



## Eyvan Basic Position to Improve Operational Efficiency in Mosques

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### Abstract

Functional efficiency performance space-oriented mosque like any other, it is influenced by the spatial configuration. In fact, religious spaces with unique features since the beginning of Islam has remained unchanged and only their own spaces. This special feature makes frequent use of specific patterns in the architecture of these buildings. The relationship between inputs, yard bedchamber (s)(or Shabestan) of the Mosque of these qualities. In many cases, there is a porch or Ivan of a communication node. In the form of a semi - open space, is the interface between the yard and bedchamber of the mosque. This study examines the role of the mosque's porch to improve operational efficiency. In connection with the evaluation of functional efficiency using space efficiently, several studies have been completed. For example, Mustafa and his 2013 study, a variety of patterns and consider the variable dome mosques, with the introduction of elements of space efficiency, to evaluate the performance of these buildings have. To study and analyze the configuration space and the functional efficiency in a variety of patterns and a variety of home business has passages. Also in the article Khan (2012) to review and explain the functional efficiency indicators is discussed in hospitals and the role of each component in order to optimize the layout of the interior space efficiency buildings, healthcare, according to the definitions analyzed and assessed. It should be noted that the present study was to evaluate the functional efficiency of the mosques with central courtyard space structure. Therefore, in this regard, this study intends to basic position Ivan element in achieving this important space in the form of mosques, explain. The hypothesis is also provided as follows: according to the calculation of operational efficiency indicators such as the depth of space, the association and the vision and perspective, space Layout mosques four porches highest functional efficiency. The research questions to examine the role of mosques Eyvan the configuration is as follows: Is Eyvan improve operational efficiency mosques is effective? Is count on a mosque porch can

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improve the efficiency of its performance? How to Eyvan role in promoting functional efficiency realized in the mosques? In order to achieve this goal in the first to introduce a paid which explains the components of operating efficiency and definitions of it through studies that have been conducted and evaluated the degree plan. So, in order to achieve this, two methods were used. The first method uses mathematical syntax space. That information required to be used in formulas, the plot justification for each of the samples obtained. The second method, using the software Depthmap and analyze its output. The final results obtained from these two methods revealed Eyvan and spaces that are dependent on the spatial structure of mosques increased spatial depth, the degree of integration and better links between the yard and the Bedchamber the combination of these factors, improving operational efficiency between the input space, garden and Bedchamber (s) in the mosque. Software Depthmap including tools to analyze the different spaces of urban spaces and architectural spaces, is used. With this software, such as deep space indices visibility and visibility cone, and so on are useful. The software has features that can be used to evaluate the efficiency indicators of the performance of different spaces payments. The application for each of the areas in question, determine the calibration. Accordingly, any portion of space considering the total area of the space and the position of the observer is standing, will have a different grading. Among other results obtained from this study can be pointed to the role of mosque porch improve operational efficiency; this means that the number of mosques in the central courtyard porch increase its operational efficiency significantly increased. create or increase the potential of space in mosques four porches because of elements such as Eyvan and its related spaces (bedchamber behind it) than other samples. The event observer relative to the surrounding atmosphere and can be changed at first glance, this feature can be used to improve the performance of the mosque. - Four-eyvan mosques because of the sequence of spaces and their propagation, has more depth than the input space and depth are less than a yard space. But due to space communication with other spaces in total efficiency is better than the other mosques patterns. a total of four Eyvan mosques pattern due to the increased level of communication spaces with each other, flexibility and permeability is there more space and thus it tends to facilitate the movement of worshipers in the mosque is different spaces finally, with regard to the importance of the porch to improve the operation efficiency of mosques, you can mosque pattern layout of four porches due to its superior performance to other mosques patterns used in the construction of mosques today.

**Keywords:** Mosque, Eyvan, Operational Efficiency, Space Syntax.

