


# Evaluation Of User Experience In Purchasing Watches On The Watch Studio Website Using The User Experience Questionnaire Method

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Article Info	ABSTRACT
<p><b>Keywords:</b> Strategy User Experience, User Experience Questionnaire, Website Watch Studio.</p>	<p>This Based on observations of the Watch Studio website for purchasing watches, there are still both positive and negative complaints from users of the Watch Studio website. A lack of product information and the absence of feedback on the Watch Studio website result in users obtaining very limited information. The purpose of this study is to measure the level of user experience with the services provided by the Watch Studio website. The research method employs quantitative data through observations of the Watch Studio website and distributing questionnaires that include several questions related to the topic, with responses scored on a scale of 1 to 7. The results are then analyzed using the User Experience Questionnaire (UEQ) method. A questionnaire is a data collection technique that involves providing several questions in the form of links or written forms to respondents for them to answer. The results of the study conducted by the author on the Watch Studio website can be summarized as follows: this study successfully evaluated the user experience on the Watch Studio website for each aspect of the User Experience Questionnaire (UEQ). From the research findings, it can be concluded that the accuracy scale on the Watch Studio website indicates the need to clearly and comprehensively describe the products, provide photos or other information sufficient for users to make purchases, and ensure that the customer service team responds quickly so users feel supported during the purchasing process. To achieve better research outcomes, active participation from respondents in providing feedback is essential for the development of an improved system.</p>
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## INTRODUCTION

Online business is no longer a foreign term among companies and the general public. This is because many stores and businesses find that having a website feature offers both financial and non-financial benefits. Today, buying and selling activities have become widespread, utilizing advanced technology as a tool to survive and win increasingly fierce competition. Watch Studio is a watch company with an online website that simplifies the process for consumers to purchase watches. With the help of technology, consumers no longer need to visit physical watch stores, saving time and money when buying watches.

However, since the website's inception, many complaints have arisen from buyers when shopping on the Watch Studio website. These complaints include non-functional email confirmations, slow website administrator responses, unavailable products listed on the website, and many other issues related to purchasing watches through the Watch Studio website.

According to the Kamus Besar Bahasa Indonesia (Indonesian Dictionary), evaluation is an assessment aimed at identifying whether individuals or structures are better or worse than others who are more knowledgeable or less competent. Quoting Sofan Amri, evaluation is a process of understanding, defining meanings, obtaining, and communicating critical information to determine whether a particular goal has been achieved (Amri, S. 2013). Vendung, as cited by Wirawan, states that evaluation is a thorough retrospective review of the values, management, results, and outcomes of governmental interventions to inform practical future situations (Wirawan, 2011). Another statement mentions that evaluation is a process of gathering information to determine to what extent, in what ways, and in which areas educational objectives can be achieved (Arikunto, S., & Safruddin, C. S. A. J, 2018)

User Experience (UX) refers to the user's experience presented through engaging and enjoyable interactions within a software application. A software product must offer a good user experience for its users (Laugwitz, B., Held, T., & Schrepp, M, 2008). The User Experience Questionnaire (UEQ) method encompasses six measurement scales found in the UEQ: Attractiveness, Effectiveness, Visibility, Reliability, Stimulation, and Novelty (Henim, S. R., & Sari, R. P, 2020). According to ISO 9241-210:2010, user experience results from the presentation, functionality, system performance, interactive behavior, and additional features of an interactive system, whether hardware or software. It also reflects past experiences, attitudes, skills, habits, and user personality traits (International Organization for Standardization, 2010). UX is the process of designing interactive product models that support communication and interaction in daily life and workplaces (Sharp, H., Preece, J., & Rogers, Y, 2019).

The User Experience Questionnaire (UEQ) is a technique for measuring user experience. UEQ stands out for its practicality and efficiency in assessing user experience for a product or software. The concept of UEQ integrates aspects of effectiveness, aesthetics, user comfort, and attractiveness. Effectiveness and efficiency are often referred to as pragmatic aspects, while comfort, aesthetics, and attractiveness are classified as hedonic aspects. Initially available in German, the UEQ is now available in more than 30 languages, including Indonesian.

According to the Kamus Besar Bahasa Indonesia, the term "web" refers to a system for accessing, processing, and downloading hyperlinked documents on the Internet, networks, and computers connected to a network (Vermaat, M. E et al, 2018; Vossen, G et al, 2017; Sadapotto, A et al, 2021).

## METHODS

This research was conducted using a quantitative approach to evaluate user experience on the Watch Studio website. The research instrument used in this study is a tool designed to

collect, measure, and analyze data relevant to the research topic. This instrument enables researchers to gather information from respondents regarding their experiences using the website. The primary instrument in this study is a questionnaire developed based on the User Experience Questionnaire (UEQ) method.

The data utilized in this research consists of primary and secondary data. Primary data was directly obtained from respondents, who are users of the Watch Studio website, through a questionnaire distributed online using Google Forms. The questionnaire was designed with a scoring scale from 1 to 7, covering six main dimensions in the UEQ: Attractiveness, Clarity, Efficiency, Accuracy, Stimulation, and Novelty. The collected data was then processed and analyzed to evaluate user experience on the website. Meanwhile, secondary data, including documents, journals, and other relevant references, was used to support the analysis and discussion in this study (Kurniawan, 2021).

The data collection process was carried out in three main stages. The first stage involved direct observation of the Watch Studio website to understand how users interact with it. The second stage included conducting a survey by distributing questionnaires to respondents via social media platforms such as WhatsApp. This approach allowed researchers to gather feedback from users regarding their experiences shopping on the website. The third stage involved a literature review, where researchers examined various theories, books, and previous studies related to user experience and the UEQ method.

The population of this study consists of Watch Studio website users who have provided reviews or comments about their shopping experiences. Based on data obtained in 2022, there were 493 users who gave both positive and negative reviews. From this population, the researcher determined the sample size using the Slovin formula to ensure an accuracy level of 95% with a margin of error of 5%. Based on calculations, the minimum required sample size is 82 respondents.

The data collected through the questionnaire was then analyzed using the UEQ method. This method enables researchers to identify factors influencing user experience, including aspects that cause dissatisfaction or discomfort while using the website. The analysis results are presented quantitatively using tools such as Microsoft Excel, which facilitates practical and efficient data processing.

## RESULTS AND DISCUSSION

### Respondent Characteristics

This study involved 100 respondents who are users of the Watch Studio website for purchasing watches. Respondents were selected through the distribution of online questionnaires via the Google Form platform using a provided link. Based on the collected demographic data, respondents have diverse characteristics, encompassing aspects of age, gender, educational background, and place of residence.

In terms of age, the majority of respondents are in the productive age range of 36–45 years, totaling 42 individuals or 42% of the total respondents. The 26–35 age group is the second largest, with 35 respondents or 35%, followed by the 17–25 age group with 14 respondents or 14%, and the 45–50 age group with 9 respondents or 9%. This indicates that

Watch Studio website users are predominantly in their productive years, who tend to be more active in online shopping. Regarding gender, the data shows that most respondents are male, with 52 individuals or 52%, while females account for 46 individuals or 46%. However, the difference in numbers between males and females is not significant, indicating that the Watch Studio website appeals to both genders.

The educational background of respondents also varies. Most respondents are Bachelor’s degree holders (S1), totaling 41 individuals or 41%. Respondents with a Diploma (D3) education amount to 31 individuals or 31%, while those with a high school (SMA/K) education background comprise 28 individuals or 28%. This suggests that the majority of the website’s users have a medium to high level of education, enabling them to adapt more easily to digital technologies.

In terms of place of residence, the majority of respondents reside in the Jabodetabek area, with 58 individuals or 58%. Meanwhile, 41 respondents or 41% live outside the Jabodetabek region. This indicates that the Watch Studio website has a wide reach, but its usage is still more dominant in urban areas, particularly in economic hubs such as Jabodetabek.

These respondent characteristics show that the Watch Studio website users are predominantly in their productive age, mostly male, have a medium to high level of education, and are primarily urban residents. This demographic data provides valuable insights into the profile of the website’s users, which can serve as a reference for service improvement and marketing strategy development.

### Analysis of Research Data Based on Questionnaire Results

Based on the survey conducted by the researcher, responses were collected from 100 respondents. The rating scale used ranges from 1 to 7, where 1 represents the lowest score (-3) and 7 represents the highest score (+3). The research on user experience in the process of purchasing watches through the Watch Studio website was evaluated using the User Experience Questionnaire (UEQ) method.

The questionnaire was distributed via the WhatsApp social media platform, and the data collection process was conducted over two weeks, involving 100 respondents who were active users of the Watch Studio website. Each respondent provided answers to 26 questionnaire items, initially rated on a scale of 1 to 7. For data processing, the respondents' answers were converted into weighted values on a scale ranging from -3 (strongly disagree) to +3 (strongly agree). An example of the conversion of values from negative and positive terms can be found in Table 1:

**Table 1.** Scale Transformation

Research Scale	1	2	3	4	5	6	7	Assessment Scale
Menyusahkan	0	0	0	0	0	0	0	Menyenangkan
Nilai Setelah Transformasi	-3	-2	-1	0	+1	+2	+3	

Meanwhile, Table 2 provides an example of data transformation from positive to negative terms.

**Table 2.** Scale Transformation

Research Scale	1	2	3	4	5	6	7	Assessment Scale
Lazim	0	0	0	0	0	0	0	Terdepan
Nilai Setelah Transformasi	+3	+2	+1	0	-1	-2	-3	

Cronbach Alpha Coefficient is a measure representing the level of consistency among all items on the scale used. In data analysis using the User Experience Questionnaire (UEQ), a high level of consistency is considered when the Cronbach Alpha coefficient reaches 0.7 or higher. To obtain the Cronbach Alpha value, the following steps are followed: first, the correlation between each pair of scale elements is calculated, and the average correlation of all scale element pairs is taken. Next, the average of all correlation scores on the scale is multiplied by the number of scale elements to obtain the Alpha value. Furthermore, an examination of inconsistent responses on the scale is conducted by calculating the mean, variance, and standard deviation of the responses provided by respondents. The data processing results show all scales with Cronbach Alpha coefficients greater than 0, with the following details: Attractiveness (0.83), Clarity (0.70), Efficiency (0.75), Accuracy (0.75), Stimulation (0.81), and Novelty (0.62).

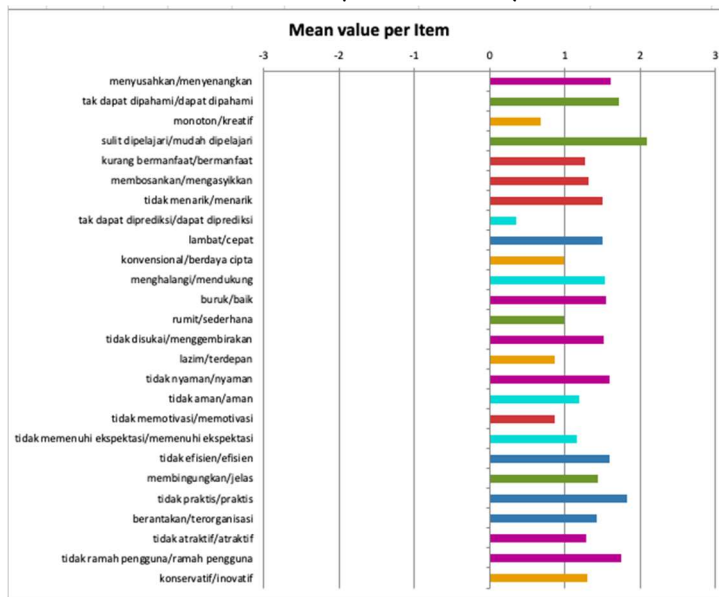
After reviewing the scale of response differences, calculate the mean, variance, and standard deviation based on the respondents' response data. Below are the results for the mean, variance, and standard deviation. Each question on the scale is color-coded differently for each scale: Attractiveness, Accuracy, Clarity, Effectiveness, Stimulation, and Novelty. The results are presented in Table 3.

**Table 3.** The Average of UEQ Measurement Results

Item	Mean	Variance	Std. Dev.	No.	Left	Right	Scale
1	1,6	2,3	1,5	100	menyusahkan	menyenangkan	Daya tarik
2	1,7	2,2	1,5	100	tak dapat dipahami	dapat dipahami	Kejelasan
3	0,7	3,9	2,0	100	kreatif	monoton	Kebaruan
4	2,1	1,5	1,2	100	mudah dipelajari	sulit dipelajari	Kejelasan
5	1,3	2,9	1,7	100	bermanfaat	kurang bermanfaat	Stimulasi
6	1,3	2,6	1,6	100	membosankan	mengasyikkan	Stimulasi
7	1,5	2,3	1,5	100	tidak menarik	menarik	Stimulasi
8	0,4	4,0	2,0	100	tak dapat diprediksi	dapat diprediksi	Ketepatan
9	1,5	2,6	1,6	100	cepat	lambat	Efisiensi
10	1,0	2,3	1,5	100	berdaya cipta	konvensional	Kebaruan
11	1,5	2,4	1,5	100	menghalangi	mendukung	Ketepatan
12	1,6	2,3	1,5	100	baik	buruk	Daya tarik
13	1,0	4,5	2,1	100	rumit	sederhana	Kejelasan
14	1,5	1,9	1,4	100	tidak disukai	menggembirakan	Daya tarik
15	0,9	3,4	1,8	100	lazim	terdepan	Kebaruan
16	1,6	2,2	1,5	100	tidak nyaman	nyaman	Daya tarik
17	1,2	2,7	1,7	100	aman	tidak aman	Ketepatan
18	0,9	3,7	1,9	100	memotivasi	tidak memotivasi	Stimulasi
19	1,2	2,6	1,6	100	memenuhi ekspektasi	tidak memenuhi ekspektasi	Ketepatan
20	1,6	2,6	1,6	100	tidak efisien	efisien	Efisiensi
21	1,4	3,3	1,8	100	jelas	membingungkan	Kejelasan
22	1,8	2,0	1,4	100	tidak praktis	praktis	Efisiensi
23	1,4	2,4	1,5	100	terorganisasi	berantakan	Efisiensi
24	1,3	2,4	1,6	100	atraktif	tidak atraktif	Daya tarik
25	1,8	2,3	1,5	100	ramah pengguna	tidak ramah pengguna	Daya tarik
26	1,3	2,6	1,6	100	konservatif	inovatif	Kebaruan

The mean results graph is grouped for each item using the color codes previously established in Table 4. Meanwhile, the following figure shows the positions of positive, zero, and negative values.

**Table 4.** Mean Graph for Each Question



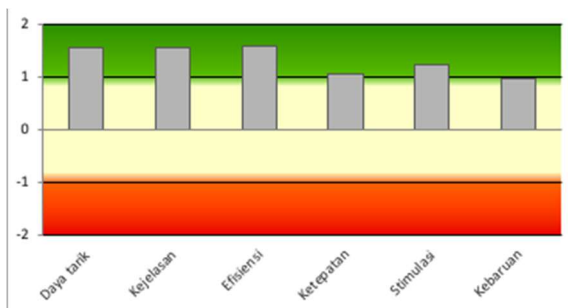
The following are the average results of all statements grouped into each scale. An average impression score within the range of -0.8 to 0.8 is considered a normal evaluation value. However, if the impression score exceeds 0.8, it indicates a positive evaluation, while scores below -0.8 indicate a negative evaluation. Therefore, it can be concluded that the Website Watch Studio has received positive impressions on all scales, including attractiveness, clarity, efficiency, accuracy, stimulation, and novelty.

**Table 5.** Average Results Based on Scale

UEQ Scales (Mean and Variance)		
<b>Daya tarik</b>	↑ 1,550	1,20
<b>Kejelasan</b>	↑ 1,555	1,41
<b>Efisiensi</b>	↑ 1,585	1,35
<b>Ketepatan</b>	↑ 1,053	1,64
<b>Stimulasi</b>	↑ 1,233	1,83
<b>Kebaruan</b>	↑ 0,953	1,43

Next, there is a graph diagram illustrating the average values obtained from the scales, as shown in Figure 1.

**Figure 1.** Average Results Based on Scale



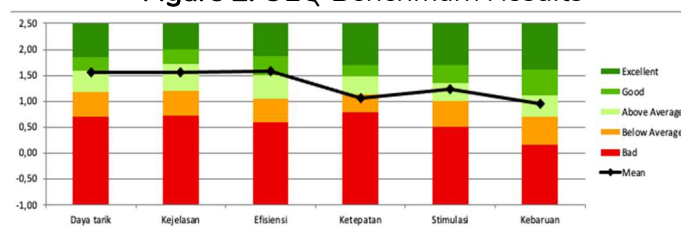
The results of the overall calculations can be divided into three aspects: attractiveness, which represents the pure valence dimension; hedonic quality, which relates to the user's enjoyment of using a product; and pragmatic quality, which describes the quality of task- or goal-related interactions. The evaluation results in this study show an attractiveness aspect score of 1.55, a pragmatic quality aspect score of 1.40, and a hedonic quality aspect score of 1.09. These results are presented in Table 6.

**Table 6.** Mean Results for Each Group

Pragmatic and Hedonic Quality	
Daya tarik	1,55
Kualitas Pragmatis	1,40
Kualitas Hedonis	1,09

To achieve a better perception of product quality, it is necessary to compare the user experience with other superior products. The User Experience Questionnaire (UEQ) allows for benchmarking by comparing each aspect's score with a dataset. This benchmark test illustrates the relative quality of Website Watch Studio compared to other websites. The benchmark results are divided into five categories: Excellent, Good, Above Average, Below Average, and Bad. Website Watch Studio achieved the following ratings : Above Average for the aspects of Attractiveness, Clarity, Stimulation, and Novelty, Good for the aspect of Efficiency, and Below Average for the aspect of Accuracy.

**Figure 2.** UEQ Benchmark Results



To aid further analysis, a benchmark dataset can be established to compare Website Watch Studio with other websites. Based on the mean values of the aspect scales mentioned earlier, the benchmark dataset can be categorized according to the previously defined categories (Excellent, Good, Above Average, Below Average, Bad). Below are the results of comparing the mean values of Website Watch Studio with the benchmark dataset:

**Table 7.** Results of Benchmark Analysis Data Tool

Scale	Mean	Comparison to benchmark	Interpretation
Daya tarik	1,55	Above average	25% of results better, 50% of results worse
Kejelasan	1,56	Above Average	25% of results better, 50% of results worse
Efisiensi	1,59	Good	10% of results better, 75% of results worse
Ketepatan	1,05	Below Average	50% of results better, 25% of results worse
Stimulasi	1,23	Above Average	25% of results better, 50% of results worse
Kebaruan	0,95	Above Average	25% of results better, 50% of results worse

The UEQ benchmark is divided into five categories (per scale), namely:

- a. Excellent: A product that achieves the highest results, falling within the top 10% range.

- b. Good: Products that are within the top 10% of the dataset, while 75% of other products score lower.
- c. Above Average: 25% of products in the dataset have higher results, while 50% of other products score lower.
- d. Below Average: 50% of products in the dataset have higher results, while 25% of others score lower.
- e. Bad: Falls within the lowest 25% of product results.

In the benchmark results, Website Watch Studio received a Good rating in the Efficiency aspect, scoring within the top 10% of the dataset. In the aspects of Attractiveness, Clarity, Stimulation, and Novelty, the application achieved an Above Average rating, scoring better than 25% of products in the dataset. This indicates that the application performs better in these categories within the benchmark dataset. However, in the Accuracy aspect, Website Watch Studio received a Below Average rating, scoring lower than 50% of products. This suggests that in the Accuracy category, Website Watch Studio has relatively lower performance compared to the benchmark dataset.

## CONCLUSION

This study successfully evaluated the user experience of the Website Watch Studio during the watch purchasing process using the User Experience Questionnaire (UEQ) approach. The findings indicate that, overall, Website Watch Studio performs quite well across most of the measured aspects, although there are some areas requiring further attention. In terms of Attractiveness, the website scored 1.55, categorized as Above Average. This reflects that users generally find the Website Watch Studio appealing for purchasing watches compared to other platforms. The Clarity aspect also showed positive results with a score of 1.56, also categorized as Above Average. This indicates that the website is easy to understand, providing comfort and trust to users during transactions. For Efficiency, Website Watch Studio recorded the highest score of 1.59, categorized as Good. This suggests that the features available are well-designed to support smooth transaction processes. Meanwhile, in the Accuracy aspect, the website received the lowest score of 1.05, which falls into the Below Average category. This indicates that users are less satisfied with the accuracy and reliability of the watch purchasing process provided. Additionally, the Stimulation aspect scored 1.23, categorized as Above Average. This score suggests that the website effectively provides encouragement or stimulus for users to make purchases. As for Novelty, with a score of 0.95 in the Above Average category, it indicates that the majority of users perceive a higher level of innovation compared to other websites. Based on these findings, it can be concluded that Website Watch Studio demonstrates good performance in most aspects of user experience. However, the Accuracy aspect requires particular attention. To enhance user satisfaction, it is recommended that the website includes more detailed product descriptions and provides additional relevant information to ensure users feel more confident and assured when purchasing watches.

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