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Approaches to improve the quality of workplace Built Environment

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Abstract

This paper highlights the main factors which can have a positive impact on the productivity of workers within an organization. It talks about the current trends and practices followed by the organizations to improve the quality of the workplace and the need to improve the quality of workplace according to changing demands of occupiers. The study is being conducted with the help of secondary research data exploring the existing work-analysis structures, trends, practices and case studies. Qualitative research methods are used for analyses of the data: Content analysis, previously published articles and papers. In this way, new ways of producing and operating buildings and the imperatives for such a process have been analysed which can help the inappropriate level of user involvement in the building procurement process and the way these buildings and work style in these buildings are managed.

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1. Introduction

In the era of exhausting natural resources, developing worldwide environmental change, corporate social responsibility & demands for ecologically friendly solutions, several organizations are progressively dedicated to developing new ways of producing & operating the building. Talking about new ways of developing a building, the decision is to create & develop green building which is not only the need of the hour but also represents a timely business decision & a good investment. In addition to other things, green buildings are considered more productive & more aesthetic for the occupants. Nowadays, organization focus on activities that ensure that the land and building asset base of an organization is optimally structured in the best corporate interest of the organization concerned, aiming to maximize human interaction with the organization. In the present era, the profession of corporate real estate and workplace encompasses business strategy for companies which is based on three important factors- that is,

I.- How and where people work,

II.- How it affects people, productivity, profit,

III.- And increasingly important - the planet.

The changing phase of the organization requires obtaining the right balance of interaction in an office environment without turning it into distraction requires a detailed understanding of work processes undertaken in the office. Thus,

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moving from the static individual process working towards more collaborative knowledge sharing. This approach requires a holistic view towards developing & maintaining the workplace, its facilities and the process of their design, construction, procurement and operation.

2. Approaches to improve the quality of the workplace by following sustainability practices

In order to improve productivity and comfort of the workplace, green buildings and increasingly green leases are addressing sustainability concerns beyond energy, water and waste.

2.1 During construction

2.2 During operation and maintenance of the building

While construction of the building is only a part of the solution for a building. Green leases give the capacity to additionally improve the environment over the course of the life of the building, while also providing benefits to both landlords & tenants who occupy them.

A Green Lease is a course of action in which both tenant and landlord agree to adopt environmentally sustainable development principles to ensure that the operation & maintenance of building reduces the negative effect on the environment and resource consumption. It intends to give motivating forces to both landlord and tenants in a commercial lease to reduce energy, water & raw material consumption, increased recycling, and also the utilization of feasible & sustainable materials in tenant improvement and provides an environment which encourages sustainable practices by both the landlord & the tenant [1].

3 Approaches to improve the quality of the workplace by following changing workstyles

There has been a declining trend towards full-time employment, increasing demand for creative minds rather than manual skills which has been refashioning our ways of working and living. Flexibility in workstyles leading to the emergence of “fluid” organizations leads to the functioning of organizations based around advice rather than instructions and decisions, the continual redefinition of tasks, encouraging “informal” and multi-strand relationships for brainstorming. A move from individuals working in cellular offices to teams of people working in an open plan environment, allowing people to interact freely, thereby supporting collaborative working. Companies now have the ability to deliver physical and virtual workplace solutions that are designed to meet the challenges of today's work styles, thus increasing the company's competitive advantage, addresses the needs of a more diverse and multigenerational workforce, dramatically reducing costs, improving productivity, and enhancing collaboration. Many organizations presently persistently resize their CRE requirements to adjust to lower demand for physical space. Some of those approaches are-

3.1 Space Management

3.1.1 Co – working: It provides space for freelance workers. It is a shared workplace, wherein employees of different organizations can work together at the same sharing values. It provides a collaborative environment to workers from different work cultures and thus helps them in forming a synergy.

3.1.2 Open plan office: Open plan office designs are focussed on improving collaboration between the workers through improved architectural and interior designing of the office workspace.

3.1.3 Hot-desking: It is a workplace setting wherein multiple workers working for the same organization can use a single workstation at different time intervals.

3.2 Benchmarking

[2] States that “Benchmarking is the process of identifying, sharing and using knowledge and best practices”. In business, benchmarking is often about comparing processes to enhance performance. In Real Estate context, benchmarking tends to be focused on analysis of performance & seeks to examine tangible measurements, like sales/sq. mt. or total occupancy costs/sq. mt. [3] states that “Benchmarking represents a management tool for enhancing an

organization's performance & competitiveness". Factors used for comparing properties are cost per sq. ft., space per person, turnover per sq. ft., and profit per sq. ft. So, that organizations within an industry compete to provide best environment to all its stakeholders.

4 Approaches to improve quality of workplace through Facilities Management

Facilities management (FM) is a term that encompasses a wide range of activities involved in the effective management of built assets. It involves the total management of all services that support the core business of the organisation. The existence of active FM may help to identify potential problems with maintenance and running costs before they result in component breakdown and even temporary shutdown of buildings.

The facilities manager's role, as an enabler and catalyst of change, must focus on how the strategy and service mechanisms for support services can assist the business to optimise its performance. The importance of performance assessment of facilities should also be looked at as part of a broader perspective of job satisfaction issues and with particular regard to theories of motivation. [4] Identified working conditions as one of the factors that most often contribute to employee dissatisfaction at work.

[5] Identified measurement of performance as one of "three essential issues for the effective implementation of a facilities strategy". There is a wide range of choices in measuring facilities management performance reflecting the varied nature of the field. Benchmarking, or post-occupancy evaluation could be identified as examples [6].

5 Approaches to improve the quality of the workplace through Technology

The technology has led to a change in work processes, making workers independent of the geography of the "fixed" location building, rendering them obsolete. Freelancers, wired into the office from home or other location, via telecommuting is common nowadays. The virtual offices are one possible solution to new demands for flexibility at work.

6 Research methodology

The study approach is to a great extent based on a literature review of secondary data taken from existing work-analysis structures, trends, practices and case studies. This study analyses the domestic as well as international contemplations on factors which improve productivity and satisfaction of workers by improving the quality of the workplace. Qualitative research methods are used for analyses of the data: Content analysis, previously published articles and papers & progress done so far. The study focuses on four important aspects which are currently impacting the workplace and helping in enhancing the satisfaction and productivity of workers. These approaches are based on how green building practices, trends in workplace transformation, managing effectively the facilities of an organization and changes in technological trends enabling the workers to be more productive and also at the same time improving the quality of workplace built environment.

7 Discussion

According to U.S. Energy Information Administration (EIA) estimates that building accounts for the use of 40% of the total U.S. energy consumption in 2016, including both residential & commercial sectors, 50% of extracted natural resources, 25% of landfill waste, 10% of airborne particulates & 35% of greenhouse gases. It mainly emphasizes on the inefficiencies of conventional construction & property management practices & the necessity to adopt environmentally sustainable standards that can help minimize the contribution of building to global climate change by 70% & simultaneously benefitting both tenants & landlords, not only cutting costs & expenses required to maintain & keeps building operational but also enhancing people's working & living environments. The decision to create & develop green building is not only the need of the hour but also represents a timely business decision & a good investment.

In order to improve workplace productivity, the accommodation & workspace strategy of an organization should aim to facilitate & enhance the productivity of those work processes. In this regard, there are three categories of spaces required for workers, i.e., space to concentrate, space to collaborate and space to contemplate. The uses of these spaces are shown in Fig. below (Fig. 1)

Fig. 1. Work – style analysis

Source: Corporate Real Estate Asset Management, by Barry Haynes & Nick Nunnington [7]

While technology has enabled the organization to become “global” by linking individuals and groups together irrespective of their location through tools like Skype for business, sway, networking sites like Twitter, LinkedIn etc.

It is clear that FM is an umbrella term under which a wide range of property and user-related functions may be brought together for the benefit of the organisation and its employees as a whole. Therefore, the aim of FM should be not just to optimise running costs of buildings, but to raise the efficiency and suitability of the management of space and other related assets for people and processes, in order that the mission and goals of the organisation may be achieved at the best combination of efficiency, cost and quality.

8 Conclusion and recommendations

In order to improve the quality of the workplace by incorporating sustainability during the operation and maintenance of the building and following lean principles during construction. Some of them are listed below:

- I. Get your Green Building operating Program certified through the standard such as IGBC and GRIHA rating standards.
- II. Make sure the lease terms are well thought through adopting smart lighting technologies such as motion sensors, timers, submetering electricity bills to reduce unnecessary use of electricity.
- III. Make necessary for tenants to use Energy Star Compliant equipment & appliances (Permissibility of solar or wind applications)
- IV. Water conservation measures (for example, low flow toilets, rainwater catchment, wastewater reuse, etc.)
- V. Indoor air quality standards (placement of façades in the building).
- VI. Recycling Programs to be adopted by tenants (example, dispose of compact fluorescent lamps in recycling containers, discard cardboard, metal, glass, paper, and plastic in assigned regions)

In order for Facilities Management (FM) to be a successful tool in improving the productivity of workers, it should aim at holistic business performance. The performance of an organization should be continually improved. Performance measurement of an organization, assessing the quality of its services through balanced scorecard as a tool should be done. Centralized FM help desk to address all Facilities management related problems across the portfolio of assets should be there which can provide services like, mapping out all customer requirements, recruiting the correct operating staff, ensuring an appropriate working environment and client communication once the help desk is operational this will enhance satisfaction of workers and clients of that organization. An integrated workplace process taking a holistic view of business, the environment and technology should be formed according to the changing needs of people (both corporate and individual), keeping in mind the management control of the process and its resulting product.

It is for these reasons [8] in his paper, “An integrated workplace process” stated that now a workplace can say to be – “Not so much a building, more a way of life”.

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