

A User Experience Perspective on Digital Publishing Products: A Case Study of the Autohome App Postprint

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Abstract

Users are the fundamental basis for Autohome's survival; centering on user service and continuously expanding among younger and lower-tier user demographics is the driving force behind Autohome's sustained development. User experience does not refer to how a product itself functions; rather, it refers to 'how a product interfaces and interacts with the external environment,' that is, how people 'contact' and 'use' it. This paper employs the Autohome mobile application as a case study to investigate whether it satisfies user experience requirements across five dimensions.

Full Text

A Study on Digital Publishing Products from the Perspective of User Experience: The Case of the Autohome App

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Abstract

Users constitute the foundation of Autohome's survival, and serving users while continuously expanding into younger and lower-tier demographics drives its on-going development. User experience does not refer to how a product itself functions, but rather "how the product interacts with the external world"—that is, how people "contact" and "use" it. This paper examines the Autohome APP as a case study to investigate whether it satisfies user experience across five fundamental dimensions.

Keywords: user experience, Autohome, digital publishing product

Autohome, established in 2005, is dedicated to providing consumers with one-stop services for viewing, purchasing, and using vehicles, offering high-quality automotive consumption and lifestyle services that contribute to the vigorous development of China’s automotive industry. The launch of the Autohome APP in 2010 made it one of the earliest automotive websites to initiate a mobile internet project [1]. Currently the second-largest interactive community across all platforms, Autohome dominates the automotive information APP sector with 67.718 million monthly active users, according to QuestMobile’s 2022 China Mobile Internet Development Report. The top three automotive information apps collectively occupy 91% of the market, with Autohome alone capturing over 80% and 56.73 million exclusive users, solidifying its leadership position in automotive information services [2].

I. The “Three More” Strategy: Building a Service Matrix at the Strategic Layer

Successful user experience begins with a clearly articulated strategy. In September 2021, Autohome announced its strategic upgrade—the “Ecologicalization Strategy”—which involves deep synergy and integration between Autohome’s ecosystem and Ping An’s ecosystem to create an integrated platform service matrix for viewing, buying, selling, and using vehicles.

According to internal research on C-end consumers, despite rapid development of internet and automotive platforms, consumers still face an “information asymmetry” dilemma. As Autohome’s Chairman and CEO Long Quan explains: “Every day, massive amounts of information are pushed to us, but what’s lacking is precise, interesting, or simple information. During the purchase process, prices aren’t transparent, requiring enormous effort for comparison, and group complaints occur frequently. Consumers genuinely need authentic transaction prices. During vehicle usage, there’s a lack of authoritative guidance, with maintenance and service costs varying wildly. This is the current situation for C-end consumers.”

Based on industry conditions and consumer needs, Autohome APP established a “Three More” strategy for consumers: more people, more playstyles, and more scenarios. The slogan “For viewing, buying, and using vehicles, come back to Autohome” covers 58% of users for viewing, 76% for buying, and 26% for using. In H1 2021, mobile DAU reached 44.1 million, a 16% year-over-year increase—outstanding data resulting from the “Three More” strategy [3].

1. “More” People: Continuously covering high- and low-tier cities and young users while building the most diverse automotive content creator ecosystem. As China’s second-largest online community, Autohome has reached 92% of China’s cities, counties, towns, and townships. Among nearly 24,000 creators, 80% have over one million followers across all platforms, with 31 of the top 100 creators incubated internally. Young users represent a crucial battleground for consumption, with users under 30 already accounting for 43% of Autohome’s

user base [4]. The annual “818 Global Auto Festival,” dubbed the top IP in automotive circles, has attracted over 300 million VR-based online auto show viewers since July 2021—a 158% year-over-year increase. Compared to the average 2 million attendees at international A-level auto shows, this is equivalent to hosting 150 offline exhibitions, representing Autohome’s strategy of reaching more people through internet models [5].

2. “More” Playstyles: Embracing the live streaming and video era to build a diverse content ecosystem. As young consumers’ purchasing power matures, their varied preferences become a key focus for the platform. For instance, Autohome’s late-June nationwide first highway slow live stream tapped into users’ desire to escape mundane daily life, attracting 6 million viewers. Crossover collaborations like the traffic police series reached 300,000 online viewers, with exploratory partnerships conducted with Bilibili, Kuaishou, Zhihu, and Changba. At the product level, Autohome achieved 100% model database coverage and 97% VR vehicle series coverage, with intelligent products like “Jiajia Test Drive” and new car launches gaining user favor.

3. “More” Scenarios: Continuously developing offline, vehicle usage, and vehicle modification scenarios to meet comprehensive user needs. Online, Autohome has established the most comprehensive model database for user viewing and purchasing needs, created dedicated channels and services for modification demands, and even covered niche scenarios like RVs and motorcycles. Offline events such as new energy vehicle owner conferences, test drive days, editorial office open days, and youth interactive activities provide users with clearer engagement points [6]. In essence, all strategies originate from users, grounded in core needs for viewing, buying, and using vehicles—Autohome does what C-end users need, representing a user-oriented product mindset.

II. Functional Expansion and User Segmentation Challenges at the Scope Layer

As a comprehensive automotive platform, Autohome APP primarily targets automotive enthusiasts with its automotive information content, satisfying their need for automotive content. Meanwhile, its vehicle selection and purchasing functions target consumers with rigid purchasing needs. Autohome’s big data reveals that 37% of users prefer the “product database and search” function, while 25% prefer the “information” function, with only 5% overlap between the two user groups [7]. This indicates a strong segmentation between Autohome’s two major user groups in terms of functional usage.

This segmentation forces the digital publishing product to serve two batches of users with almost no overlapping needs. Car buyers typically have fixed purchasing targets and require minimal automotive information content, while over 73% of automotive enthusiasts already own vehicles and rarely use the selection and purchasing functions—leading both groups to perceive the product as bloated.

Established in 2005, the Autohome Forum became a platform for automotive enthusiasts to exchange ideas. Platform growth necessitated expanding product boundaries, leading to the 2010 launch of iOS and Android versions, making it one of the earliest automotive websites to embrace mobile internet. Restricting content to a small circle of automotive enthusiasts would inevitably lead to stagnation, and digital product upgrades meant adding functionality. After incorporating vehicle selection and purchasing features, Autohome APP attracted a large number of general car buyers who were not automotive enthusiasts.

According to user frequency data for Autohome APP functions, enthusiasts and car buyers show no compatibility. For automotive enthusiasts, automotive information content is a regularly used feature for staying updated on vehicles of interest. In contrast, rigid car buyers have short usage cycles concentrated during their purchasing period, and since car buying is inherently a low-frequency consumption behavior, general car buyers quickly become low-frequency users once their purchasing needs are satisfied.

This independence of needs between different user groups is an inherent problem when automotive apps expand their product scope. Therefore, a trade-off must be made between user experience and commercial pursuit, sacrificing some software simplicity for broader commercial possibilities.

III. Listening to Users to Drive Information Architecture Reform at the Structure Layer

As a crucial user product supporting the intelligent ecosystem, Autohome APP has continuously deepened user needs over the past year, pursuing innovation through iterative upgrades from product service core to visual experience. The Autohome User Product Center conducted user feedback activities, focusing on 思考和改进 problems encountered during vehicle selection and purchasing processes.

Before the redesign, most users feedbacked that they “didn’t know which entry point to click for car selection.” Upon opening Autohome APP, users faced three “car buying” entry points: New Car Purchase, Good Car Low Price, and Car Selection, each presenting different pages and options. This hindered efficient and effective content browsing. Centering on the “viewing, buying, using” slogan, Autohome began improvements from logical architecture and algorithmic data levels to present users with a cleaner, more refreshing interface.

Autohome’s numerous internal business lines each set up identical entry points, resulting in functional duplication and excessively long user paths. However, the effects of such homogeneous product experiences may be greatly diminished. As a ten-million-level APP, the average traffic diverted to core pages is only 3,000 per business line—a negligible effect compared to its impact on user experience. Additionally, the practice of continuously adding advertisements to the product’s hierarchical architecture may prevent purchase-intent users from seeing the model database, with advertisements dominating their view.

Autohome previously focused more on traffic distribution among business lines in its structural layout, without fully considering user scenarios and needs. This caused users to struggle finding needed content and functions, increasing learning costs. A core redesign member noted, “We wanted to give users the entire universe, but this left them overwhelmed by numerous modules.” Therefore, returning to the “viewing, buying, using” slogan proved the best approach, enabling users to clearly find appropriate entry points based on their purposes. Building on the original foundation, Autohome APP established separate channels for new car purchase, used car purchase, and vehicle usage, creating clearer diversion. Reorganizing channels around users formed multi-dimensional fine classifications, merging similar content and page types to simplify the complex hierarchical structure and help users quickly find entry points.

IV. A Three-Step Interface Design Revolution at the Framework Layer

In 2021, then-Autohome Chairman and CEO Lu Min stated regarding the APP interface redesign: “Users have usage inertia; we cannot give them a revolutionary version all at once.” He therefore decided to complete this arduous task in three stages.

April 20: Autohome launched version 1.0. This update was barely noticeable to ordinary users. Maintaining consistency with users’ established habits was important, but more crucial was ensuring the interface remained consistent with itself. In version 1.0, all module positions remained unchanged, with only the addition of brand colors (primarily blue and yellow), adjusted text size and spacing, and refined visual elements and icons.

Interface design is fundamentally about selecting the correct interface elements. A well-designed interface organizes users’ most common behaviors while making these elements easily accessible and usable.

June 20: When initiating version 2.0 revisions, Autohome allocated vehicle licenses and a 500,000 RMB budget from the company. Product leader Pan Meiyu and team members experienced the real car purchasing process as users—searching, viewing, and buying vehicles offline—to identify problems. After re-evaluation, revision, and correction, the Autohome 2.0 concept version emerged two months later.

August 20: Autohome adopted a gradual rollout for the new version, first providing it to a randomly selected 10% of users, then gradually increasing to 20%, 30%, and 50%. Results were positive. According to internal statistics, commercial advertisement effectiveness on the APP homepage increased by 30%, while bug rates dropped from 14% to 6% [8]. Simultaneously, Autohome’s logo, slogan, mascot, and peripheral items underwent subtle changes—brighter colors and richer characteristic elements. Taking the homepage as an example, the complex structure that didn’t match user habits was optimized. Ten page levels were screened and sorted, streamlining into five levels: content navigation

area, focus image, tool service area, intelligent recommendation area, and basic function area. Users can quickly locate desired content channels through the content navigation area.

V. Three Design Perceptions Perfecting User Experience at the Presentation Layer

In July 2021, Autohome APP 11.0 launched with a completely new sensory experience. The product focused on three directions: minimalism, youthfulness, and professionalism, achieving comprehensive upgrades from “skin” to “core” to “brain,” returning to product fundamentals with user experience at the center to build Autohome’s brand moat [9]. As an automotive platform, Autohome incorporated three sensory experiences into its design.

Haptic Experience: Based on vibration devices, the APP added haptic feedback. On vehicle selection pages, users can enter interior spaces by long-pressing the screen, accompanied by vibration for more positive feedback. In the model database, users can start engines by tapping screen buttons, with devices simulating vibration feedback based on real vehicle ignition sensations for stronger immersive experiences.

Auditory Experience: Autohome APP provides various automotive sound simulations. In the 3D model comparison function, besides simulated engine start sounds, users can tap the screen to simulate turn signal sounds, horn sounds, acceleration roars, and even trunk opening/closing sounds.

Voice Interaction: The homepage search features a voice assistant called “Dudu Xiaomi.” Users can say “show me Audis under 300,000 RMB” to instantly retrieve needed content with intelligent model recommendations, effectively jumping to the car selection function for detailed comparison. This represents the most comfortable and natural search method for automotive users, akin to one-on-one consultations with sales staff at offline 4S stores without complex searching.

Users’ initial impressions of products rely on vision. Externalizing internal product changes while accurately conveying brand essence is paramount.

Visual Style Youthfulness: Autohome APP grasps the youthful core by deconstructing the brand logo’s stroke structure and incorporating product attributes (headlights, steering wheels, tires, etc.). Combining product characteristics and upgrade goals, it extracted super auxiliary graphics and comprehensively upgraded the original brand IP. The mascot “Little Dragon Man” was optimized for greater expandability, with dragon horns corresponding to the “A” in “Autohome,” rich personality and storylines transforming it into an automotive doctor, and a tech-element energy ring making it friendlier and more dynamic. Extensions include trendier outfits and more diverse forms.

Personalized Expression: Aggregating youthful elements, the brand mascot image was combined with APP emojis to design personalized sticker sets,

meeting user needs while spreading brand image and building a fashion-forward visual system that enhances young users' brand recognition and satisfaction.

Product Style Minimalism: The content navigation channel menu was optimized to restore user demand scenarios. By analyzing preferences in high-traffic channels, homepage channels were reclassified based on user demands. The bottom five navigation buttons feature simpler designs, rotating from white to Autohome's signature blue when clicked. Pop-ups and floating balls were reduced to lower advertisement harassment frequency. Previously, Autohome APP had up to 18 pop-ups across scenarios, with four visible on first-level pages, and floating ball entry points on up to 13 pages simultaneously, severely impacting user operations. The redesign restricted pop-up frequency, unified interaction specifications and visual styles, and reduced page information noise.

Conclusion

For Autohome APP, on the foundation of ecological strategy upgrades, broadly collecting user feedback to correct information architecture, completing interface design innovation through a "three-step" approach without changing user habits, and ultimately presenting an automotive information product aligned with user experience.

Despite Autohome APP's strong performance from strategic to presentation layers, the explosive era of automotive popularization has passed, and users no longer need such vertically specialized pre-decision tools. Autohome's comprehensive services appear somewhat fatigued, particularly the user segmentation created by product boundary expansion. The independent needs of automotive enthusiasts and general car buyers create redundant functions for users. Users constantly monitor automotive news while considering budgets to determine ideal models and comparing models and prices across portals, ultimately consuming excessive time on information rather than the purchase itself.

2022 is a year of both opportunities and challenges. Autohome, which has contributed to the automotive era, will ultimately receive the era's rewards.

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