Jal Dhara
Sign of purity

Mini Review Open Access

- Provider: Addressing the challenge of ensuring the consistent delivery of potable and uncontaminated water to every residential and commercial location.
- Consumer: Ensuring prompt, high-purity, reliable, and customized water supply, meeting individualized specifications and satisfaction levels.

Introduction

Water, the most essential element of life is free in nature along with air. About 70% of earth's surface is covered with water but only 3% of world's water is fresh. 2% is frozen in the polar ice caps and glaciers and 1% is ground water. Only 0.02% is freshwater lakes and rivers [1]. As the world population increased due to urbanization and industrialization, the demand for water kept rising but the quality kept deteriorating. Water scarcity affiicted many nations and access to clean drinking water and sanitation became difficult [2]. Ue contrast between tap water and bottled water reflects the contest for authority and public trust between governments and corporations. Packaged drinking water industry has grown in all the developed economics of the world. Ue product is targeted especially at touring and traveling market segments [3]. Ue growth of this industry can be due to contamination/shortage of water supply in the cities. Ue demand for consumption of packaged water in India is estimated at 500 million liters of pure water bottles and the market is expected to grow at a rate of 25-35% per annum [4].

Objectives

- To study about the different brands of packaged drinking water available.
- To carry out competitive analysis of packaged drinking water.
- To find out the customer satisfaction level of these brands.

- To find out the market share of various companies in packaged drinking water.
- Problems Faced by local water vendors and their customer

Literature Review

Packaged drinking water refers to water derived from any source of potable water which may be subjected to treatments like decantation, filtration, combination of filtrations, aeration, filtration with membrane filter, depth filter, cartridge filter, activated carbon filtration, demineralization, remineralization, reverse osmosis or any other method to meet the prescribed standards and packed [3]. Due to the rise in health awareness among people, increase in tourism, a rise in per capita income, changes in lifestyle and easy availability of bottled water, the per capita consumption of bottled water in India has increased [5]. Marketers have made goods out of mundane and abundant things into exotic valuables that have nothing to do with 'need' for mankind [6]. Bottled water is an exceptionally clear example of the power of branding to make commodities a meaningful part of daily life [7]. Ue other side of thinking about how bottled water has come to represent nature and purity is the equally important question of how public water has come to be seen as dangerous and dirty [8].

Market analysis of packaged drinking water on environment

- 80% of the diseases in India are water-borne.
- 60% - 80% children su9er from water-borne diseases.
- 50,000 people die every day due to water contamination.
- India has 17 million cases of viral hepatitis, and
- 8 million cases of typhoid are recorded every year. Concerns about packaged drinking water [9]:
- Poor regulations in manufacturing.
- Uncertainty of the shelf-life and possible health implications.
- Uncertainty of water quality status.

Reasons for higher trend of bottled water use are [10]:

- Consumer consciousness of increasing water pollution.
- Paucities in municipal water supplies in terms of chemical, aesthetic and microbiological water quality.
- Marketing strategies of bottled water by different companies.
- Availability and reasonable pricing.
- Bottled water is generally considered safe and is taken for granted by people without question.

- Mineral water is perceived as good for health and the mineral content gives it a taste.
- Minerals in the bottled water are easily absorbed by the body compared to minerals in the food.
- Mineral water benefits the body by helping it to fight against fungus and bacteria along with de-oxidizing the body [11].
- Regular water purifiers remove all kinds of mineral content from the water; mineral revitalization water purification systems artificially add minerals back into the water.

Re-sealability has added advantage to the quality of bottles. It has become re-usable and the consumers can refill the bottle with ordinary water or other fluids. It has been seen that truck drivers on highways form a major chunk of bottled water drinkers. Penetration in rural area is another significant factor that has played an important role in the development of the bottled water trade [12].

Jal Dhara - Sign of Purity

Introduction:

Water is a fundamental resource for human existence, and efficient water delivery systems are crucial for ensuring accessibility and purity. In recent years, the integration of technology into water distribution and management has gained traction, offering innovative solutions to streamline processes and enhance user experience. This literature review explores existing research and applications related to water delivery services, tracking systems, and scheduling platforms to inform the development of "Jal Dhara: Sign of Purity," a Flutter app aimed at addressing the challenges faced by local water vendors and empowering users to manage their water orders seamlessly.

Water Delivery Services:

Research in the field of water delivery services reveals a growing need for efficient distribution systems, especially in urban areas. Existing solutions often rely on traditional methods, leading to inefficiencies and inconsistencies in service. Emerging technologies, such as mobile applications, have shown promise in improving the accessibility and reliability of water delivery. Studies emphasize the potential impact of technology-driven platforms in enhancing the overall effectiveness of water supply chains.

Tracking Systems in Water Delivery:

Efficient tracking systems are essential for monitoring the movement of water orders, ensuring timely delivery, and maintaining the quality of the supplied water. GPS-based tracking solutions have been explored in various contexts, demonstrating their effectiveness in real-time location monitoring. Studies highlights the significance of tracking systems in optimizing logistics and providing transparency in water delivery processes.

Scheduling Platforms for Water Orders:

Scheduling platforms play a crucial role in allowing users to plan and manage their water orders conveniently. Existing literature on scheduling systems for water services emphasizes the importance of user-friendly interfaces and automated scheduling options. Research for instance, delves into the design principles that contribute to the success of scheduling platforms, offering insights that can inform the development of the "Jal Dhara" app.

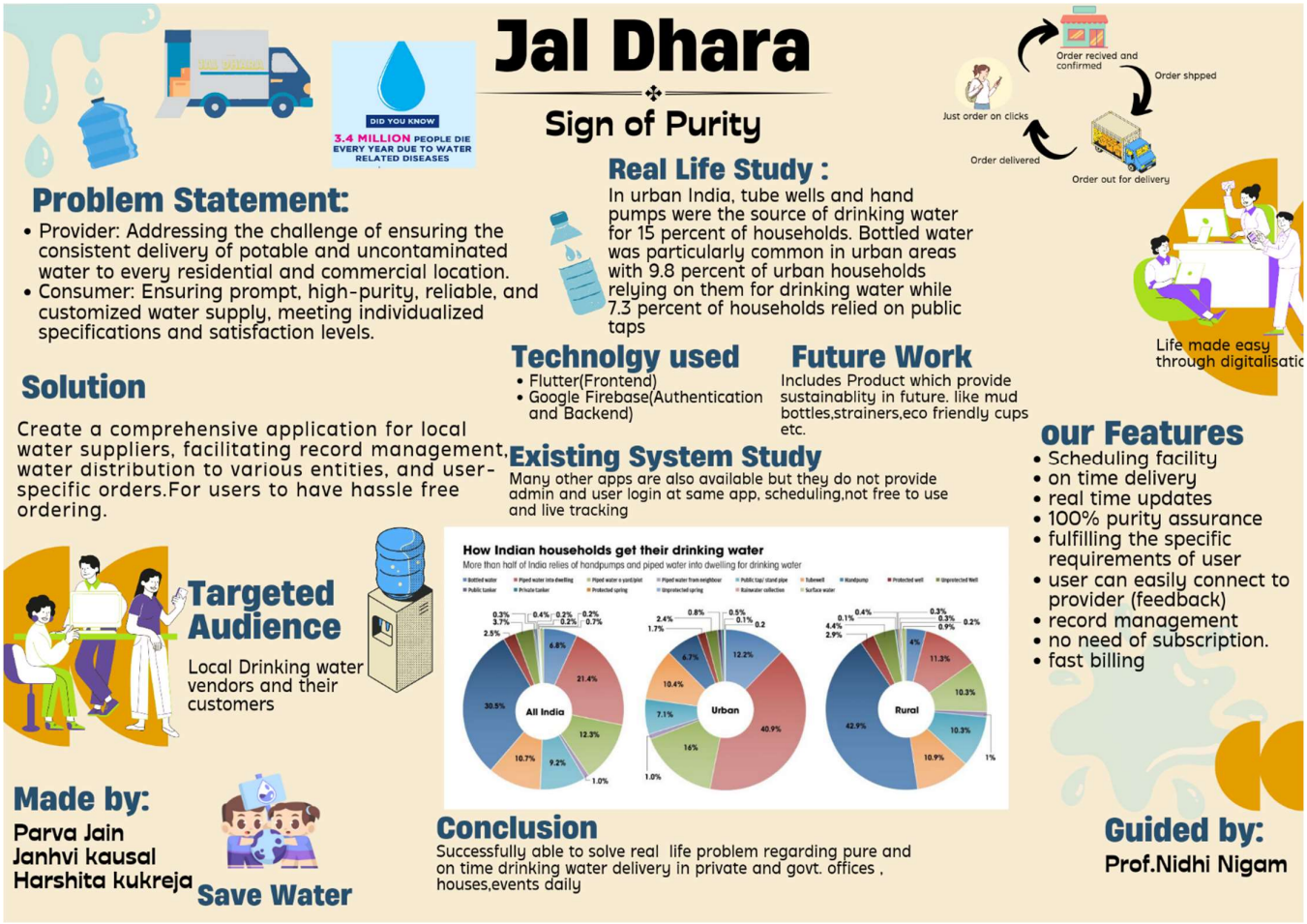
Challenges Faced by Local Water Vendors:

Local water vendors often face challenges related to manual order management, inefficient routing, and a lack of digital tools. Studies shed light on the obstacles encountered by small-scale water vendors and stress the need for tailored solutions to enhance their operational efficiency.

Conclusion:

The literature reviewed indicates a growing interest in leveraging technology to address challenges in water delivery services. "Jal Dhara: Sign of Purity" has the potential to contribute significantly to this evolving landscape by providing a comprehensive solution that empowers both water vendors and users. By incorporating insights from existing research, the app can streamline water delivery processes, enhance tracking capabilities, and offer a user-friendly scheduling platform, ultimately contributing to the efficient and transparent management of water resource.

Poster:



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