



Technological Equipment of Modern Kitchen

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ABSTRACT

The article discusses modern trends and trends that are intertwined and create high-tech kitchens. The main types of technological equipment with characteristic elements are determined. Such qualities as functionality and ergonomics are emphasized for a comfortable stay in the kitchen space.

Keywords:

Automation, Device, Technology, Convenience, Security, Economy, Video Surveillance.

Introduction

It is impossible to imagine a modern house or apartment without automated devices. Technological advances do not stand still - today a new generation of smart systems is being developed called convenience and, most importantly, home security called 'smart home'. One of the most important rooms in a smart home is the kitchen. Convenience, comfort and, most importantly, time-saving "smart boiler", "smart refrigerator", "gas stove", "smart table".

The relevance of the research topic of "smart kitchen" is due to the high potential for its development and the lack of uniform standards for devices included in these systems [1].

A smart home is a smart system that allows you to bring lifestyle efficiency to a new level of



Figure 1. Modern technologies.

well-being consisting of systems integrated into a new information space in order to

reduce the cost of operating services and operating costs. In other words, "smart home" smart systems are the digitization of home appliances, combining them into a single network capable of automatically storing optimal parameters and changing them with a remote control command [2].

The concept of "smart home" emerged in the United States in the 1970s, with a sophisticated system with a single control panel serving as the basic concept. The modern concept of a "smart home" is defined as a set of management systems that respond to human and environmental availability.

Smart kitchen trends have been developed to make the most of this multifunctional room.

Analysis of the Relevant Literature

Women spend most of their time in the kitchen, and one of the rooms we need the most is the kitchen. Over time, various technologies are being developed to improve and facilitate people's lives, and among these technologies, the presence of many unique devices for the kitchen, of course, makes us women happy. As the kitchen is one of the most functional rooms, we demand a lot from it. As a result, today's smart kitchen designs have evolved into today's smart kitchen designs that involve many technological wonders. Imagine if you could adjust the kitchen light to the sunset, or control the temperature and time in your oven with your phone ... A high-tech kitchen can help us with many tasks and even add to the food list He remembers that he had to eat.

Thanks to artificial intelligence and other technologies, our devices are becoming smarter. IoT or Internet networks built with sensors and software to connect and transmit data over a wireless network. Combined with our smartphones, LCD displays and user-friendly interfaces for a variety of applications, IoT technology makes kitchen appliances easier, cheaper and more fun to use!

Here are a few examples of how home appliance manufacturers make kitchens smarter.

LG's HomeChat function manages its devices via SMS. For example, when you type "I'm going on vacation" on your home appliance, the

refrigerator can automatically switch to power saving mode. The oven may even respond to say you miss it!

GE's SmarthQ app allows users to control their ovens and monitor their cooking status from another room via voice control on your smartphone or using Amazon Alexa or Google Assistant. A smart kitchen can teach you new recipes, cooking techniques, and even time-saving tips.

However, like all home-connected technologies, you need to have a stable Wi-Fi connection to work flawlessly.

Smart devices save money on groceries For example, smartphone apps instruct housewives to cook meals through a video screen installed in the refrigerator based on what's in the fridge so food doesn't fall into the trash. Refrigerators can be so smart that you ask your fridge, "What can I do for dinner tonight?" you may ask. You will be offered a list based on the items in your refrigerator and a few basic kitchen utensils. The refrigerator can be equipped with LCD displays that can control the temperature via Wi-Fi. Smart home appliances give us flexible ways to stay in touch with our kitchens without having to be near the stove.

Smart technology saves more money and water!



Figure 2. Smart refrigerator.

The largest energy consumers in American homes are heating and air conditioning systems. Today, you can have the features of energy-saving technology integrated into every function of your home appliances.

If you are planning to renovate your kitchen or want to try out some smart kitchen features, you can start by adding sensors, smart gadgets

and other appliances to your old kitchens. For example, easy attachments include kitchen faucets equipped with a motion sensor that senses the presence of hands and automatically turns on and off to save water. Or you can select a touch function to control the water flow a little more.

Connected home appliances allow you to run your smart washing machine and dishwasher at the lowest cost of electricity. With built-in sensors, your dryer automatically adjusts rotation times to help reduce energy consumption, and automatically shuts off when clothes are dry.

Manufacturers of smart kitchen appliances

On voice-controlled devices like Amazon Echo and Google Home, you can find a variety of appliances, such as cookware, pots, pans, coffee pots, water heaters, ovens, and dishwashers, controlled via digital help apps.

The manufacturers listed above are fast innovative technologies to replace kitchen appliances in the residential and commercial markets. You can find products such as Smart refrigerators that turn on Wi-Fi / Bluetooth, smart dishwashers, smart cooking pads, and smart microwave ovens [3].

Smart boiler device. On this device, you place the products in a row and press a button to set the time for each product to be loaded and ready. The rest is done by the boiler itself. All you have to do is pour the food on the plates.

I don't think it's worth mentioning the dishwasher, because it's been around for a long time.

Smart refrigerator. LG CES 2021 The newest LG refrigerator can open its doors via voice command, and there is also a new oven. The new LG InstaView range is the company's smartest model. It has Air Sous Vide, Air Fry mode and InstaView panel. 6.3 cu. ft. takes the InstaView feature from the LG cooling line and applies it to your oven window. The inside of the oven has two quick knocks for easy viewing. The range also includes LED backlit buttons for a futuristic look and can be preheated and remotely monitored via LG's ThinQ app.

Desktop. The desktop is placed at a distance of 90 cm parallel to the gas stove. This table is

made of semi-tinted glass on each side and transparent glass on the top. These windows allow you to easily see the products inside.

The project also envisages a separate zone for children in the kitchen. As mentioned above, women who work and have young children worry about where their children are when they cook dinner, and they don't even know how to cook when they are imaginary children. There are two ways to handle this [4].

1. Install a camera in each room of the house and monitor it in the kitchen through a convenient TV set;

2. Organize a play area for children in the kitchen

all the equipment that is interesting will be placed, from which the child will not be able to go anywhere without the mother's consent. This area is specially designed and can be controlled by telephone when not needed, and can be assembled in a special way and raised to the ceiling and used as one of the ceiling decorations.

Conclusion

Today we live in an age of high technology. There are almost all the amenities for a person to live well, and it requires a little money. As with any development in the industry, there is a lot of innovation in housing. In this society, both men and women have an equal right to live well, and given that women spend most of their time at home, especially in the kitchen, it is important to create a comfortable and easy living environment for them. 24 hours a day, of which an average of 8 hours goes to sleep, 8 hours to work, and the remaining 8 hours in the morning to prepare breakfast. There is no time to rest. What if the kitchen is equipped with smart appliances? Women have more invisible responsibilities than men. These include housekeeping, cleaning, cooking, raising children, and, if necessary, working in government-owned enterprises. Moreover, the poor woman does not have time to look after herself, she is tired, and as a result, we see that she is suffering from various nervous disorders, some family disputes, divorces. If the house is equipped with modern technology, that is, smart technology one can also find time

to look after oneself, give special affection to one's children, and engage in other hobbies that one enjoys.

References

1. Oparina L.A. Ivanovo viloyatida "aqli uy" kontsepsiyasini ishlab chiqish uchun tashkiliy-iqtisodiy mexanizmni ishlab chiqish // Rossiya bozor iqtisodiyoti sub'ektlarining iqtisodiy va ijtimoiy muammolari Genezisi. - 2015. № IX. S. 90-92;
2. Polychuk E.I. YAKKA YASHASH UY UCHUN "SMART HOUSE" TEXNOLOGIYALARI // "Talabalar ilmiy forumi" XI Xalqaro talabalar ilmiy konferentsiyasining materiallari URL: <https://scienceforum.ru/2019/article/2018015646> (kirish sanasi: 17.03.2019).
3. Mannopova, Nilufar Ravshanovna. "Umumiy ovqatlanish muassasalari interyerlari muhitini tashkil etish va unda zonalashtirishning ahamiyati." Барқарорлик ва етакчи тадқиқотлар онлайн илмий журнали 2.2 (2022): 186-191.
4. Rasul-Zade, L. U., Salimugli, E. S., Amriddinovich, A. D., & Khamroevich, T. J. (2021). About scale, proportion and image in architecture on the example of the order system. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(11), 284-293.
5. Amriddinovich, A. D., Ziyodullayevna, S. U., Bahromovna, G. S., & Abduhabirovna, S. D. (2021). Architecture of historical cities of Uzbekistan. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(12), 443-445.
6. Saidkhonova, Umida Ziyodullayevna, et al. "Problems in tourism in uzbekistan." *ACADEMICIA: An International Multidisciplinary Research Journal* 11.11 (2021): 256-258.
7. Мансуров, Я.М. (2022). Бугунги кун театр биноларини замонавийлаштириш масалалари. *Zamona viy dunyoda tabiiy fanlar: Nazariy va amaliy izlanishlar*, 1(7), 66-72.
8. Sultanova, Muhayyo. "Use of Cultural Plants in Desert Cities in Creating the Landscape of Recreation Zones in Uzbekistan." *International Journal on Orange Technologies*, vol. 2, no. 10, 20 Oct. 2020, pp. 102-104, doi: 10.31149/ijot.v2i10.738.
9. Dobronravova E. A., Vetlugina A.V., Gadaeva Sh.B. «Medico-ecological phitodesign in landscape design». *Design Engineering*. ISSN: 0011-9342 | Year 2021 Issue: 8 | Pages: 3205 – 3212. www.thedesignengineering.com/index.php/DE/article/view/5262
10. Adilov Z.H., Mirjalolov D.T., Komiljonov M.S., Mirjalolov N.T., Tadjibaev J.H. // *Effective Organization Of Landscaping In The Republic Of Karakalpakstan*. Volume 6, ISSUE 11, November 2019. pp. 11930-11932. <http://www.ijarset.com/volume-6-issue-11.html#>
11. Matniyazov, Z.E., Farxatova, Z.X. (2021). The Principles of Formation of a GYM in Modern Multi-Storey Residential Buildings. *International Journal of Innovative Analyses and Emerging Technology*, 1(7), 115-119. <http://openaccessjournals.eu/index.php/ijiaet/article/view/857>
12. Khasanov, Azamat. "Organizing Eco Tourism Along With Uzbek National Automagistrale Way." *Solid State Technology* 63.6 (2020): 12674-12678.
13. Tajibaev, J. K. (2022). Use of Small Architectural Forms in Greening Public Places of Historical Cities (On the Example of Khiva). *Eurasian Journal of Engineering and Technology*, 4, 107-114.
14. Mannopova N.R., Kamolkhodjaeva M.B. Features of designing interiors of restaurant establishments // *Asian*

- journal of multidimensional research. - 2021. - T. 10. - №. 4. - C. 711-715.
15. Saidov, Abdumalik. "Features of landscape design for 9-floor residential buildings." *ACADEMICIA: An International Multidisciplinary Research Journal* 11.11 (2021): 268-272.
 16. Matniyazov, Zafarbek Erkinovich. (2020). "Invitation projects for architectural routes architectural environment", *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(6), pp. 8154 - 8164. Available at: <https://archives.palarch.nl/index.php/jae/article/view/2221>.
 17. Matniyazov, Zafarbek Erkinovich. (2020). "Cultural and Cognitive Aspect and Factors Influencing the Organization of the Aralsea Region Tourist Routes", *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(6), pp. 8139 - 8153. Available at: <https://archives.palarch.nl/index.php/jae/article/view/2220>.
 18. Reyimbaev Shukhrat, Adilov Zarif, Matniyozov Zafar. (2021). Role of the design code in improving the quality of the urban environment. *ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL*, 11 (1), pp. 1805 – 1812
 19. Z. Adilov, Z. Matniyozov, A. Vetlugina, D. Xudoyarova. (2020). "Educational buildings solutions for typical landscape design", *International Journal of Scientific and Technology Research*, 9 (4), pp. 2825-2828
 20. Matniyazov, Z.E., Eshnazarova, S.Z. (2021). Hagia sophia as a synthesis of the types of Byzantine temple architecture and an example of the Byzantine building culture of the IV-VI centuries. *Asian Journal of Multidimensional Research*, 10 (8), pp. 294 – 297.