Comparative analysis of web and mobile interfaces of popular sales portals

Analiza porównawcza interfejsów webowych i mobilnych popularnych portali sprzedażowych

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Abstract

Sales platforms are becoming increasingly popular, with a steadily growing user base. This article presents the results of a comparative study of the web and mobile interfaces of two popular sales platforms, OLX and Vinted, focusing on user efficiency and intuitiveness. The analysis entails measuring task completion times and evaluating the usability of both interface types on each platform using the System Usability Scale. The findings indicate that Vinted's interface is more intuitive and faster for users who had no prior experience with OLX or Vinted.

Keywords: comparative analysis; sales portals; web interface; mobile interface

Streszczenie

Portale sprzedażowe zyskują na popularności, a liczba ich użytkowników stale rośnie. W tym artykule przedstawiono wyniki badań porównawczych interfejsów webowych i mobilnych dwóch popularnych platform sprzedażowych, OLX i Vinted, w kontekście efektywności i intuicyjności dla użytkowników. Analiza obejmuje pomiary czasu realizacji zadań oraz ocenę użyteczności obu typów interfejsów na każdej platformie z wykorzystaniem System Usability Scale. Uzyskane wyniki wskazują, że interfejs Vinted jest bardziej intuicyjny i szybszy dla użytkowników, którzy nie mieli wcześniej styczności z OLX ani Vinted.

Słowa kluczowe: analiza porównawcza; portale sprzedażowe; interfejs mobilny; interfejs webowy

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1. Introduction

In the era of digitalization, sales platforms have become a widely used tool that allows users to conveniently buy and sell a diverse range of goods. By offering both web and mobile interfaces, these platforms enable users to engage with them in ways that align with their individual preferences and needs. In Poland, OLX and Vinted are among the most popular solutions [1], giving users the ability to browse and add listings through both web browsers and mobile applications.

Choosing a sales platform can be challenging, especially for individuals with limited experience in using advanced selling services. The intuitiveness and efficiency of the interface are key factors influencing user satisfaction as well as the time required to complete tasks such as searching for listings, adding new ones, or editing user profiles [2]. Consequently, a comparative analysis of these platforms is needed to determine which one provides a more user-friendly interface and enables inexperienced users to perform essential operations more smoothly.

The collected data allow for an assessment of interface usability in terms of both intuitiveness and efficiency, considering the strengths and weaknesses of each solution under examination. The study's findings may serve as a basis for a deeper understanding of differences in usability, guiding the development of more intuitive and efficient solutions that better meet users' expectations. In the long term, such comparative insights could prove valuable for improving online sales platforms, ensuring they accommodate users with varying levels of technical proficiency. Future investigations could also explore how increasing digital literacy affects user preferences, potentially shaping the evolution of sales platforms in the coming years.

1.1. Literature review

Leading e-commerce platforms such as Amazon and eBay implement user-centric design principles to enhance usability and reduce cognitive load, as recommended by Krug [3]. These industry giants continually invest in digital transformation, enabling them to refine intuitive user interfaces that more effectively address evolving consumer needs [4]. A core aspect of their strategy is the development of solutions that are not only aesthetically appealing but also straightforward to use, thus directly influencing customer satisfaction. In the Polish market, Allegro has maintained a leading position for many years, benefiting from sustained user trust [5]. However, in the sphere of used goods trading, OLX and Vinted have been rapidly gaining popularity, offering simplicity and intuitive tools for creating listings. E-commerce reports from 2022 and 2023 point to the dynamic growth of user bases on these platforms, making them a compelling subject of investigation regarding interface usability and efficiency [6].

Web interfaces offer larger screen real estate for content display, which promotes clear navigation and

efficient management of functionalities, such as product searches and user account administration [7]. Their extensive navigation features are pivotal for effectively browsing listings on bigger screens, often leading to more informed purchase decisions. By contrast, mobile interfaces, tailored to smaller displays, require a simplified layout that focuses on essential functions like quick searching, filtering results, or intuitive ad posting [8]. This demands careful design choices that ensure usability without compromising core platform features. Research indicates that such a minimalist approach, coupled with an appealing visual design, significantly influences how users perceive interface usability [9]. Furthermore, it is critical that interface design be driven by actual user requirements rather than constrained solely by technological limitations [10].

User interface efficiency is a key measure for evaluating sales platforms. The literature underscores the importance of time-based metrics, particularly Time on Task, which captures how rapidly users can complete specific actions [11]. Reducing task execution time not only increases efficiency but also favorably shapes the user's perception of the platform [12]. When assessing platform intuitiveness, the System Usability Scale (SUS) is frequently employed to provide a standardized usability evaluation [13]. The scale comprises ten questions that reflect users' experiences with the system. The resulting scores are mapped onto a 0–100 scale, allowing standardized comparisons among different solutions. These scores are interpreted using recognized thresholds: values above 80 signify excellent usability, 68–80 denote good usability, and results below 68 may indicate issues requiring further refinements. Data collected via SUS serve as a valuable resource for designers, who can implement empirically driven enhancements. Owing to its simplicity and adaptability, SUS stands as one of the most widely utilized tools in user interface research [14].

An understanding of user behaviors in interface interactions is crucial for designing intuitive systems. For example, a study [15] examining search patterns revealed that users tend to favor interface elements that are recognizable and easily accessible. This design philosophy not only simplifies navigation but also reduces errors, ultimately elevating user satisfaction.

Moreover, methods such as eye tracking enable a detailed investigation of which interface components garner the greatest user attention [16]. These findings offer critical insights for optimizing interface layout and functionality. Evidence further indicates that responsiveness and intuitiveness are vital for achieving high user satisfaction and enhancing operational efficiency [17].

1.2. Purpose and scope of work

The objective of this study was to conduct a comparative analysis of the web and mobile interfaces of two popular sales platforms: OLX and Vinted. The research aimed to determine which interface offers a more efficient and intuitive experience for performing key user tasks, such as searching for listings, posting new ones and editing user profiles.

The scope of the study involved selecting sales platforms that are among the most widely used in Poland and that provide both web and mobile interfaces. The research employed test scenarios simulating typical user activities, with data gathered through time-based metrics (task completion times) and the SUS questionnaire, supplemented by questions about encountered difficulties, process speed and suggestions for improvements.

Based on the research assumptions, the following thesis was formulated: **the web and mobile interfaces of the Vinted sales platform are more efficient and intuitive than the corresponding interfaces on OLX.**

2. Research methodology

2.1. Preparation of the research environment

To ensure consistency and comparability of the results, the study was conducted using two devices that represent typical usage environments for web and mobile interfaces. For the web interface, tests were conducted on a Dell Latitude 3410 laptop running the 64-bit version of Windows 10 Pro, providing standard conditions for users operating via a web browser. Meanwhile, tests of the mobile interface were performed on an Apple iPhone 11 Pro running iOS 17, enabling a realistic simulation of the user experience when interacting with mobile applications.

On the laptop, the tests were conducted in Google Chrome (v130.0), chosen due to its dominant market share, exceeding 65% in 2024 [18]. Before each test, the browser was reinstalled to ensure uniform testing conditions and remove any remnants of previous sessions, such as cookies or browsing history. Likewise, on the phone, the OLX (v4.105.2) and Vinted (v24.42.0) apps were reinstalled prior to each test, thereby maintaining a neutral research environment and eliminating potential disruptions from prior user activities. The hardware specifications used in the study are presented in Table 1.

Table 1: Environment specifications of hardware and software

Parameter	Web interface	Mobile interface
Manufacturer & model	Dell Latitude 3410	Apple iPhone 11 Pro
Processor	Intel Core i5-10210U	Apple A13 Bionic
RAM	16GB	4GB
Operating system	Windows 10 Pro 64-bit	iOS 17
Software	Google Chrome (v130.0)	Vinted (v24.42.0) OLX (v4.105.2)

2.2. Research procedure and experiment execution

Usability studies of the web and mobile interfaces of OLX and Vinted were conducted based on a single research scenario consisting of three tasks. These tasks aimed to evaluate the intuitiveness and efficiency of the interfaces in the context of typical activities performed by users on these platforms.

Before starting the study, each participant was given a brief overview of the research objectives and procedures. As part of the research scenario, participants were asked to complete three specified tasks, as presented in Table 2.

Table 2: Tasks in the research scenario

No.	Task description
1	**Finding a listing:** Search for a listing in a specific category and subcategory that meets certain criteria (size, color, brand, price) using the appropriate sorting options.
2	**Adding a listing:** Create a new listing with detailed information such as title, description, category, size, condition, color, photos, and price.
3	**Editing the user profile:** Change the location and edit the avatar (profile photo) on Vinted; in the case of OLX - switch to a business account.

While the task scenarios and data entry processes were structurally identical across both platforms, minor interface differences may still impact user experience. To illustrate the practical execution of these tasks, selected mobile interface screenshots of OLX and Vinted are presented in Figures 1 and 2. These views highlight the design of the listing creation forms and the filtering tools used during searching process.

Figure 1: Create listing form in the mobile interface of OLX (left) and Vinted (right).

Figure 2: Listing filter view in the mobile interface of OLX (left) and Vinted (right).

After completing each task, participants answered four questions:
1. Did you encounter any difficulties while performing the task?
2. Were all steps of the task clear to you?
3. How would you rate the overall length of the process on a scale from 1 (very slow) to 5 (very fast)?
4. What improvements would you suggest to streamline the completion of this task?

Upon finishing all three tasks, participants were asked to complete the System Usability Scale (SUS) questionnaire, which facilitates the evaluation of an interface's intuitiveness and usability. SUS is a standard tool employed in usability research, enabling comparisons among different systems based on standardized scores. The entire research process – from the initial briefing, through task completion, to filling out the SUS survey – took an average of 10 to 15 minutes per participant. The short duration of the study minimized participant burden while ensuring high data quality and consistency.

2.3. Study group

The study was conducted in 2024 with a group of 32 individuals aged 22 to 43, with an average age of about 26. Participants were divided into four subgroups of eight, each subgroup testing one interface type: web or mobile on OLX and Vinted. This setup enabled a detailed comparison of outcomes based on interface type and platform, and allowed for a diverse analysis of user experiences in different usage environments, thereby enhancing the precision and reliability of the collected data.

The study group consisted exclusively of students who were professionally active IT specialists with extensive experience in using modern technologies. Although some participants had prior experience with other e-commerce platforms (e.g., Allegro), none were

familiar with OLX or Vinted. To ensure the objectivity of the results, individuals who had prior familiarity with OLX or Vinted were excluded. Consequently, it was possible to examine the intuitiveness and efficiency of the interfaces among new users, which constituted a key aspect of research. Due to time and organizational constraints, this approach served as a convenience sample, allowing for rapid participant recruitment despite the possibility that it may not fully represent the broader demographic spectrum of sales platform users.

The choice of participant numbers was based on previous studies indicating that as few as five users can detect about 85% of usability issues [19]. With eight users, this rate increases, enabling a more thorough identification of potential difficulties and a more accurate assessment of the systems under investigation. The selection of 32 participants also considered time and organizational constraints while maintaining sufficient representativeness of the data. All participants were informed about the purpose of the study and consented to participate. The research conditions were carefully designed to minimize confounding factors such as stress or environmental discrepancies, thereby ensuring consistent and credible results.

3. Research results

The results are presented in three parts: the first addresses the average task completion times for the web and mobile interfaces of both platforms, the second outlines the findings of the SUS questionnaire and the third focuses on participants' comments and observations related to the execution of individual tasks.

3.1. Task completion times

The research findings reveal noticeable differences in task completion times, depending on both the interface type and the platform. A comparison of the collected data highlights which solutions proved more efficient and facilitated faster execution of key operations. The time required to complete tasks depended on the complexity of each activity and the intuitiveness of the available tools. The analysis made it possible to identify interfaces that were better aligned with users' needs, as well as to pinpoint potential constraints that could prolong task completion times.
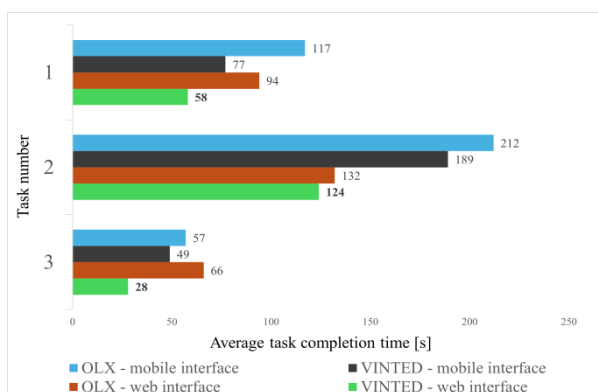
Figure 3: Average task completion times by platform and interface type.

Task number one, which involved searching for a listing, showed that the web interfaces of both platforms outperformed their mobile counterparts in terms of efficiency. This is likely due to larger screens, which offer a more transparent presentation of filters and sorting options – factors that significantly simplify this kind of task. The shortest average completion time for this task was recorded in Vinted's web interface (58 seconds), whereas the longest was in OLX's mobile interface (117 seconds). The disparity suggests that limitations of smaller screens and less intuitive design in OLX's mobile interface may pose challenges for users. Task two, adding a new listing, proved to be the most time-consuming on all platforms, irrespective of interface type. This task required filling in numerous form fields and uploading images. In mobile applications, these steps were compounded by additional challenges such as reduced ease of navigation and technical constraints. The longest average completion time (212 seconds) occurred with OLX's mobile interface, while the shortest (124 seconds) was noted for Vinted's web interface. This outcome indicates that the listing-posting process on Vinted – particularly in its web version – is better optimized in terms of intuitiveness and ease of use. Task number three, which involved editing a user profile, was the fastest among all tasks. The best outcome was observed in Vinted's web interface, where the average time was only 28 seconds, suggesting a high level of accessibility and simplicity in this process. Meanwhile, Vinted's mobile interface took slightly longer (49 seconds). OLX, in contrast, showed greater difficulties in both its mobile and web interfaces, with average completion times of 57 and 66 seconds, respectively. These differences may stem from variations in how profile-editing features are organized and how readily key interface elements are accessed.

3.2. System Usability Scale (SUS)

As part of this study, participants completed the SUS questionnaire after finishing all three tasks. The results for each interface are presented in Figure 4.
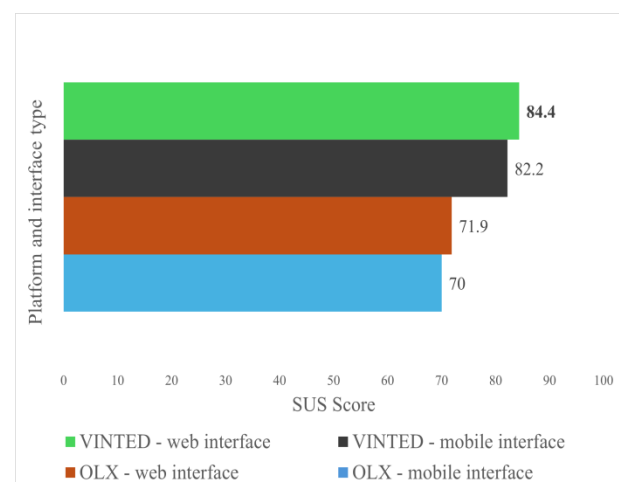
Figure 4: SUS questionnaire results for the web and mobile interfaces of OLX and Vinted.

Based on the data obtained, there are notable differences in usability ratings among the platforms and their respective interfaces types:

- **Vinted – web interface** achieved the highest score, 84.4, which classifies it as having excellent usability. This strong result may stem from the intuitive arrangement of features and the clarity of the interface layout, both of which facilitate efficient task completion,
- **Vinted – mobile interface** scored 82.2, also placing it in the excellent usability category. Its optimization for mobile devices allows users to effectively utilize the platform despite the inherent limitations of smaller screens,
- **OLX – web interface** received a score of 71.9, indicating good yet not flawless usability. This suggests that the platform is functional, but certain interface elements – such as feature discoverability or navigational clarity – could be enhanced to boost user satisfaction,
- **OLX – mobile interface** attained the lowest score among the tested interfaces – 70.0. While this still classifies it as good in terms of usability, it also signals potential operational challenges, especially when handling more complex tasks.

3.3. Participants' opinions and comments

After completing each task, participants answered questions concerning any difficulties encountered, the clarity of the process, their assessment of how long each task took, and possible ways to improve the interface. The feedback collected enabled the identification of problematic areas within the interfaces of the platforms under study, as well as the formulation of suggestions to enhance their usability. A detailed analysis of participant responses for both OLX and Vinted, in mobile and web interfaces, is presented below.

3.3.1. Comments on the OLX mobile interface

While using the OLX mobile, 50% of participants reported readability issues with the category structure, which significantly complicated the process of finding listings. The category layout was considered unintuitive, requiring users to spend additional time locating the correct options. Another major concern was the hard-to-find button for switching to a business account, which also posed difficulties for 50% of participants (Figure 5 - left). It was noted that 37.5% did not notice the prominent user profile editing button in the top-right corner of the account tab, potentially prolonging task completion (Figure 5 – right). Additionally, 25% of participants did not upload images at the beginning of the listing-posting process, despite the form clearly suggesting that this step be done first.

Participants proposed several changes to improve interface usability:

- enhancing the category layout to make it more readable and easier to navigate,

- moving the button for switching to a business account to a more visible location, for instance, within the account menu.

Average ratings for task duration in the OLX mobile interface were varied (on a scale from 1 = "very slow" to 5 = "very fast"):

- task 1 (finding a listing): 3.3/5,
- task 2 (adding a listing): 4.0/5,
- task 3 (editing a user profile): 4.1/5.

Figure 5: OLX mobile interface - switching to a business account (left) and user profile editing button (right).

3.3.2. Comments on the Vinted mobile interface

For Vinted's mobile interface, the most frequently reported issue was an inefficient listing-filter mechanism, as mentioned by 50% of participants. Each newly applied filter caused the listing view to refresh automatically, thus extending the search process. One participant noted that the button for adding images in the form was not clearly visible, hindering smooth progress through the steps. 25% of participants observed delays in the brand filter's functionality.

Based on these challenges, participants suggested:

- allowing multiple filters to be selected simultaneously before refreshing the results,
- increasing the visibility of the button for adding images by using more striking colors or a more intuitive placement,
- improving the performance of the brand filter to eliminate delays.

Additionally, the majority of participants (87.5%) proposed moving the profile-edit button directly into the profile tab. 37.5% initially navigated to the "Personalization" tab by mistake, which prolonged the task (Figure 6).

Average ratings for task duration in the Vinted mobile interface indicate high platform efficiency, particularly in adding listings and editing user profiles:

- task 1 (finding a listing): 4.3/5,
- task 2 (adding a listing): 4.4/5,
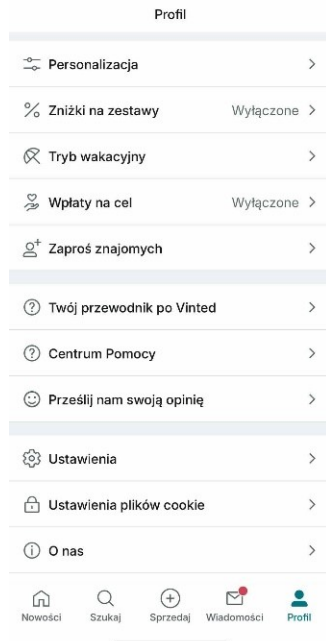- task 3 (editing a user profile): 4.4/5.

Figure 6: Vinted mobile interface – settings screen.

3.3.3. Comments on the OLX web interface

When using the OLX web interface, 62.5% of participants experienced difficulties finding the correct subcategories, significantly affecting task completion time. Additionally, 12.5% noted that filters reset when switching subcategories. Another critical issue – similar to the mobile version – was the hard-to-locate button for switching to a business account, which 62.5% or participants found problematic. Furthermore, 25% mistakenly chose the "Settings" tab instead of the "Edit profile" button, leading to additional delays.

Participants recommended the following improvements:
- introducing dropdown lists for subcategories to enhance clarity and simplify navigation,
- eliminating filter resets when changing subcategories,
- placing the business account button in a more intuitive area within the main menu or "Profile" tab.

The usability concerns mentioned above may help explain the following average ratings:
- task 1 (finding a listing): 3.4/5,
- task 2 (adding a listing): 4.5/5,
- task 3 (editing a user profile): 3.6/5.

3.3.4. Comments on the Vinted web interface

Participants offered varied comments on the functionality and category layout of Vinted's web interface. 37.5% reported that subcategories were insufficiently visible, complicating navigation and requiring extra time to locate the correct sections. The same proportion (37.5%) faced difficulties in selecting the first category. In addition, 25% proposed the introduction of a universal

category structure where gender selection would occur only after choosing a main category. A smaller number of participants (12.5%) indicated other areas in need of improvement, such as:
- implementing size filters in the form of tiles rather than dropdown lists,
- increasing the visibility of text fields in forms,
- allowing the listing-posting process to be broken down into sequential steps, guiding the user through each stage.

It was also observed that 25% did not notice the prominent "Sell now" button on the homepage, choosing instead a less visible button in the top-right corner. One participant (12.5%) did not use the hints suggested by the portal, potentially increasing the time needed to complete the task.

Based on the reported issues, participants suggested:
- increasing the visibility of subcategories, for instance through a tile-based layout,
- introducing a universal category structure in which gender is selected at a later stage,
- emphasizing the "Sell Now" button on the homepage,
- changing how sizes are filtered to a more intuitive approach, such as tile-based options.

The average task completion ratings in Vinted's web interface were as follows:
- task 1 (finding a listing): 3.9/5,
- task 2 (adding a listing): 4.3/5,
- task 3 (editing a user profile): 4.8/5.

4. Conclusions

The study enabled a detailed examination of the efficiency and intuitiveness of the web and mobile interfaces of two popular sales platforms—OLX and Vinted. The findings highlight significant differences in how users handle key tasks on both platforms, providing valuable insights for user interface design.

The Vinted interfaces, both web and mobile, received higher ratings in terms of task efficiency. Participants completed operations such as searching, adding a listing, and editing a profile more quickly. In particular, the web version of Vinted stood out as the most intuitive and transparent, potentially thanks to an optimal arrangement of features and a clear category layout. By contrast, while OLX proved functional, it requires improvements in areas such as the visibility of key buttons, category organization, and the process for editing user profiles.

Results from the SUS questionnaire confirmed a higher degree of intuitiveness for Vinted's interfaces compared to OLX. The Vinted web interface achieved the highest score among all tested versions, indicating a very good user experience. Participants especially appreciated its smooth navigation and the clarity of available features. Conversely, the OLX mobile interface received the lowest rating, largely due to difficulties in locating essential functions such as switching from a personal to a business account.

During feedback collection, participants identified areas for improvement on both platforms. Suggested changes related not only to the structure of the interfaces,

but also to the organization of key functionalities. It is worth noting that some feedback may stem from individual user preferences or their familiarity with other sales platforms, rather than strictly objective usability concerns. Nonetheless, the identified issues and proposed modifications indicate potential avenues for further optimization to better align these interfaces with the needs of a broader user base.

It is important to note that this study focused exclusively on User Experience (UX) and interface efficiency. Differences in product availability and cross-border transactions across the two platforms, which could potentially influence user choices, were not taken into account. For example, although OLX operates in over 40 countries, its Polish site primarily features domestic listings, whereas Vinted allows users to buy and sell goods across multiple countries, potentially offering a broader range of items. As a result, a more intuitive interface does not necessarily outweigh a broader product catalog when users select a platform. Future research might investigate whether and how cross-platform comparisons and a wider variety of offers affect user satisfaction and overall platform selection.

It should also be emphasized that the study was limited to a single demographic group with a shared technological background, which may influence how the results are interpreted. Future research might involve a wider spectrum of users to obtain a more representative view of the needs and preferences of online sales platform users. Additionally, employing methods such as eye-tracking could yield deeper insights into how users interact with these interfaces.

In conclusion, Vinted demonstrated greater intuitiveness and efficiency in task execution, making it more user-friendly overall. The results of this study thus confirm the thesis that Vinted's web and mobile interfaces surpass OLX in both efficiency and intuitiveness. Implementing the recommendations arising from this study could significantly enhance the user experience and bolster the competitiveness of both platforms.

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