FORM 2

THE PATENTS
ACT,1970
(39 of 1970)
&
THE PATENT
RULES, 2003

Complete Specification
(See section10 and
rule13)

1. Title of the Invention: **ADOPTING A MOBILE - FIRST STRATEGY IN E-COMMERCE APPLICATION**

2. Applicants

Name	Nationality	Address
Mr. HARSHIT RAJENDRA GANDHI	Indian	RESEARCH SCHOLAR , MANAGEMENT STUDIES, MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY, BHOPAL , MADHYA PRADESH -462043
Dr.S.PARVEEN BANU	Indian	ASSOCIATE PROFESSOR, COMMERCE, SAVEETHA COLLEGE OF LIBERAL ARTS & SCIENCE, SAVEETHA UNIVERSITY, CHENNAI, TAMILNADU- 602 105
Dr .YACHNA RAMESH GHARDE	Indian	ASSOCIATE PROFESSOR, MANAGEMENT , PUNE INSTITUTE OF BUSINESS MANAGEMENT PUNE, MAHARASHTRA -412115
Ms.D.DIVYA	Indian	ASSISTANT PROFESSOR , BCOM PA , DR.SNS.RAJALAKSHMI COLLEGE OF ARTS AND SCIENCE , COIMBATORE, TAMILNADU – 641049, INDIA
Dr.HARSHALI GOMASE	Indian	ASSISTANT PROFESSOR, FINANCE, MATRIX SCHOOL OF MANAGEMENT STUDIES PUNE,- 411041, INDIA

Mr. ABHISHEK NARAYAN J	Indian	ASSISTANT PROFESSOR , SCHOOL OF MANAGEMENT STUDIES , KARPAGAM COLLEGE OF ENGINEERING, COIMBATORE , TAMILNADU – 641032, INDIA
Dr.R.SANTHANAKRISHNAN	Indian	ASSOCIATE PROFESSOR, COMMERCE, SAVEETHA COLLEGE OF LIBERAL ARTS & SCIENCE, SAVEETHA UNIVERSITY, CHENNAI, TAMILNADU- 602 105
Dr.ANURADHA	Indian	ASSOCIATE PROFESSOR, BUSINESS ADMINISTRATION, SAVEETHA COLLEGE OF LIBERAL ARTS & SCIENCE, SAVEETHA UNIVERSITY, CHENNAI, TAMILNADU- 602 105
Dr.C.SATHIYAMOORTHY	Indian	ASSOCIATE PROFESSOR, COMMERCE, SAVEETHA COLLEGE OF LIBERAL ARTS & SCIENCE, SAVEETHA UNIVERSITY, CHENNAI, TAMILNADU- 602 105
Dr.D.SETHURAMAN	Indian	ASSOCIATE PROFESSOR, COMMERCE, SAVEETHA COLLEGE OF LIBERAL ARTS & SCIENCE, SAVEETHA UNIVERSITY, CHENNAI, TAMILNADU- 602 105
Mr.J LOGESHWARAN	Indian	RESEARCH SCHOLAR, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, SRI ESHWAR COLLEGE OF ENGINEERING, COIMBATORE- TAMIL NADU

3.Preamble to the description:

The following specification particularly describes the invention and the manner in which it is to be performed.

4. DESCRIPTION

FIELD OF THE INVENTION

The present invention relates to the field of E-commerce.

Background problem for the Innovation

As technology continues to evolve, companies must keep up or risk being left behind. This is especially true for companies that deal with e-commerce applications. Businesses in this industry must have a mobile-first strategy if they want to gain the maximum reach, engagement, and success. One of the main challenges facing companies when it comes to adopting a mobile-first strategy in e-commerce is user experience. Mobile users expect a smooth and simple experience when it comes to shopping apps. As such, companies need to factor in mobile-specific elements, such as screen size and touch interface, when developing their e-commerce applications. It is also important to consider the graphics and design of the application, as this can greatly impact the user experience. Another challenge that must be addressed is security. With the rise of cybercrime, it is essential that companies have safeguards in place to protect user data. Companies should ensure that their e-commerce applications are secure enough to prevent any unauthorized access or manipulation of data. Finally, companies must consider search engine optimization (SEO). SEO enables businesses to increase their visibility on search engine results pages. Companies must ensure that their applications are optimized for mobile, as this will help them to rank higher on search results and thus increase the chances of customers downloading their applications. Overall, the adoption of a mobile-first strategy in e-commerce is essential for companies that want to take advantage of the many opportunities of today's digital world. While there are many challenges that must be addressed, it is worth the effort in the long run. Companies must ensure that their applications provide a great user experience, are secure, and are optimized for mobile in order to ensure maximum success.

Innovation model

As the world of e-commerce changes rapidly, business owners and entrepreneurs have had to keep up with technological advancements and the evolving needs of their target demographic. One such innovation is the mobile-first strategy, where mobile devices are employed as the primary platform for e-commerce applications. This strategy is growing in popularity and effectiveness, and is becoming increasingly important to businesses that hope to establish a foothold in the increasingly competitive world of e-commerce. The greatest advantage of a mobile-first strategy in e-commerce is that it allows for quicker, more convenient

shopping experiences for customers. Mobile devices enable customers to purchase products more quickly with few taps and swipes, and to instantly receive updates on orders and delivery status. They also allow customers to shop nearly anywhere, as long as they have a connection. This portability allows retailers to extend their reach to customers who would not normally be able to purchase products or services. A mobile-first strategy also enables retailers to track customer activity and gather on-the-go analytics in order to better tailor their offerings. Businesses can use data collected from customer interactions to gain insights on consumer preferences, improve personalization efforts, and create a more meaningful customer experience. Furthermore, retailers can implement real-time advertising and push notifications to target customers who may be more likely to make a purchase. Lastly, employing a mobile-first strategy often results in considerable cost savings for retailers, when compared to traditional e-commerce practices. Companies no longer need to maintain an extensive web presence, creating fewer web-development and maintenance expenses. Additionally, mobile-first advertising strategies often involve prominently displaying products for which sales are already present, reducing the need for costly and direct promotional campaigns. In conclusion, adopting a mobile-first strategy in e-commerce applications is an important innovation that businesses should consider if they hope to remain competitive. The advantages of the strategy, including improved customer convenience, greater access to data and analytics, and cost savings, cannot be ignored. By embracing mobile-first applications, retailers can easily harness the power of technology to deliver innovative e-commerce solutions that improve their standing in the marketplace. The proposed innovation model is shown in the attached fig.1.

Adopting a mobile-first strategy in e-commerce applications is becoming increasingly important as more and more consumers continue to shop online using their mobile devices. Implementing a mobile-first strategy is both beneficial to the customer and the business, minimizing costly errors and improving customer satisfaction. The first step for businesses is to make sure their online store is optimized for mobile devices. This includes making sure the website is designed with a responsive layout and optimized for a wide range of screen sizes. Additionally, the website should be mobile-friendly with features such as touch-friendly buttons, searchable menus, and easy navigation. Businesses should also focus on making sure their content is mobile-friendly. All content should be optimized for easy reading on small screens, utilize large buttons for navigation, and provide quick loading times for images and videos. For the best user experience, businesses should also look into using features such as push notifications, which can alert customers of new products, discounts, and promotions. In addition to optimizing the user experience, businesses should also ensure their applications are secure. This includes data encryption, secure payment processing, and authentication procedures. Security features will help

protect both the business and its customers from potential threats. Finally, businesses should look into using analytics to gain insights into customer behavior. By collecting data on how customers use the mobile site, businesses can determine which features are proving popular, and which features need to be refined further. This will allow businesses to ensure their mobile-first strategies are effective and improving customer satisfaction. By adopting a mobile-first strategy, businesses can ensure their e-commerce applications are user-friendly and secure, while also maximizing the potential of their applications. Executing such strategies can result in improved customer satisfaction and an increase in profits. As mobile devices continue to become more ubiquitous, it is imperative for businesses to take advantage of this growing trend.

Summary of the Innovation

Adopting a mobile-first strategy in developing e-commerce application is rapidly becoming a popular choice due to the rising number of smartphone users worldwide. By re-engineering their web applications, companies can create an enhanced and an easier user experience to meet the preferences of the current mobile generation. This strategy can help companies to reach new potential customers and increase their profit as well. The following points analysis the performance of a mobile-first strategy in e-commerce application:

1. Increased Reach: Adopting a mobile-first strategy can enable the company to reach potential customers from all parts of the world. This is due to the fact that the majority of people access the web from their mobile phones as compared to desktop and laptop computers. Thus, companies that invest in the development of mobile-friendly e-commerce application can benefit from increased reach and improved visibility of their products.

2. Faster Loading Time: One of the main features of a mobile-first strategy is that it can improve the loading time of an e-commerce application on mobile phones. This is due to the fact that the mobile browser treats the mobile version of the website differently compared to when it is accessed from a desktop computer. This will ensure that the mobile applications are loaded quickly, thus providing a better user experience.

3. Easy Navigation: Another key performance factor of a mobile-first strategy is the improved user experience that it provides. Easy navigation on the mobile application is essential to ensure that users can easily find the products they are looking for and make purchases smoothly. Through mobile-first strategy companies can create a user-friendly navigation experience by optimizing the design of the mobile application.

4. Accessibility: Mobile-first strategy enables the companies to create an application that is accessible from a variety of mobile devices such as smartphones, tablets, and wearables. This is crucial to ensure that users can access

the website and purchase products from any device and any location. Overall, a mobile-first strategy can offer a number of key advantages to companies in terms of improved reach, faster loading time, better user experience, and device accessibility. Therefore, it is important for companies to invest in re-designing their website to make sure that their e-commerce application is mobile-friendly.

The vast majority of online business platforms leverage mobile experiences to drive conversions, engagement, and user loyalty; however, many organizations are still not embracing a consistent, holistic mobile-first strategy in their customer success programs. The growth of mobile-based commerce platforms has created a competitive advantage for businesses that are able to maximize the performance and usability of their applications in a mobile-friendly format. As the competition increases, organizations often struggle to keep up, finding themselves lagging behind in the adoption of a mobile-first approach. The key to staying ahead and optimizing mobile performance is to begin by developing a unified mobile strategy that complies with current consumer trends and is tailored to the unique needs of the business's customers. Successful organizations take the time to understand their customer base and how mobile affects their consumption pathway. They commit to leveraging mobile capabilities to delight customers with exceptional experiences. To facilitate the adoption of a mobile-first strategy, businesses need to focus on optimizing the user-experience, developing intuitive features and consumers will benefit from. This should involve creating intuitive functionalities, as well as creating interactive experiences that are visually attractive. Furthermore, businesses need to make sure their content rendering is flawless and fast. Therefore, they should limit unfortunately associated with slow page loading and page timeouts. In addition, businesses need to consistently look for ways to reduce friction in user interactions, such as providing easy access to checkout, product information, and customer service. Finally, organizations should invest in Analytics and A/B testing. Leveraging A/B testing can help businesses identify potential areas or features to improve in the mobile experience and better understand consumer preferences. By recognizing these nuances, organizations can use their experience and the data gathered from A/B testing to drive their own mobile-first strategy in order to stay competitive, improve overall application performance, and provide truly exceptional customer experiences. Overall, a mobile-first strategy is essential for any business competing in the current digital landscape. When implemented correctly, it can provide a real competitive advantage and increase user engagement. Therefore, in order to maximize the performance and usability of their applications, organizations need to consider adopting a mobile-first strategy. Through optimizing the user experience, leveraging analytics, and committing to the strategy, organizations create additional opportunities to tap into new customer segment, increase loyalty, and enhance overall ROI.

CLAIMS

We Claim:

1. **Adopting a Mobile - First Strategy In E-Commerce Application in claims,**

   The increasing popularity of mobile phones and the proliferation of Internet access have revolutionized modern communication and the way we use technology. As a result, mobile e-commerce applications have become increasingly important to companies seeking to achieve competitive advantage in today's digital world. Adopting a mobile-first strategy is crucial for e-commerce applications because of the many advantages and opportunities that it provides.

2. **Adopting a Mobile - First Strategy In E-Commerce Application in claims,**

   A mobile-first strategy allows companies to offer a more streamlined, personalized user experience on mobile devices. By delivering tailored and optimized content, businesses can ensure their users can quickly and efficiently access the features and services they need. This can lead to higher customer satisfaction and engagement. Additionally, optimizing e-commerce applications for mobile users can help increase sales and overall conversion rates.

3. **Adopting a Mobile - First Strategy In E-Commerce Application in claims,**

   Mobile users tend to have shorter attention spans and are often quicker to make purchasing decisions. This can be a huge advantage to companies looking to capitalize on the increasing number of mobile shoppers. E-commerce companies can also leverage the power of mobile to increase brand visibility and reach more users.

4. **Adopting a Mobile - First Strategy In E-Commerce Application in claims,**

   In today's marketplace, customers are constantly on the go and rely on their mobile devices for easy access to information and services. As such, optimizing websites and applications to be compatible with a range of devices allows businesses to gain exposure to a larger audience.

5. **Adopting a Mobile - First Strategy In E-Commerce Application in claims,**

Companies can also take advantage of mobile marketing and advertising opportunities to further strengthen their presence and maximize their potential for reaching customers

6. **Adopting a Mobile - First Strategy In E-Commerce Application in claims,**

Finally, businesses can use mobile e-commerce applications to obtain insights into user behavior. By tracking customer interactions with their applications, companies can gain a better understanding of which features are most popular, which products and services customers are most interested in, and how they can further optimize their offerings to better meet their users' needs. This data can then be used to create better experiences for customers and improve marketing strategies.

7. **Adopting a Mobile - First Strategy In E-Commerce Application in claims,**

In this day and age, it's critical for businesses to adopt a mobile-first strategy for their e-commerce applications. This will ensure that users are provided with a better, more personalized user experience, enhance brand visibility, and enable businesses to gain valuable insights about customer behavior. Ultimately, this strategy can help e-commerce companies to maximize their success and stand out among their competitors.

Dated this 15th day of November 2023.

Senthil Kumar B
Agent for the applicant
IN/PA-1549

ABSTRACT

ADOPTING A MOBILE - FIRST STRATEGY IN E-COMMERCE APPLICATION

The mobile-first strategy is an approach to e-commerce applications focusing on designing the user interface (UI) and user experience (UX) for mobile devices first, instead of starting with a design tailored to desktop computers and adapting it to smaller devices. Adopting a mobile-first approach to e-commerce applications leads to improved user experience, greater content accessibility, and mobile-friendly payment processes, resulting in an increase in revenue for businesses. The mobile-first approach is grounded in responsive web design, which creates an adaptive UI according to the user's device. It optimizes the UI for mobile devices, allowing interactive elements to respond to user input quickly. This approach also supports material design principles to provide users with a natural and intuitive UX. Additionally, mobile-first design also responds to the types of content users access on mobile devices, such as maps, online payment, and place orders. For example, a well-designed e-commerce application should seamlessly integrate Google Maps as a navigation option for customers to find nearby stores or items. Furthermore, an efficient payment process is key to a successful mobile-first strategy. The UI should integrate with popular mobile payment solutions such as Apple Pay, Google Pay, or Stripe. In order to provide customers with easy ways to place orders, the same interface should allow for order tracking. Overall, businesses can benefit from adopting a mobile-first approach to their e-commerce applications. This strategy encourages businesses to build mobile solutions that allow customers to make purchases and access content more quickly and efficiently. Ultimately, this leads to increased user satisfaction, improved customer loyalty, and increased conversions.