A Survey of on Demand Home Services

Arya Gothankar¹, Nikhil Yadav², Abhishek Animesh³, Umesh Rautgol⁴, Prerana Kulkarni⁵

Students, Department of Information Technology and Engineering¹,²,³,⁴
Assistant Professor, Department of Information Technology and Engineering⁵
Pillai College of Engineering, New Panvel, Maharashtra, India

Abstract: The On-Demand Home Services Platform has emerged as a game-changer in the service industry, providing customers with convenient access to a wide range of home services. This platform utilizes technology to connect customers with vetted service providers, offering quick and reliable service bookings. With its user-friendly interface and seamless transactions, the On-Demand Home Services Platform is revolutionizing the way people seek and receive home services, making it a popular choice for busy individuals in need of efficient service solutions.

Keywords: On-demand technology, on-demand economy, service network, opportunity for new startups, On-demand services, Access economy, Service on-demand

I. INTRODUCTION
In the present state, businesses operating in the on-demand economy are an extension of conventional services repacked in new modes of delivery and accommodating a wide range of users (Chesbrough, 2013; Juggernaut, 2016). The phrase On-Demand refers to the economic opportunity and activities developed by technology-driven companies to fulfill consumer demand via the immediate supply of goods and services (Patel, 2016). The supply side of on-demand technologies is programmed via an intuitive and efficient digital layer existing on top of infrastructure networks. Such methods are not only efficient but revolutionary, as they provide fast and effective solutions to everyday problems. Start-ups using the on-demand business model have made fortunes overnight using on-demand technology. However, there are a sufficient number of problems and unidentified success of on-demand technologies, some constant security challenges inherent to mobile-based technologies have been identified. The issues raised in many international circles over on-demand mobile services adoption is safety and security.

II. MARKET ANALYSIS
The on-demand home service sector has witnessed substantial growth and competitiveness. In this section, we analyze the size, growth trends, and competitive landscape of the market. By examining market statistics, adoption rates, and customer satisfaction levels, we gain insights into the market's potential and challenges.

III. SERVICE CATEGORIES AND BUSINESS MODELS
On-demand home service platforms offer a wide range of service categories and employ different business models. This section

IV. USER EXPERIENCE
User experience and customer satisfaction play a crucial role opportunities that are waiting to be exploited (Burson-Marsteller, 2016; Giri & Singh, 2014). Despite the success of on-demand technologies, some constant security challenges inherent to mobile-based technologies have been identified. The issues raised in many international circles over on-demand mobile services adoption is safety and security.

V. CHARACTERISTICS
Weinman (2012) discusses the economic value of on-demand services for the customer and argues that “on demand” implies that the customer can be allocated the “right quantity of resources at the right time for the right amount of time at any given time” and where only the actual usage of resources is priced. Chen and Wu (2013) also discuss “on-
demand” from the adopting firm’s perspective to describe the procurement of (mostly IT) externally owned resources with usage-based pricing. They argue that on-demand services offer customers direct and unlimited access to resources as they would have through owning them, but with different cost structures, which change from mostly fixed costs to variable costs. Similarly, Künsemöller and Karl (2014) argue that on-demand computing provides capacity for processing and storage similar to a physical server owned by the customer, but that fees only apply when the capacity is used, which corresponds with the usage-based pricing argued by Chen and Wu (2013) and Weinman (2012) in the success of on-demand home service platforms. In this section, we discuss the key factors that contribute to a positive user experience, such as convenience, service quality, pricing, and communication. Additionally, we highlight the strategies employed by platforms to improve user experience and foster customer loyalty.

VI. TECHNOLOGICAL INNOVATIONS
Technological advancements have been instrumental in shaping the on-demand home service industry. This section explores the role of mobile applications, artificial intelligence, and data analytics in enhancing service delivery and user experience. We also discuss emerging trends, including Internet of Things (IoT) integration and virtual reality (VR) applications.

VII. OPERATIONAL CHALLENGES
On-demand home service projects face various operational challenges that can impact their success. This section identifies common challenges, such as supply-demand imbalance, quality control, and trust and safety concerns. We explore the strategies employed by platforms to overcome these challenges and examine the role of regulations and policy frameworks in ensuring fair and ethical practices.

Further process is preceded to the next module where the customer needs to pay for the services opted. It is done through an external payment gateway which guarantees a secure and safe transaction. Once the payment is done, a confirmation acknowledgement is forwarded to the user about all the details of services opted and also an onsite confirmation is displayed on the website. When the service is booked and confirmed, service men from our organization will reach you to deliver the service.

The idea proposed in this paper is one among the new innovations where it reduces the trouble for customers to search for the labors and avoids form bargaining to get the profitable services to be done. Once the service is completed our customers are requested to rate the overall service done by our professionals and asked for any valuable feedback or improvements to be done in providing a better service. If the customers are unsatisfied with the service provided then with some valid reasons a return policy is approved, or a re-service may be done to make you feel convenient with our service.

7.1 Use Case diagram for the proposed model
The Proposed system involves three actors which include a Admin, Service provider, and a Customer. Admin has the beginner rights to access and modify the website where he/she needs to login to do so. Then next to admin comes the customer who wants avail our services should precede with the registration and login process. If required a customer can upload a file that describes about the services. Once the request has been done then he can forward it to payment process and to confirm service after the service has been done a customer can rate the service. And in worst case if the customer is not satisfied with the service they can move with the return policy process. At last a service provider who is the one who provides a service, where they should also go with the registration and login process and they should proceed with files uploaded and once the service is confirmed they are intimated to provide the service and when done after service if the customer is unsatisfied with it based on the customers review if required they should provide the re-service.
Figure 1: Workflow of Proposed model

Figure 2: Use Case diagram

VIII. CONCLUSION

Convenience and cost-saving has attracted lots of consumers and end users to use the “on-demand” services. This has led to the rapid growth of “on-demand” startups and also the emergence of new “on-demand” startups in various
sectors. However, there are two main challenges to the development of “on-demand” startup. Those are legal challenges and security challenges. The rising number of “on-demand” startups also will play a vital role in shaping sustainable solutions. We have reviewed prior research studies of “on-demand” startups and their future potential and opportunities in this paper. Based upon that review, it can be concluded that there are five unseen opportunities that new and current companies can leverage to create an on-demand economy. Those are real time technology, background history and capability, interactive maps, pricing, and distance-wise priority. We also found that current and future “on-demand” startups will provide services in over 10 sectors in our society varying from transportation and logistics, travel and tourism, food delivery, health care, real estate, home services, pet services, etc.

IX. FUTURE SCOPE
The online household services application provides some of the home services which are most frequently used. This system accommodates the changing needs of the end user. The overall system can be designed so that its capacity can be increased in response to the further requirements for which the application provides an appropriate service overseas. Further this application can be prolonged by merely adding up the required services and additional payment systems. For example, the current system provides the following services such as home painting, home cleaning, packers and movers, plumber repair and service further the system can be extended as per the requirements of the user. The system can be prolonged by adding the services such as mobile and computer repair, laundry services, catering services and many more. The discussion payment methods our system has, for example currently the system has online payment by only MasterCard users further it can be extended by adding the payment services for visa users also.

REFERENCES