

Impact Factor:

ISRA (India) = 6.317
ISI (Dubai, UAE) = 1.582
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 3.939
ESJI (KZ) = 8.771
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2022 Issue: 09 Volume: 113

Published: 28.09.2022 <http://T-Science.org>

Issue

Article



Islambek Halikovich Davletov

Tashkent Architectural and Civil Engineering Institute
researcher

Elyor Shokirovich Kurbanov

Tashkent Architectural and Civil Engineering Institute
researcher

Nodir Ergashevich Rakhimov

Tashkent Architectural and Civil Engineering Institute
researcher

Shohabbos Muradulla ugli Juraev

Tashkent Architectural and Civil Engineering Institute
researcher

Utkir Abdishukurovich Oltiyev

Tashkent Architectural and Civil Engineering Institute
researcher

MODERN MAINTENANCE MODEL FOR MULTI-STOREY BUILDINGS

Abstract: The article presents suggestions and a model for improving the service of multi-apartment houses. High-quality maintenance of high-rise buildings, the creation of all amenities for apartment owners gives beauty to the city. The model presented in the article provides constant control over the activities, expenses and other types of services of the construction and operational organization. The main purpose of the model presented in the article is to eliminate problems on the first and last floors of the building, increase control over the funds paid by apartment owners for services by apartment owners, as well as increase competition between construction organizations.

Key words: Apartment buildings, multi-apartment housing stock, residential buildings, non-residential buildings, housing management, homeowners' association, homeowners, direct management, management organization, model, algorithm, database, repair and restoration service, public-private partnership.

Language: English

Citation: Davletov, I. H., et al. (2022). Modern maintenance model for multi-storey buildings. *ISJ Theoretical & Applied Science*, 09 (113), 142-144.

Soi: <http://s-o-i.org/1.1/TAS-09-113-27> **Doi:**  <https://dx.doi.org/10.15863/TAS.2022.09.113.27>

Scopus ASCC: 3300.

Introduction

Modern construction is developing in Uzbekistan, that is, the construction of high-quality and smart houses. But today's high-rise buildings, as you know, are of poor quality. Currently, multi-storey buildings are provided by a homeowner company. This service should be improved for multi-apartment buildings and building utilities. This article presents proposals and models for providing quality building services.

According to the results of the study, the shortcomings of multi-storey buildings belonging to the association of owners of single housing were revealed.

- appearance of multi-storey buildings is not repaired;
- despite the provision of heating for multi-storey buildings, the level of heating of houses is unsatisfactory;

Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

- problems in the roofing parts of multi-storey buildings;
- humidity of the basement of multi-storey buildings;
- maintenance of playgrounds around apartment buildings and a number of other similar problems.

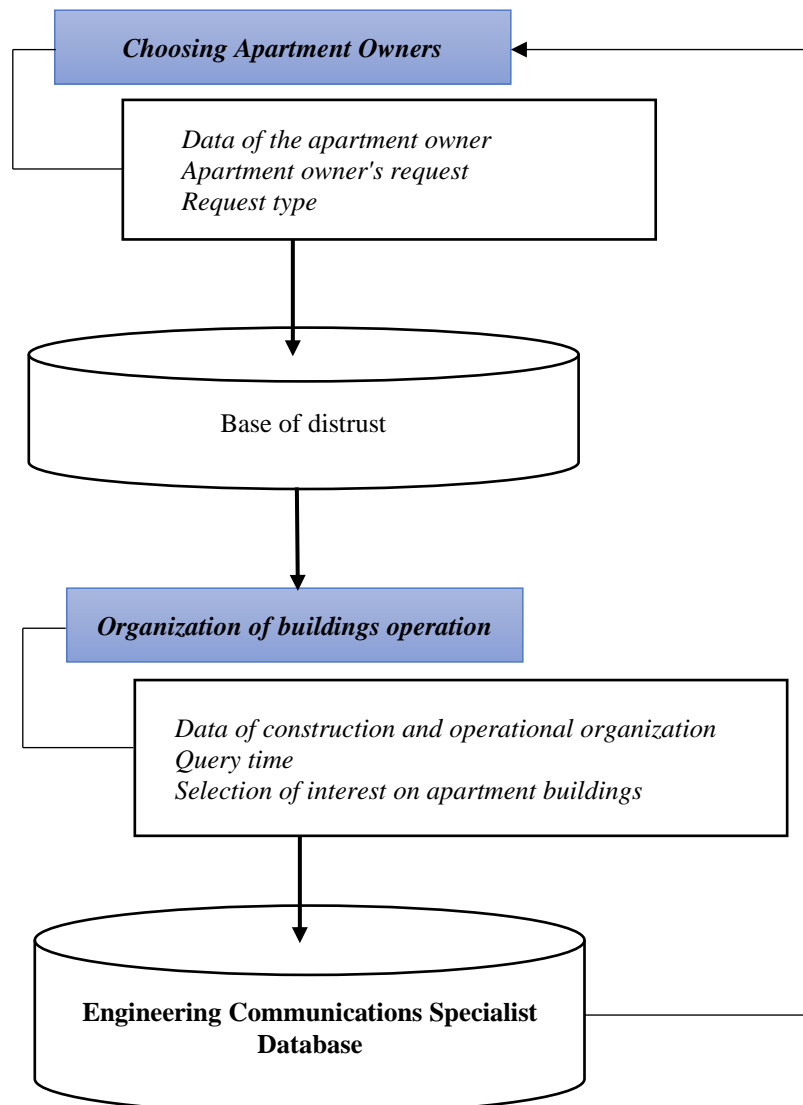
To overcome these disadvantages, there are fixed utility bills for each apartment. Using these means, you can easily solve the shortcomings of each house. But there are several reasons why this is not happening.

We present a model and proposals for the elimination of defects and maintenance of apartment buildings.

- create a system for organizing the construction service and attach houses to it in all regions based on samples;

- online selection of a construction organization once a year based on the choice of the owner of an apartment building;
- creation of a database of construction and service organizations and their connection to the housing database;
- increase in the number of construction and service organizations as a test and create competition between them;
- use engineering communications specialists by setting a number of requirements for the organization of building maintenance and displaying wages in the system;
- the creation of databases of engineering communications specialists serving apartment buildings and the creation of conditions for their work through requests based on this;
- take control of corridors from one building to another and repair them with modern materials;

Picture 1. Main multi-storey building maintenance model



Impact Factor:

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	ПИИИ (Russia)	= 3.939	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.771	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

From these proposals it can be seen that the competition between construction and service organizations for the addition of houses to themselves and the high-quality service of them during the year easily overcomes the above disadvantages. Owners of apartments, based on these tariffs, form their funds monthly at the expense of a house-operating organization. Only then will the problems of apartments on the top floor and apartments on the first floor be solved. The corridors around the apartment buildings from the first house to the second house will be created from modern building materials, and thus the corridors of neighboring houses will become safe corridors for children.

The main function of construction and service organizations is to advertise their services and receive offers, earn interest on apartments per house, then receive service applications and send them to specialists, send an application from specialists to the owner of the apartment and perform the service. The assignment of apartment buildings to a construction organization is carried out according to a system based on the percentage of households that chose a construction organization, that is, the most selected

construction organization. On this basis, competition arises between construction service organizations, and the very origin of this competition testifies to high-quality service.

Conclusions.

The article, written on the topic of the model of the information system for controlling funds allocated for the repair of apartment buildings, shows the control of funds, and this article shows the model of providing high-quality services to buildings. The purpose of this is to monitor the current multi-storey building and introduce high-quality service. Buildings and their surroundings add beauty to the city.

We offer the above model of the information system for monitoring the targeted use of funds of apartment owners focused on the overhaul of apartment buildings.

In conclusion, it is important to note that apartment owners will be aware of utility bills and debt information, as well as how much of the house is being renovated and when, and will also receive information about replenishment of funds and payments during the repair process.

References:

1. Davletov, I.H., & Temirov, D.A. (2018). Some problems in the system of servicing the apartment housing stock in the country. *Economy and finance*, Tashkent, No. 10 (118), pp.25-31.
2. Davletov, I.H., Kurbonov, E.S., Rakhimov, N.E., & Juraev, S.M. (2021). Model of information system for managing funds, repair and operation of apartment buildings. *Vestnik of Science and Practice*, 2021.
3. Saidov, A.A., & Usmanov, J.T. (2017). Algorithmic design model based on data, customs control of cargo at regional railway terminals. *Problems of computational and practical mathematics, gram*, Tashkent, No. 6 (12), pp. 68-71.
4. Bucon, R., & Czarnigowska, A. (2021). A model to support long-term building maintenance planning for multifamily housing uly 2021. *Journal of Building Engineering*.
5. Geipele, I. (n.d.). *Different Approaches to Building Management and Maintenance Meaning Explanation, Procedia Engineering*.
6. Ettaye, G., El Barkany, A., & Elkhalfi A. (2017). Modeling and Optimization a Production/Maintenance Integrated Planning, January 2017. *International Journal of Engineering Research in Africa*.
7. Hossam, H. (n.d.). *Elborombaly*.
8. (2003). *Ain Shams University, Methodology of maintenance for the modern buildings*, Conference: The third international conference of EL Fayoum-2003At: EL Fayoum-2003.