

# Online Household Services For Electronic Devices

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**Abstract-** Online household services for electronic devices have revolutionized the way homeowners maintain and repair their gadgets. This paper explores the various types of services available, including appliance repair, computer troubleshooting, smart home device setup, and more. The growing demand for professional assistance in setting up and maintaining electronic devices highlights the importance of these online services in today's digital age.

**Keywords-** Online household services, electronic device repair, appliance repair, computer troubleshooting, smart home setup, professional installation, gadget maintenance.

## I. INTRODUCTION

Display apartment rentals online using shop workflows or virtual showrooms. Last but not least, to convince stakeholders, digital remodeling projects should describe the economics of the project and the intended benefits and potential risks during and after its implementation. In other words, every digital transformation project must report on the return on investment using different evaluation methods and key financial performance indicators, taking into account possible risks while they measure possible derived qualitative value benefits such as customer engagement, customer satisfaction, internal efficiency, learning and innovation [1].

As for house rental equipment, in order to remain competitive, their most important challenges are flexible production, quality production, procurement cost optimization and inventory management. Commercial companies are interested in tracking product purchase prices, paying attention to logistics and customer service costs. Therefore, these types of companies are challenged to optimize the purchase of products, customer service during and after the purchase process, and fast delivery of goods [2].

Technology may replace low-wage jobs, but it creates other high-skill jobs. For example, this technology eliminates drivers at gas stations, but creates other quality jobs in the design, implementation and maintenance of automatic gas pumps. In addition to emotional engagement, people need to excel at what technology cannot do well, ie. creative and critical thinking, innovative thinking, people management, diagnosis and manual dexterity like plumbers,

electricians, lawyers, scientists, entrepreneurs, inventors, etc. But technology can also help them do their jobs better and increase productivity. In addition, digital technology is responsible or creates completely new jobs or, for example, opened Pc Component, a leading computer electronics store in Spain [3]

Industries such as entertainment and retail have implemented or strengthened their digitalization due to large losses due to the COVID-19 pandemic. Overall, especially during the lockdown, online shopping and home delivery has experienced unprecedented growth. As a result, thanks to digitization, some companies have turned the threat of the COVID-19 epidemic into an opportunity, certainly increasing their business volume. For example, the New York Times recently reported, or for the first time in history, that its digital revenue exceeded that of a print newspaper[4]

In addition, the digital economy has led to an increase in the number of digital startups in incubators, universities and science parks during the last decade. These startups have the culture and skill set to take advantage of digitalization, even though they have less business experience. In contrast, established "analog" companies, although having extensive business experience, may be severely limited by organizational structure, culture and values. Therefore, while digital startups need to build a new business, established companies need to plan their business digitally in house rental [5]

## II. LITERATURE SURVEY

According to Randal J Thomas et al., 2019 Previous randomized trials have provided weak to moderately strong evidence that HBCR and center-based CR can achieve similar improvements in clinical outcomes at 3–12 months. Although HBCR appears promising for expanding the use of CR to eligible patients, more research and evidence projects are needed to clarify, strengthen, and expand the evidence base for HBCR to key subgroups, including older adults, women, underrepresented minorities, and others. for risk groups and unstudied groups. Meanwhile, we conclude that HBCR may be an acceptable alternative for selected clinically stable patients order[6]

According to **R Niranjana**.et al.,2022 A smart house may be one of the most important features of the Internet of Things. In this paper, we provide an affordable, useful, IoT-based home automation system. Blynk ASCII text file IoT server supports this technology. In our article, the Esp32 module can connect the server to the Internet, allowing the use of all connected home devices. There is a relay between the esp32 and the electrical equipment that controls the 230 volt equipment by connecting some low voltage from the esp32 [7].

According to **Nina Olinder**.et al.,2021 article focuses on consumer preferences for so-called smart homes (also known as smart houses), a new addition and product of the ongoing digitization and adoption of the Internet of Things (IoT). . The main scientific contribution of our study is an empirical model based on data from an online survey of randomly selected respondents (N = 523) from four European Union (EU) countries and Russia [8]

According to **Yanqin Yang**.et al.,2022 Systems have been developed to implement smart home buildings and personal healthcare. These advanced devices can be classified into environmental devices and mobile devices based on their usage scenarios, enabling motion tracking, health monitoring, daily care, home automation, fall detection, intelligent communication, assistance, life comfort and security in smart homes. Due to the rapid proliferation of such advanced devices and IoT systems, achieving fully self-sufficient and multi-mode smart systems is increasingly important to realize a sustainable and comprehensive smart home platform [9]

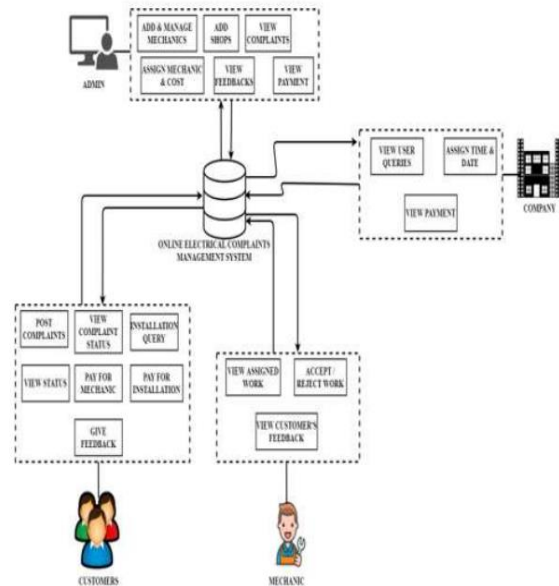
According to **Syed M Hasan**.et al.,2021 PSLM is a nationally representative household survey that includes comprehensive information on work outcomes, children's educational attainment, and Internet and computer connections and past use. Adapting the approach of Dingel and Neiman [2020], we define the feasibility of working from home based on the percentage of tasks exchanged online and taking into account internet accessibility. We also identify opportunities for students to study at home through television or internships [10]

### III. PROPOSED SYSTEM

Our proposed system aims to streamline the process of accessing and scheduling online household services for electronic devices. Utilizing a user-friendly platform, homeowners can easily browse through a range of services, select their specific needs, and book appointments with certified professionals. The system will feature an integrated rating and review system to ensure quality and reliability, as

well as real-time tracking of service providers for transparency and accountability. Additionally, personalized recommendations based on user preferences and past interactions will enhance the user experience, making it easier for homeowners to maintain and repair their electronic devices with confidence and peace of mind.

### IV. ARCHITECTURE DIAGRAM



#### EXPLANATION:

##### 1.User Interface (UI):

This is the front-end component where users interact with the platform. It includes web pages, mobile apps, and user-friendly interfaces for browsing services, selecting options, and making requests.

##### 2.Application Server :

The application server serves as the middle layer that processes user requests, handles business logic, and interacts with the database. It manages service requests, schedules appointments, and coordinates communication between users and service providers.

##### 3.Database :

The database component stores all the essential data related to users, service providers, electronic devices, service requests, appointments, and transactions. It ensures data integrity, availability, and security.

##### 4.Service Provider:

This component represents the professionals or technicians who offer repair, maintenance, installation, and troubleshooting services for electronic devices. They register on the platform, update their availability, and communicate with users to deliver services.

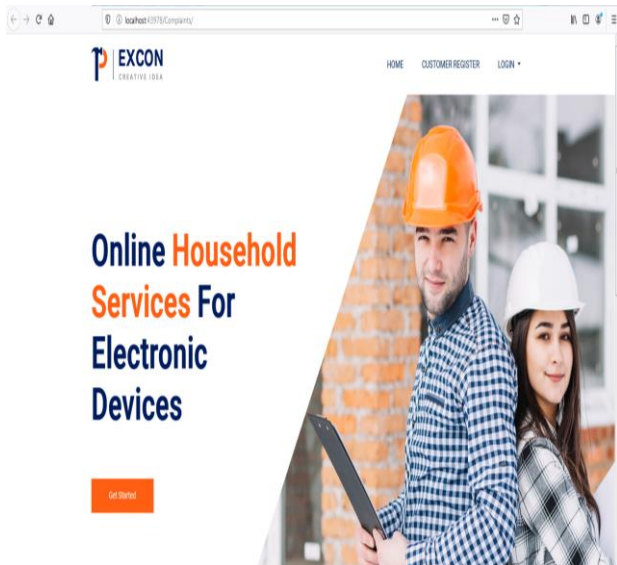
**5.Payment Gateway:**

The payment gateway facilitates secure online transactions between users and service providers. It handles payment processing, verifies transactions, and ensures the confidentiality and integrity of financial data..

**6.Notification System:**

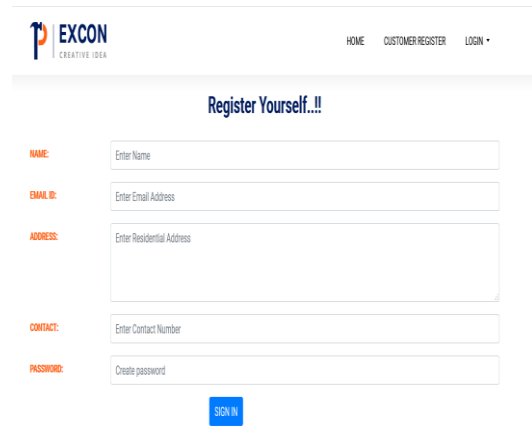
The notification system sends real-time updates, reminders, and alerts to users and service providers regarding service requests, appointments, and other important information.

**V. RESULTS AN DDISCUSSION**



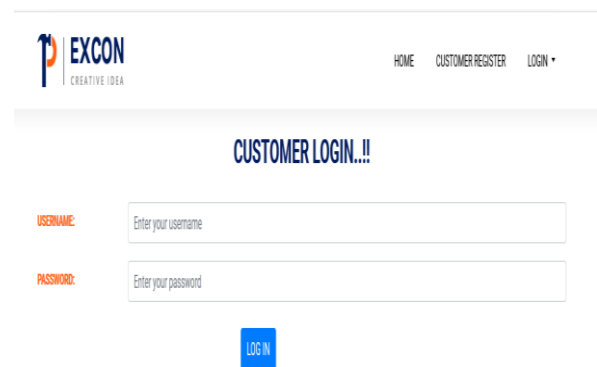
**FIGURE.1**Homepage

The home page serves as the initial interface for users visiting the online household services platform. It is designed with a user-friendly layout, featuring clear navigation menus, prominent call-to-action buttons, and visually appealing graphics. The home page effectively communicates the platform's services, making it easy for users to understand the offerings and proceed with their desired actions.



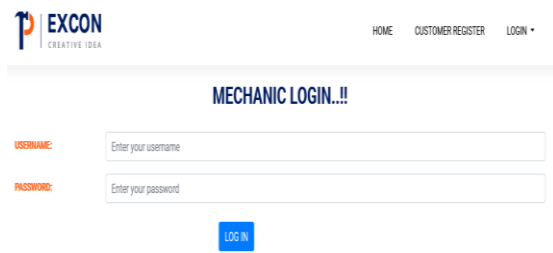
**FIGURE.2** Customer Register

The customer registration page is crucial for onboarding new users to the platform. The figure illustrates a streamlined registration process, requiring essential information from customers to create an account. The registration form is well-organized, with clear instructions and validation checks to ensure data accuracy. Overall, the registration page appears to be user-centric, facilitating a seamless onboarding experience for new customers.



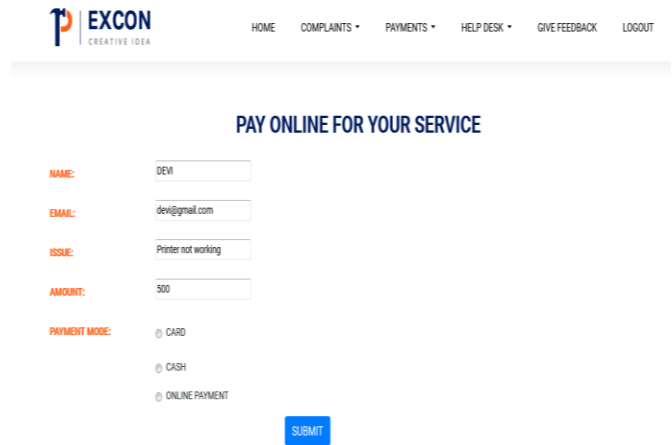
**FIGURE.3**Customer login

The customer login interface is designed to provide secure access to registered users. The figure showcases a straightforward login form, where customers can enter their credentials to access their accounts. The login page incorporates security measures such as CAPTCHA verification and password encryption to safeguard user data. The intuitive design and efficient functionality of the login interface contribute to a secure and user-friendly experience for customers.



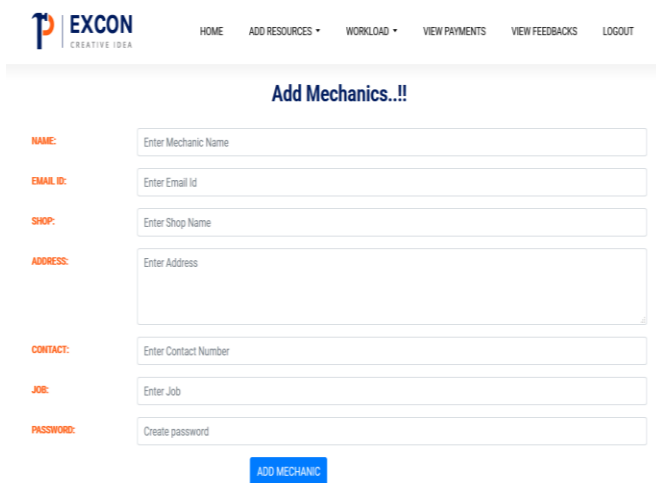
**FIGURE.4 Mechanic Login**

The mechanic login page is tailored to cater to the needs of service providers or mechanics associated with the platform. The figure presents a dedicated login portal for mechanics, where they can enter their credentials to access their work dashboard.



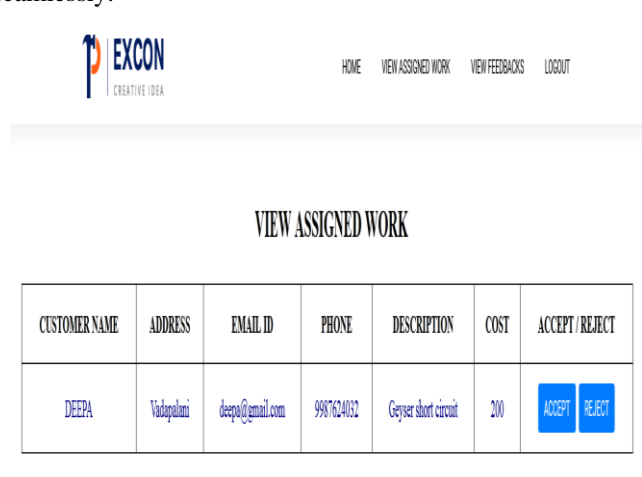
**FIGURE.6 Payment**

The payment interface is a critical component of the platform, facilitating secure and convenient transactions for services rendered. The figure illustrates a secure payment gateway, where customers can choose their preferred payment method, enter billing details, and complete transactions seamlessly.



**FIGURE.5 Add Mechanic**

The 'Add Mechanics' feature is essential for platform administrators to onboard new mechanics or service providers. The figure demonstrates a user-friendly interface for adding mechanics, where administrators can input relevant details, such as name, contact information, and expertise areas. Friendly interface, administrators can easily input, validate, and maintain accurate bus details, ensuring timely updates and compliance with regulatory requirements.



**FIGURE.7 View Assigned Work**

The 'View Assigned Work' feature enables customers and mechanics to monitor and manage their respective tasks effectively. The figure showcases a comprehensive dashboard displaying assigned work orders, status updates, and relevant details for easy tracking and communication. The feature is designed with user-centricity in mind, offering filters, search functionality, and notifications to streamline workflow management and enhance productivity for both customers and mechanics.

**VI. CONCLUSION**

The rise of online household services for electronic devices has provided homeowners with convenient and reliable solutions for maintaining and repairing their gadgets.

Whether it's a malfunctioning appliance, a computer virus, or a smart home device setup, professional assistance is just a click away. As technology continues to advance and become an integral part of our daily lives, the demand for these online services is expected to grow further, emphasizing the need for continuous innovation and quality service in this sector.

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