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**AN ANALYSIS OF ENVIRONMENTAL
FACTORS IN OPEN OFFICE
LAYOUTS**

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By

V. D. Geekiyanage

Supervised by

Dr. L. L. Ekanayaka

TH3361

The dissertation was submitted to the Department of Civil Engineering of the University of Moratuwa in partial fulfillment of the requirement for the Post Graduate Degree of Master of Business Administration in Project Management

Department of Civil Engineering

University of Moratuwa

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TH3361

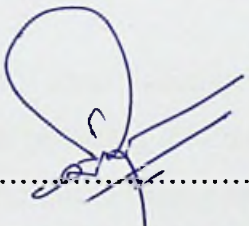
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ABSTRACT

'Cellular office layouts' and 'open office layouts' are the two main office designing techniques available for a Facility Manager. The latter is the widely used technique out of the two due to the reasons such as efficient space utilization, cost effectiveness, easiness in altering the layouts etc.. Although, both the techniques have its advantages and disadvantages, it is observed that lot of grievances exist among the users of "open office layouts".

The employee productivity and Job satisfaction level are found to be inter-related. Hence the factors affecting the job satisfaction level of an employee is vital for organizational management. Satisfaction level about the work place is identified as one of the factors affecting job satisfaction level of an employee.

The literature available about working environment and productivity, discusses about the attributes which affect Overall Environmental Satisfaction level (Satisfaction level about ones work place) of an employee occupying a workplace. Out of them, the researcher identified 21 attributes as the base of his study and developed a questionnaire to gather information about the occupant's Overall Environmental Satisfaction level in relation to the identified attributes. Survey done among the 46 executives in two offices, implies that the 21 attributes identified, have a direct impact upon the Overall Environmental Satisfaction level of an occupant. Hence inclusion of said 21 attributes, into layout designs is very vital in providing an efficient and productive working environment.

Further, a detailed analysis about customer requirements and their interdependencies, prior to design a layout, is important, since success of the proposed layout will depend upon inclusion of them.

User awareness about the functionality and design considerations (or assumptions) of the layout is also important in maintaining the office layout as intended.

Finally the office layouts are to be checked routinely, for their intended performance levels after handing over.

Key words: *Open office layouts, physical environment and productivity, Office environment, Environmental satisfaction in open plan environments.*

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ABBREVIATIONS

| | | | | |
|------------|----|----|----|--|
| AC | .. | .. | .. | Air Condition |
| A/L | .. | .. | .. | Advanced Level |
| ANOVA | .. | .. | .. | Analysis of Variance |
| Asst. Arc. | .. | .. | .. | Asset Arcade |
| Coeff. | .. | .. | .. | Coefficient |
| CTO | .. | .. | .. | Central Telegraph Office |
| Env | .. | .. | .. | Environment |
| FM | .. | .. | .. | Facility Management |
| GFL | .. | .. | .. | Ground Floor |
| HR | .. | .. | .. | Humana Resources |
| LR | .. | .. | .. | Linear Regression |
| OES | .. | .. | .. | Overall Environmental Satisfaction |
| PLC | .. | .. | .. | Public Listed Company |
| PHD | .. | .. | .. | Doctor of Philosophy |
| SLT | .. | .. | .. | Sri Lanka Telecom |
| SLT – HQ | .. | .. | .. | Sri Lanka Telecom Head Quarters. |
| Std. Error | .. | .. | .. | Standard Error. |
| WS | .. | .. | .. | Workstation |
| (OES) | .. | .. | .. | Overall Environmental Satisfaction; Dependent variable |
| (L gt) | .. | .. | .. | Lighting Aspects; Independent vaiable |
| (P ws) | .. | .. | .. | Privacy & noise in workstation Environment; Independent Variable |
| (T wk) | .. | .. | .. | Boost for Teamwork; independent variable |
| (V nt) | .. | .. | .. | Ventilation aspects; independent variable |

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