



PRIVATE BIDDING PLATFORM FOR HOME SERVICES

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Abstract: This proposal presents the development of an innovative software product, the Private Bidding Platform for Home Services. The platform goals to revolutionize the home services industry by streamlining the hiring and bidding process for different services, including plumbing, cleaning, masonry, carpentry, painting, and electrical work. Key features involve user management, job posting, bidding, and transparent communication. Users will register with their contact details and maintain profiles display their preferences and reviews. Job posting functionality will allow users to create detailed listings, while the bidding process will enable service seekers and providers to view available jobs, submit bids, and monitor competition. The platform will also provide detailed job information to job posters, and worker profiles will highlight service providers' expertise and work history. Bid acceptance will be at the carefulness of the job poster, and the platform will classify user notifications for bid updates, job status changes, and messaging. The user interface will be designed for an intuitive and user-friendly experience. Optional features include map service integration, ratings and reviews, secure payment systems, and job history and analytics. The technical requirements include developing a responsive web application with robust user authentication and authorization mechanisms. This platform promises to encourage transparency, efficiency, and convenience in the home services industry.

Keywords- Hiring and Bidding Process, Home Services, User Management, Job Posting, Bidding, Process, Transparent Communication, Detailed Job Information, Worker Profiles, Bid Acceptance, User Notifications, User Interface

I. INTRODUCTION

As a homeowner, finding and hiring local service providers for home maintenance can be a daunting and time-consuming task. Whether it's a plumber, cleaner, mason, carpenter, painter, or electrician, the process can be mired with difficulties such as lack of transparency, difficulty comparing options, and inefficiency.

The traditional methods of finding and hiring local service providers often involve word-of-mouth recommendations, online searches, or using local directories. However, these options have their limitations, such as limited information, unreliable reviews, and limited availability. As a result, the process is often frustrating and time-consuming for homeowners.

In today's technological world, there is a need for a streamlined and efficient process for homeowners to find and hire local service providers. This paper proposes the development and implementation of a Private Bidding Platform for Home Services. The platform will offer a centralized online marketplace for homeowners to post job requests and receive bids from local service providers, making the process efficient and transparent. This paper will outline the key features, optional additions necessary for the successful development and implementation of this proposed platform.

II. LITERATURE REVIEW

Paper Name: An Online Portal for Home-Based Services

Author Name: K. Aravindhan, K. Periyakaruppan

Description: Urban Company, also known as Urban Clap, is an app-based service marketplace connecting users to service professionals. Their goal is to reach as many people as possible, benefiting numerous individuals. In today's fast-paced world, Urban Company aims to provide essential services to customers with a simple click. The company has introduced a contactless payment method, allowing customers to pay through online payment gateways. Founded in 2014, Urban Company currently operates in 30 major cities in India, including Pune, Bangalore, Chennai, and Delhi NCR.

Paper Name: Home delivery services innovations and emerging needs

Author Name: K. Aravindhan

Description: K. Aravindhan and his team have introduced an innovative online platform for home services. What sets this system apart is the inclusion of a "chatbot" feature, designed to assist users in resolving any inquiries they may have. The primary objective of this system is to gather comprehensive information about service providers, enabling customers to promptly avail the services they require.[14]

Paper Name: "MAZDOOR"- Online Application for Household Services

Author Name: N.M. Indravasan

Description: In his research, M. Indravasan noted that individuals are deeply immersed in their demanding work routines. However, when an unforeseen household chore arises, it becomes a distraction from their work. E-Commerce emerges as a crucial solution to this problem by offering a platform that conveniently provides a multitude of services with just one click. To ensure the authenticity of customers on this platform, the authors opted for email verification.

Paper Name: An Online System for Home Services

Author Name: Gunjal Trupti

Description: Gunjal Trupti and her colleagues have made a valuable contribution. Our proposed system functions as a marketplace for household services, providing a platform where rates are standardized and there is no need for price negotiations. The system covers various aspects such as painting, pest control, home

cleaning, plumbing, electrical works, and carpentry services. Its main goal is to create a happy and healthy home environment, satisfying consumers' needs. We strive to offer optimal solutions to all your household troubles, ensuring efficiency, convenience, and a delicate approach. Customers' willingness to pay is strongly and positively associated with the expectation of receiving better services for a fee and the belief in the principle of "pay for what you get."

Paper Name: Android App for Household Services

Description: 1. Household Services are essential for our daily lives. If these services are not provided promptly, it can significantly impact our lifestyle. Therefore, finding a proper solution to these issues becomes crucial. However, in today's fast-paced world, it is challenging for everyone to personally search for service providers and address these problems. This process not only consumes a lot of time but also requires physical effort.

2. This application offers a convenient solution by providing comprehensive information about various service providers that are essential in our daily lives, such as carpenters, plumbers, barbers, electricians, pest control, and more. By using this app, individuals can easily access the details of these service providers without the need to go out and search for them manually.

3. The benefits of this app extend to both the individuals requiring services and the service providers themselves. It simplifies the process for those in need of assistance, while also helping service providers connect with potential customers. This app serves as a valuable platform for bridging the gap between service seekers and providers, ensuring a smoother and more efficient experience for all parties involved.

Paper Name: Design and Implementation of the Home Service Delivery and Management System Based on OSGi Service Platform

Author Name: Taein Hwang and Hojin Park

Description: In this document, we put forward the concept of the digital home service delivery and management system (DSM) as a means to consolidate the servers of home service providers. We outlined the different functional components of the DSM and demonstrated how it facilitates the delivery of home services from providers to users. The DSM, once implemented, has the potential to enhance competition among third-party service providers in the home services market. By utilizing a dependable service aggregator, the service user can access a wide range of services and conveniently receive a consolidated bill for their subscribed services.

Paper Name: Web based System for Domestic Services

Author Name: S Rachitha

Description: The future of Door Step holds immense potential. Numerous improvements can be made to enhance this system. It seamlessly adapts to the evolving needs of the end user. Further functionalities can be incorporated, such as the inclusion of various languages, to cater to regional individuals who may not have a high level of education. Additional payment options can be introduced to facilitate transactions based on user convenience, thereby enhancing its user-friendliness. Moreover, additional services can be added based on customer demands and requirements.

Paper Name: Research on the Impact of Online Shopping Express Service quality on Customer Satisfaction Based on Management Statistics

Author Name: Fangjunru, Lixuewer

Description: The products can be transported to the designated location promptly and with excellent quality. It is recommended that e-commerce opt for a third-party logistics firm that offers reliable services.

Paper Name: At Doorstep: An Innovative Online Application for Household Services

Author Name: Tarun Gariya

Description: There are currently existing applications that offer similar services to assist customers with their service needs and dispatch their employees to customers' homes to resolve issues. However, this is not beneficial for the labourers as these companies utilize their own employees instead of individuals from retail shops or daily-wage labourers. At Doorstep, on the other hand, focuses specifically on this segment of society and aims to eliminate all intermediaries between the customer and the employee/labour. The target audience for At Doorstep is universal. Unlike other apps that only offer limited services depending on the availability of their professional employees.

Paper Name: Website for Home Service Provider

Author Name: Amruta Amol Bhawarathi, Kaustubh Muley

Description: 1. Clients of a system can enjoy the convenience of accessing services through a well-organized mobile environment, enhancing their overall user experience. The main objective of online systems for domestic services is to provide home services with just a single touch, offering a wide range of services in an organized and harmonious manner. Verified users can easily utilize the online system for home services through the website.

2. The information age has ushered in a revolution comparable to the industrial revolution, according to economists and experts. This revolution has brought significant changes to society's economic, social, and cultural aspects. One notable change is the transition from paper-based commercial transactions to electronic-based ones, leading to transformations in economic relationships between individuals, corporations, and governments. This article will focus on the advantages of e-commerce and its impact on the market.

3. Home appliances are essential for household functions, and their maintenance and repair require technical expertise. In today's digital era, online platforms provide convenient access to services such as plumbing, moving, packing, and repairs at the click of a button. A two-way communication platform connects service providers with customers, allowing for skill improvement through a feedback-based rating system. Real-time tracking based on geo-location enables faster service delivery.[11]

Paper Name: Web-Based Service-Providing Platform (Labour Mitra)

Author Name: Manish Rakhewar, Prathmesh Pawar, Kundan Rajput

Description: The case study outlines the challenges faced by a technology company with staffing shortages in its distribution centres. These shortages were caused by high turnover rates and a difficult labour market, resulting in difficulties in meeting customer orders. To address this issue, the company sought a reliable and cost-effective solution to quickly source on-demand labour. They found this solution in GigSmart, a platform

that provided access to on-demand workers within an hour. By partnering with GigSmart, the company efficiently filled gaps in its workforce, allowing them to maintain a competitive edge in the delivery market and meet customer expectations in today's labour market.[5]

Paper Name: Doorstep home services

Author Name: Er. Swati Gurav, Shaikh Aswad, Khan Safiullah, Nagrale Mansi

Description: 1. The paper discusses an online system for household services that offers a range of services such as house cleaning, painting, plumbing, and electrical work. However, it lacks many important services that are in high demand today. The system needs to be updated with modern technologies to improve its speed, efficiency, and ease of use. Additionally, the paper highlights that stand-alone applications are becoming less popular, and users prefer web applications that are lightweight and require no installation.

2. The paper focuses on Easyfix, a web application founded in 2011 and based in New Delhi. It offers home repair, service, and maintenance facilities, but its services are limited to plumbing, electrical work, A/C repair, and carpentry. The website is well-designed and has the qualities of a modern web application. However, the limited services offered by Easyfix are a major drawback. While the application works well on desktop, it may become unresponsive in certain cases. The verification process for service personnel is mentioned on the website, but it is unclear whether it is done through a personal meeting or a virtual process. Despite these limitations, Easyfix has been in the market since 2015 and continues to make progress.

III. PROBLEM STATEMENT

Home services are an essential part of our daily lives, from plumbing and handyman work to landscaping and home cleaning services. With the rise of the gig economy, the home services industry has seen a significant influx of independent service providers. However, the current process of hiring and bidding for these services efficiency, transparency, and convenience, causing challenges for both the service seekers and providers. In this paper, we will discuss the existing issues in the home services industry and propose a streamlined platform that will revolutionize the way users connect with service providers, emphasizing user management, job posting, bidding, and transparent communication.

One of the main problems in the current process of hiring and bidding for home services is the lack of a centralized platform. Service seekers often have to rely on word-of-mouth recommendations or spend hours searching online for reliable service providers. This fragmented approach to finding service providers leads to an inefficient use of time and resources. Additionally, the current process lacks transparency, making it challenging to assess the credibility of service providers. Service seekers may have to rely on incomplete or biased reviews, which can result in subpar services. On the other hand, service providers may struggle to showcase their expertise and skills to potential customers.

Challenges for Service Seekers: For service seekers, the lack of a centralized platform makes it challenging to find and compare service providers effectively. They may have to contact multiple providers individually, gather quotes, and assess their credibility before making a decision. This process can be time-consuming, overwhelming, and may not always result in finding the best service provider for the job.

Furthermore, the lack of transparency in the hiring and bidding process can make it difficult for service seekers to trust the service providers. They may have to take risks and invest time and money in trying out different service providers before finding a reliable one. This uncertainty can be daunting and discouraging for service seekers, leading to a reluctance to hire home service providers altogether.

Challenges for Service Providers: The current process also presents challenges for service providers. As mentioned earlier, they struggle to showcase their skills and expertise to potential customers. With limited ways to market their services, independent providers may find it challenging to compete with larger, more established companies. Moreover, the bidding process can be challenging for service providers, as they may have to compete against multiple providers for the same job. This competition can drive down prices, making it difficult for providers to earn a fair wage. Additionally, providers may have to spend a significant amount of time and effort bidding on jobs, which may not result in any income.

IV. PROPOSED METHODOLOGY

The home services industry has been growing rapidly in the past few years. As more individuals opt for professional help with household tasks, the demand for reliable and efficient home service providers has increased. With this rise in demand, various service platforms have emerged, offering convenience and ease of access to home services. However, the existing systems for hiring and bidding for home services have not been able to keep up with the evolving needs and expectations of the users.

In this paper, we will discuss the limitations of the current system for hiring and bidding for home services and propose a private bidding platform as a solution to address these challenges. Traditionally, individuals seeking home services relied on word-of-mouth recommendations or consulted local directories or classified ads to find service providers. While these methods may have been effective in the past, they come with several limitations. Firstly, they are time-consuming and may not provide a wide pool of service providers to choose from. This can be especially problematic for urgent or time-sensitive jobs. Moreover, the quality of service may vary, and there is no mechanism in place to evaluate the reliability and reputation of service providers. The lack of a centralized platform for job postings and bidding is another major issue with the existing system. Service seekers and providers may have to resort to multiple platforms, making the process confusing and fragmented. This not only adds to the time and effort required to find and hire a service provider but also impacts the transparency of the process. Without a unified platform, there may be discrepancies in communication and coordination between service seekers and providers, leading to potential conflicts and delays.

The home service industry has seen significant growth in recent years, with 80% of homeowners using some type of home service every year. However, with this growth comes the challenge of finding reliable and trustworthy service providers, and the tedious process of hiring and bidding for home services. This is where the Private Bidding Platform for Home Services comes in. This innovative software product aims to revolutionize the home service industry by simplifying the process of hiring and bidding for services such as plumbing, cleaning, masonry, carpentry, painting, and electrical work.

One of the key features of the Private Bidding Platform is its ability to connect homeowners with pre-screened and verified service providers. This eliminates the need for homeowners to spend time researching and vetting service providers on their own. The platform ensures that all service providers on the platform have the necessary licenses, insurance, and qualifications, giving homeowners peace of mind and ensuring that they receive high-quality services.

The platform also simplifies the bidding process for service providers. Instead of competing with numerous other providers for a single job, service providers can bid on specific jobs posted by homeowners. This not only saves time for service providers but also allows them to focus on providing accurate and competitive bids for the jobs they are interested in. The platform also provides a feedback mechanism for homeowners to rate and review service providers, helping other homeowners make informed decisions when hiring service providers.

Another advantage of the Private Bidding Platform is its ability to facilitate communication between homeowners and service providers. The platform allows for real-time messaging between the two parties, making it easier to discuss the scope of work, ask questions, and provide updates. This eliminates the need for constant phone calls and emails, making the process more convenient and efficient for both parties. The Private Bidding Platform for Home Services aims to address this challenge by streamlining the process of hiring and bidding for services, benefiting both homeowners and service providers. With its innovative features and potential for growth, the platform has the potential to revolutionize the home service industry and make the process of maintaining and improving homes more efficient and convenient for all parties involved.

4.1 Modules:

User Management:

- Users must register using their email, phone number, name, and location.
- Each user will have a profile containing their contact information, work preferences, and reviews.

Job Posting:

- Users can create job listings with detailed descriptions of the required service.
- Job listings should include the service category, job description, location, preferred date, and budget range.
- Users can also upload images related to the job to provide a clearer understanding.

Bidding Process:

- Users, both service seekers and providers, can view a list of available jobs within their location radius.
- Users can select a job to view its details and submit bids.
- Bidders can specify their price and any additional notes relevant to the job.
- Bidders can also see how many other bids have been placed on the same job.

Job Details:

- Job posters can view details of the bids received for their job listing.
- They can see the bid prices, notes from bidders, and bidder profiles.
- This transparency helps them make informed decisions on selecting the most suitable bidder.

Worker Profiles:

- Workers can create profiles detailing their expertise, work history, skills, and reviews from previous clients.
- Workers must be registered users to post bids on jobs.

Bid Acceptance:

- The user who posted the job can accept or reject bids.
- Upon accepting a bid, contact information is exchanged between the service seeker and provider for further coordination.

Notifications and Communication:

- The platform should send notifications to users about bid updates, job status changes, and messages.
- A messaging feature should allow users to communicate directly regarding job details.

Security and Privacy:

- Ensure user data privacy and implement necessary security measures to protect personal information.

User Interface:

- Design an intuitive and user-friendly interface that makes job posting, bidding, and communication seamless.

4.2 Additional Features (Optional):

- Integration with map services to visually represent job locations.
- Ratings and reviews for workers and service seekers to build credibility.
- In-app payment or escrow system for secure transactions.
- Job history and analytics to track completed jobs and expenses.

4.3 Technical Requirements:

- Develop the platform as a web application with responsive design for mobile devices.
- Choose suitable technologies for front-end, back-end, and database development.
- Implement user authentication and authorization mechanisms.

The development of the Private Bidding Platform for Home Services will involve the following methodology:

- 1. Requirement Gathering:** The first step is to gather requirements by conducting interviews and surveys with potential users, service providers, and industry experts. This will help identify the key features and functionalities needed in the platform.
- 2. Design and Prototyping:** Based on the gathered requirements, the design phase will involve creating wireframes and prototypes to visualize the user interface and user experience. This will help in refining the design and obtaining feedback from stakeholders.
- 3. Front-end Development:** The front-end development will involve implementing the user interface using suitable front-end technologies such as HTML, CSS, and JavaScript. The design prototypes will serve as a reference for creating responsive and user-friendly web pages.
- 4. Back-end Development:** The back-end development will involve implementing the server-side logic and database integration. Suitable back-end technologies such as Node.js, Python Rails can be used to handle user authentication, job posting, bidding, and communication functionalities.

5. Database Design and Implementation: A suitable database technology such as MySQL, MongoDB will be chosen to store user profiles, job listings, bids, and other relevant data. The database will be designed and implemented to ensure efficient data retrieval and storage.

6. User Authentication and Authorization: Robust user authentication and authorization mechanisms will be implemented to ensure secure access to the platform. This may involve using technologies such as OAuth, JWT (JSON Web Tokens), or session-based authentication.

7. Testing and Quality Assurance: The platform will undergo rigorous testing to identify and fix any bugs or issues. This will include unit testing, integration testing, and user acceptance testing to ensure the platform functions as intended and meets the requirements.

8. Deployment and Maintenance: Once the platform is tested and ready, it will be deployed to a suitable hosting environment. Regular maintenance and updates will be performed to ensure the platform remains secure and up-to-date with the latest technologies.



Figure 1: Flowchart of Components



Figure 2: Mind Map

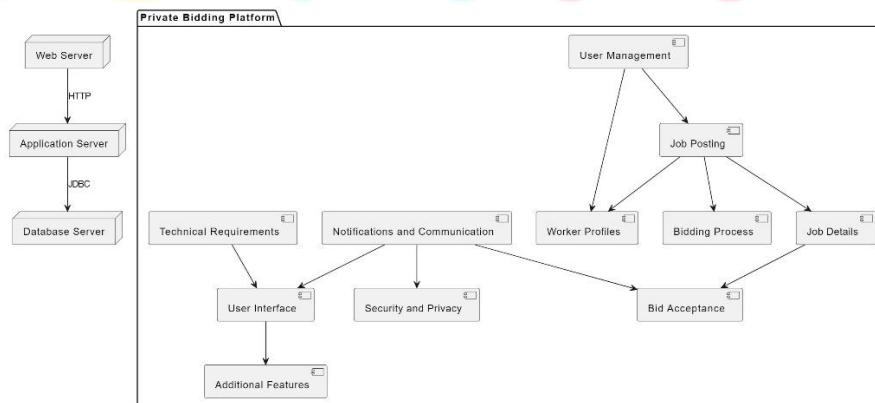


Figure 3: System Architecture and Modules

Feature	User Actions	Data/Content	Potential Benefits
User Management	Register / Login	Email, Phone number, Name, Location	Secure access, personalized profiles
Job Posting	Create listing	Service category, Description, Location, Date, Budget, Images	Clear communication of needs, attract relevant providers
Bidding Process	View jobs, Submit bids	Job details, Bid price, Additional notes	Find suitable work, competitive environment
Job Details	Review bids, Bidder profiles	Bid details, Bidder information, Reviews	Informed decision-making, choose best fit
Worker Profiles	Create profile	Expertise, Work history, Skills, Reviews	Showcase qualifications, build trust with clients
Bid Acceptance	Accept / Reject bids	Bid information, Bidder profiles	Choose suitable provider, manage project workflow
Notifications & Communication	Receive updates, Send messages	Job updates, Bid status, Direct communication	Stay informed, efficient project coordination
Security & Privacy	Secure login, Data encryption	User data protection, Privacy policies	Safe platform, user trust
User Interface	Intuitive design, Search & filters	User-friendly experience, Efficient job matching	Seamless interaction, time-saving navigation
Additional Features (Optional)	Maps, Ratings/Reviews, In-app payments, Job history/analytics	Enhanced visibility, Credibility building, Secure transactions, Track performance	Competitive advantage, user convenience, valuable insights

Table: Features of Modules

V. APPLICATIONS

Home services refer to a wide range of services provided to individuals in their residences to enhance comfort, convenience, and maintenance. The applications of home services are diverse and cater to various needs. Here are some common applications:

- Cleaning Services:** Regular house cleaning and deep cleaning services, Carpet cleaning and upholstery cleaning, Window cleaning and exterior cleaning.
- Plumbing Services:** Repairing leaks and fixing plumbing issues, Installation of new plumbing fixtures, Maintenance and inspection of plumbing systems.
- Electrical Services:** Installation of new electrical wiring and fixtures, Troubleshooting and repairing electrical issues, Upgrading electrical systems for energy efficiency.
- Carpentry Services:** Custom furniture design and construction, Repair and installation of doors, windows, and cabinets, Woodworking projects and renovations.

5. **Masonry Services:** Brickwork and blockwork for construction or repair, Installation or repair of stone features, Masonry restoration and waterproofing.
6. **Painting Services:** Interior and exterior painting, Wallpaper installation and removal, Specialty painting techniques.
7. **HVAC (Heating, Ventilation, and Air Conditioning) Services:** Installation of new HVAC systems, Repair and maintenance of heating and cooling units, Duct cleaning and air quality improvement.
8. **Home Security Services:** Installation of security systems and cameras, Monitoring services for alarms and surveillance, Smart home security integration.
9. **Appliance Repair Services:** Repair and maintenance of household appliances, Installation of new appliances, Troubleshooting and diagnostics.

VI. CHALLENGES

Limited-Service Provider Pool: Initially, attracting a sufficient number of service providers to join the platform can be challenging. A smaller pool might limit the options available to customers, reducing competition and potentially impacting pricing.

Quality Control: Maintaining service quality can be difficult when dealing with various service providers with different skill levels, experience, and professionalism. Ensuring consistent quality across different providers can be a challenge.

Customer Trust and Satisfaction: Building trust among customers regarding the quality and reliability of service providers on the platform is crucial. Negative experiences or reviews can significantly impact the platform's reputation.

Platform Maintenance and Security: Continuous maintenance of the platform, ensuring its security against cyber threats, and providing customer support for technical issues can be resource-intensive.

Pricing Transparency: Sometimes, bidding platforms might face challenges related to pricing transparency. Customers may find it challenging to assess the fairness of bids or understand the breakdown of costs.

Market Saturation: In regions with multiple similar platforms, competition can be fierce, making it difficult to stand out and retain both service providers and customers.

VII. CONCLUSION

In conclusion, the development of the Private Bidding Platform for Home Services presents an innovative solution to simplify and enhance the hiring and bidding process in the home service industry. Its focus on user management, detailed job postings, transparent bidding, and direct communication promotes efficiency, transparency, and convenience for both service seekers and providers. With its advanced features and intuitive interface, the platform has the potential to revolutionize the industry and become an indispensable tool for individuals seeking home services and providers looking to efficiently connect with potential clients. One of the key features of the Private Bidding Platform for Home Services is its focus on user profiles. Both service seekers and providers are required to create detailed profiles, which include information such as their skills, qualifications, experience, and reviews from previous clients. This promotes a more informed decision-

making process for service seekers, as they can assess a provider's expertise before making a hiring decision. It also encourages providers to maintain a high level of quality in their work, as their profiles serve as a reflection of their reputation on the platform.

VIII. REFERENCE

1. K. Aravindhan; K. Periyakaruppan; T.S. Anusa; S. Kousika; A. Lakshmi Priya “Web Application Based on Demand Home Service System”, Publisher: IEEE, 2020 6th International Conference on Advanced Computing and Communication Systems (ICACCS)
2. N.M. Indravasan, Adarsh G, Shruthi C, Shanthi K, “An Online System for Household Services” International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, May 2018.
3. Sheetal Bandekar, Avril D’Silva, “Domestic Android Application for Home Services” International Journal of Computer Applications, ISSN No.0975 – 8887, Volume 148 – No.6, August 2016.
4. “An online system for household service” by N. M. Indravasan, Adarsh G, Shrushti C, Shanthi K, and Dadapeer was written in the International Journal of Technology and Engineering.
5. “Web-Based Service-Providing Platform (Labour Mitra)” by Manish Rakhewar, Prathmesh Pawar, Kundan Rajput, Ram Khartadkar by International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 11 Issue V May 2023- Available at www.ijraset.com.
6. Shahrzad Shahriari, Mohammadreza Shahriari, Saeid gheiji. “E-Commerce And It Impactson Global Trend and Market”. International Journal of Research–Granthaalayah Vol.3 (Iss.4): April 2015.
7. L. Richard Ye, Yue Jeff Zhang, Dat-Dao Nguyen, James Chiu, “Fee-based online services: Exploring consumers’ willingness to pay”. Journal of International Technology and Information Management. DOI: <https://doi.org/10.58729/1941-6679.1248>
Available at: <https://scholarworks.lib.csusb.edu/jitim/vol13/iss1/12>
8. Facilitykart: Is India’s’ most trusted hyper local aggregator for handyman and home need services like AC, RO, Home Appliances, Electrical, Plumbing, Carpentry etc. Available: <http://facilitykart.com>.
9. Er. Swati Gurav, Shaikh Aswad, Khan Safiullah, Nagrale Mansi Department of information technology, M.H. Saboo Siddik of Engineering Byculla — 400008. University of Mumbai, Maharashtra, India.
10. Authors: Manish Rakhewar, Prathmesh Pawar, Kundan Rajput, Ram Khartadkar DOI Link: <https://doi.org/10.22214/ijraset.2023.52451>
11. June 2023| IJIRT | Volume 10 Issue 1 | ISSN: 2349-6002 Amruta Amol Bhawarshi, Kaustubh Muley, Kavya Amrutkar, Devendra Kawade, Anushka Kausadikar, Ayush Kawane, Kaustubh Singh, Institute of Technology, Pune, 411037, Maharashtra, India
12. ISSN: 2455-2631 September 2020 IJSDR | Volume 5, Issue 9 “An Online System for Home Services” Ms. Prachi S. Tambe, Nikam Poonam, Gunjal Trupti, Jadhav Priti, Parakhe Sonali, Chincholi, Nashik, Maharashtra, India.

13. June 2023| IJIRT | Volume 10 Issue 1 | ISSN: 2349-6002 “Website for Home Service Provider” Amruta Amol Bhawarthy, Kaustubh Muley, Kavya Amrutkar, Devendra Kawade, Anushka Kausadikar, Ayush Kawane, Kaustubh Singh, Vishwakarma Institute of Technology, Pune, 411037, Maharashtra, India.

14. Available online at www.sciencedirect.com ScienceDirect IFAC-Papers Online 49-12 (2016) 1371–1376 “Home delivery services: innovations and emerging needs” Maliheh Ghajargar, Giovanni Zenezini Teodoro Montanaro

15. International Conference - Innovation-2021-Innovation-2021, International Journal of Scientific Research in Computer Science, Engineering and Information Technology ISSN: 2456-3307 (www.ijsrcseit.com) Volume 8, Issue 3, May-June-2021 17 “MAZDOOR”- Online Application for Household Services, Kunal Bhalgat, Sayali Desai, Rajeshri Mayanaikar, Aaditya Pardeshi, Prof. Bhagyashree Dhakulkar.

