchasers should interrogate potential offices the executives accomplices regarding the degree to which they are really coordinating energy and offices the board in their methodology.

Consolidate data systems to shift focus from individual 4 building management to portfolio optimization.

In any event, for associations that are gaining ground at the office level, there may in any case be openings for firms to broaden best practice association wide. For instance banking firm Barclays has now revealed a distant structure the board control framework across most of its portfolio, following a fruitful pilot venture to help a 30% decrease in worldwide energy utilization more than three years. Actualizing a solitary programming stage for the portfolio is a key fixing, as it takes into consideration experiences to be divided between various office groups.

A large portion of the act of office the executives in India at present is attempted by land firms as the property specialist. This is because of the way that structures, for example, skyscraper office towers are overseen by property specialists. The support strategy that they use is for the most part the customary of receptive upkeep rather than the proactive one. Responsive upkeep is a support and fix technique which is being done just if some harm is being found. This



strategy for responsive upkeep and fixes are not effective, since it cost three to multiple times more than the proactive support for a similar fix. Tragically this strategy is picked because of the helpless record of information the executives since the plan and development stage that make the cycle of proactive upkeep hard to do. In addition, the helpless information the board is additionally bring about the negative future arranging of upkeep works and administrations the executives.

Min et al.; Myeda, and Pitt expressed that some other test the act of FM in India and other Asian nation are (1) the absence of individuals comprehension of the significance of giving a complete FM administrations to accomplish the ideal structure execution 2) absence of ability, specialized information and aptitude on the structure administrations and office the board field so the trouble of dealing with different issues is regularly happen subsequently the need to plan an adaptable FM arranging that can be applied. 3) Lack of the norm and rules in the FM benefits that can be utilized to gauge the quality and execution of FM rehearses by organization just as to normalize the training and usage 4) the shortfall of explicit FM association to control and screen the FM rehearsed by property the board or specialists in India.

CONCLUSION

Setting up a nearby energy the board instrument can help building experts in assessing the saving capability of a current structure, cost recuperation and financing necessities utilizing the aggregate/property manager/inhabitant energy execution benchmarking bends and utilizing fitting energy evaluation and review techniques to accomplish the ideal result. An exhibition target might be set for a short-or long haul execution of the structure. On the off chance that administrations framework energy information is accessible, the saving reachable from every one of the frameworks can be resolved utilizing framework benchmarking bends. When the framework's saving potential has been set up, a structure proprietor can focus on an energy retrofitting project as indicated by the degree of saving every framework can accomplish, and the arrival of speculation might be determined. There is a distinct contrasts and slight comparability between the act of office the board in the created nations in USA and Europe when contrasted with the non-industrial nations in Asia and Africa. The distinctions are concerning the nature of administrations, the number offices the board guidelines that exist, and the quantity of exploration distributed while the likeness is the absence of monetary help that looked by the Asian nations just as some European nations and the Australia and the test in applying incorporated offices the executives. This field of offices the board is generally new, yet the quickly developing improvement of this industry in the course of the most recent 25 years have demonstrated that this field is getting progressively perceived. Then again, numerous difficulties that actually looked by the office the board professionals over the world offer numerous chance for analyst to help tackling the issues that happen and filling the holes of information in this field.



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