Journal of Information Technology application in Education, Economy, Health and Agriculture
Vol. 1, No. 1, February 2024, pp. 1~7
ISSN: xxx-xxxx, DOI: -

User Experience Analysis in Website-Based Digital Invitation Design

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Article Info

Article history:

Received January 02, 2024
Revised January 28, 2024
Accepted February 14, 2024

Keywords:

Human-Computer Interaction
Digital Invitation
Online Questionnaire
Data Analysis

ABSTRACT

Human-Computer Interaction (HCI) studies how humans interact with computer technology, focusing on interface design that allows users to communicate and operate computer systems effectively and intuitively. The goal is to enhance user experience, productivity, and satisfaction through approaches that consider users' needs, preferences, and abilities. A digital invitation is created digitally, usually in electronic formats such as email, text messages, social media posts, or websites. Digital invitations can be images or text sent to guests via digital platforms, often accompanied by RSVP links or additional information. Creating and using digital invitations addresses various limitations of traditional physical invitations, such as accessibility issues, delivery costs and time, and environmental impact. This research involves creating a prototype of a digital invitation using design platforms like Canva and collecting and analyzing online questionnaire data to assess user efficiency, flexibility, and satisfaction. The results show that digital invitations have many advantages, including cost efficiency, reduced environmental impact, ease of management, and higher interactivity than physical invitations. The conclusion of this study emphasizes the importance of interactive and user-friendly design, as well as high user satisfaction with digital invitations. Recommendations include further development of interactive features, enhanced data security, testing on various devices, and promotion and education on the benefits of digital invitations.

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1. INTRODUCTION

The need for information is essential and plays a crucial role in various fields. It has led to many changes in people's lifestyles, particularly in the field of information technology [1][2]. In the Fourth Industrial Revolution era, all devices will require an internet connection, and the internet provides convenience for humans. The internet seems to shift the habit of accessing traditional media that has long existed. However, this is justified as everything feels more accessible with the internet. The internet also changes people's lifestyles [3].

In today's digital era, digital invitations are becoming increasingly relevant due to their efficiency, speed, and various advantages compared to traditional physical invitations. Digital invitations are more environmentally friendly, easier to manage, and align with the modern lifestyle that relies on information technology. The goal of developing digital wedding invitations is to provide an efficient alternative, reduce negative environmental impacts, increase flexibility and management, leverage interactivity and creativity,

ISSN: xxxx-xxx

save costs, speed up responses and tracking, and adapt to the modern lifestyle increasingly dependent on information technology.

The use of digital invitations has started to gain popularity among Indonesians. Google Trends data compares searches for the keywords "digital invitations" and "invitation cards." Digital invitations show a 57% interest, while traditional invitation cards have 46% [4]. Invitations can be printed or digital. Design services are usually paid for when designing invitations, which naturally increases the budget for an event. Moreover, if the design does not meet the buyer's expectations, revisions will be required to improve the design, which can take longer. In the following process, if the buyer wants to print the invitations, many face difficulties finding printing prices matching their budget. As a result, buyers often have to visit multiple places one by one to compare prices at each printing service. In conclusion, this issue makes it particularly difficult for individuals with limited time, as they have to manage invitation designs that require numerous revisions and find an exemplary printing service for creating printed invitations [5].

Despite this, many people still choose to use physical invitations and feel several drawbacks. One of the main issues is limited accessibility, such as higher delivery costs and time and the risk of invitations being lost or damaged. Therefore, this research is conducted to encourage people to transition from physical to digital invitations while also gathering feedback on the design of digital wedding invitations. The aim is to make a meaningful contribution to information technology.

2. METHOD

The method used in this research is data analysis with a Likert Scale approach derived from questionnaire results. The Likert Scale is a scale used to measure perceptions, attitudes, or opinions of an individual or group regarding an event or social phenomenon. There are two types of questions in the Likert scale: positive questions to measure positive scales and negative questions to measure negative scales. Positive questions are scored 5, 4, 3, 2, and 1, while negative questions are scored 1, 2, 3, 4, and 5 [6].

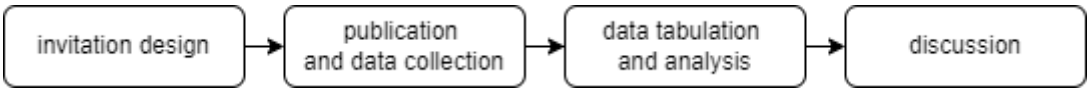

Figure 1. Research Method

Figure 1 shows the procedure in this research: Invitation Design: Designing and publishing the digital wedding invitation to the public. Publication & Data Collection: Publishing the design online and collecting data from the public for analysis. Tabulation & Data Analysis: Presenting the data in tables and graphs for analysis.

3. RESULTS AND DISCUSSION

Digital wedding invitations allow couples to publish their wedding invitations electronically. In addition to being more practical, digital invitations can also save on printing costs and distribution expenses [7]. Digital invitations can showcase more than one of the best photos of the couple without worrying about additional printing costs that would arise if they wanted to include many photos in their invitation. In the initial phase of this research, we designed a digital invitation with the concept of a wedding invitation. The creation process involved using a design platform like Canva to develop the digital invitation prototype. This design focuses on aesthetics and integrates interactive and multimedia elements, such as images, buttons, and more, to enhance the user experience. This step is crucial to ensure the digital invitation is appealing and functional [8].

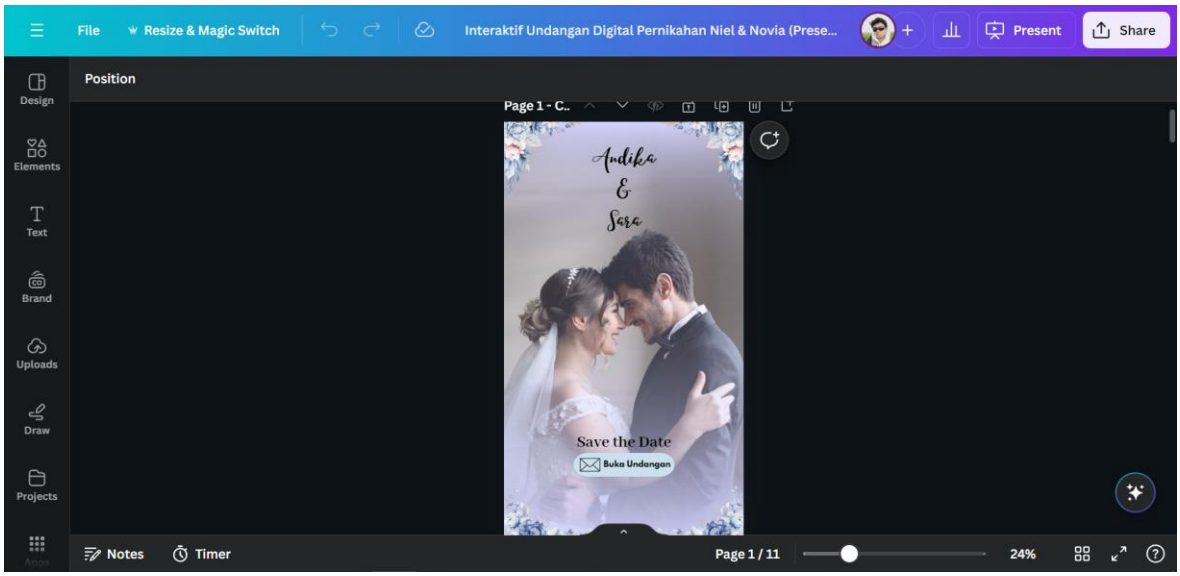

Figure 2. Invitation Design

ISSN: xxxx-xxx

Figure 3. Invitation Design

The field of Human-Computer Interaction (HCI) studies how computer technology affects human work and activities. Human-computer interaction involves the relationship between humans and computers to achieve specific goals. The main objective of HCI is to make it easier for humans to operate computers and to obtain the necessary feedback [8].

From the above invitation, we have applied several concepts of Human-Computer Interaction (HCI) that we believe adequately meet the requirements in the design of the digital invitation we created; the design includes all essential information such as date, time, location, map, and more. The user-friendly design has transparent and easily accessible RSVP links or additional information. It is straightforward and to the point, allowing recipients to obtain the information they need quickly. The invitation functions well across various devices (computers, tablets, smartphones), and buttons and other interactive elements work correctly and responsively. The design is intuitive, so recipients can easily understand how to use it with clear icons or instructions to guide them through the invitation. It is visually appealing, reflecting the theme and ambience of the wedding, and provides an enjoyable experience for recipients, with personalization elements like photos or videos of the couple to make it more memorable. By incorporating these HCI concepts, we are confident that we have delivered a well-designed digital wedding invitation that effectively meets users' and recipients' needs [9].

Google Forms is a component of Google Docs services. This application suits students, teachers, lecturers, office employees, and professionals who frequently create quizzes, forms, questionnaires, and online surveys [10]. In the Google Form, we used the Likert Scale questionnaire type, where respondents are asked to choose from values 1, 2, 3, 4, or 5, with one representing "Strongly Disagree" and five representing "Strongly Agree." From this Google Form questionnaire, we received responses from 31 participants regarding the quality of the digital invitation design we created [11].

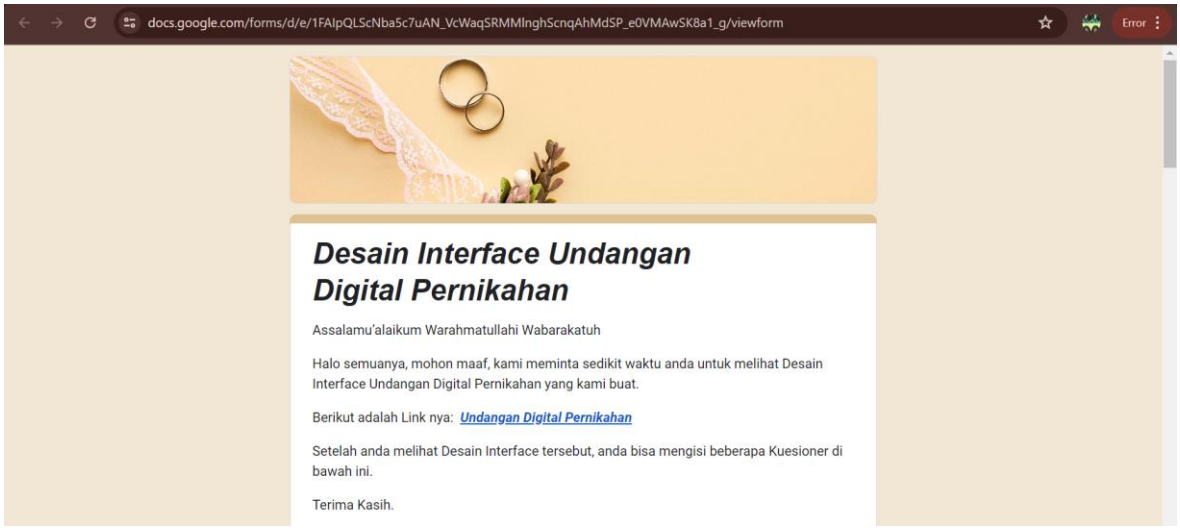

Figure 4. Google Form Design Interface

Table 1. Likert Scale

Score	Description	Interval	Criteria
1	Strongly Disagree	0% - 19,99%	Very bad
2	Disagree	20% - 39,99%	Bad
3	Neutral	40% - 59,99%	Enough
4	Agree	60% - 79,99%	Good
5	Strongly Agree	80-100%	Very Good

Table 2. Result of X Variable

No	Timestamp	X1	X 2	X3	X4	X5	X 6	X 7	X 8	X 9	X10
1	6/26/2024 16:31:38	5	4	5	5	5	5	5	5	4	4
2	6/26/2024 17:58:18	5	5	5	5	5	5	5	5	5	5
3	6/26/2024 21:53:22	5	5	5	5	5	5	5	5	5	5
4	6/26/2024 21:57:47	5	5	5	5	5	5	5	5	5	5
5	6/26/2024 22:02:11	5	5	5	5	5	5	5	5	5	5
6	6/26/2024 22:46:25	5	5	5	5	5	5	5	5	5	5
7	6/26/2024 22:48:53	4	3	2	2	2	3	3	2	2	4
8	6/26/2024 22:50:29	4	4	4	4	4	4	4	4	4	5
9	6/26/2024 22:51:54	3	4	3	3	3	5	4	3	5	2
10	6/26/2024 22:54:04	5	5	5	5	4	5	5	4	5	5
11	6/26/2024 22:55:50	4	4	5	3	4	4	4	4	4	4
12	6/26/2024 23:00:19	3	3	3	3	3	3	3	3	3	3
13	6/26/2024 23:00:33	5	5	5	5	5	5	5	5	5	5
14	6/26/2024 23:02:03	5	5	5	5	5	5	4	4	5	5
15	6/26/2024 23:02:24	5	5	5	5	5	5	5	5	5	5
16	6/26/2024 23:03:15	4	4	4	4	4	4	4	4	4	4
17	6/26/2024 23:03:20	5	4	4	4	4	4	4	3	4	4
18	6/26/2024 23:03:24	5	5	5	5	5	5	5	5	5	5
19	6/26/2024 23:11:10	4	4	4	4	4	4	4	4	4	4
20	6/26/2024 23:39:00	5	2	5	5	5	5	3	5	5	5
21	6/27/2024 6:12:12	4	2	3	5	3	4	5	5	5	5
22	6/27/2024 7:25:22	4	4	4	4	4	4	4	4	4	4
23	6/27/2024 7:45:23	4	4	4	4	4	4	4	4	4	4
24	7/2/2024 16:07:03	5	5	5	4	4	4	4	4	4	4
25	7/5/2024 8:29:14	5	5	5	5	5	5	5	5	5	5
26	7/5/2024 11:59:05	1	1	1	1	1	1	2	5	5	5
27	7/5/2024 12:02:13	4	3	4	4	4	3	5	2	4	5
28	7/5/2024 12:18:10	5	5	4	5	5	5	5	5	5	5
29	7/5/2024 12:26:20	5	4	5	5	4	4	4	4	4	4
30	7/7/2024 19:38:01	5	5	5	5	5	5	5	5	5	5
31	7/10/2024 8:32:50	5	5	5	5	5	5	5	5	5	5

From the total data, the respondents highly appreciate the digital invitation design created by us. This is evidenced by the total score from all ten questionnaires given to the respondents, who rated our digital invitation design using the Likert scale values of 1, 2, 3, 4, and 5. We also calculated the percentage for each questionnaire using the formula (Total Score / Maximum Score) * 100 and computed the average rate of all questionnaire scores. The resulting average rate is 86.97%, which falls into the "Excellent" category.

Table 3. Result of Y Variable

No	Timestamp	X1	X 2	X3	X4	X5	X 6	X 7	X 8	X 9	X10
1	6/26/2024 16:31:38	5	5	5	5	5	5	5	5	5	5
2	6/26/2024 17:58:18	5	5	5	5	5	5	5	5	5	5
3	6/26/2024 21:53:22	5	5	5	5	5	5	5	5	5	5
4	6/26/2024 21:57:47	5	5	5	5	5	5	5	5	5	5
5	6/26/2024 22:02:11	5	5	5	5	5	5	5	5	5	5
6	6/26/2024 22:46:25	5	5	5	5	5	1	5	5	5	5
7	6/26/2024 22:48:53	3	3	3	3	3	4	2	3	3	3
8	6/26/2024 22:50:29	4	4	4	4	4	4	4	4	4	4
9	6/26/2024 22:51:54	2	3	3	3	3	3	3	3	3	3
10	6/26/2024 22:54:04	5	5	5	5	5	4	5	5	5	5

ISSN: xxxx-xxx

11	6/26/2024 22:55:50	3	4	4	4	4	4	4	4	4	4
12	6/26/2024 23:00:19	3	3	3	3	3	3	3	3	3	3
13	6/26/2024 23:00:33	5	5	5	5	5	5	5	5	5	5
14	6/26/2024 23:02:03	5	5	5	5	5	5	5	5	5	5
15	6/26/2024 23:02:24	5	5	5	4	5	4	5	4	5	4
16	6/26/2024 23:03:15	4	4	4	4	4	4	4	4	4	4
17	6/26/2024 23:03:20	5	4	4	4	4	4	4	4	4	4
18	6/26/2024 23:03:24	5	5	5	5	5	5	5	5	5	5
19	6/26/2024 23:11:10	4	5	5	5	5	5	5	5	5	5
20	6/26/2024 23:39:00	5	5	5	5	4	5	5	5	4	5
21	6/27/2024 6:12:12	4	3	4	5	4	4	4	3	4	4
22	6/27/2024 7:25:22	4	4	4	4	4	4	4	4	4	4
23	6/27/2024 7:45:23	4	4	4	4	4	3	4	4	4	4
24	7/2/2024 16:07:03	4	4	4	4	4	4	4	4	4	4
25	7/5/2024 8:29:14	5	5	4	4	4	5	5	5	5	5
26	7/5/2024 11:59:05	5	5	5	5	5	5	5	5	5	5
27	7/5/2024 12:02:13	4	4	5	5	5	3	1	4	5	4
28	7/5/2024 12:18:10	3	4	5	4	3	4	5	4	5	4
29	7/5/2024 12:26:20	5	4	4	4	4	4	4	4	4	4
30	7/7/2024 19:38:01	5	5	5	5	5	5	5	5	5	5
31	7/10/2024 8:32:50	5	5	5	5	5	5	5	5	5	5

The total data shows respondents are very satisfied with the digital invitation design we created. This is confirmed by the total score from all ten questionnaires given to the respondents, who rated our digital invitation design using the Likert scale values of 1, 2, 3, 4, and 5. We also calculated the percentage for each questionnaire using the formula (Total Score / Maximum Score) * 100. We computed the average rate of all questionnaire scores, resulting in an average rate of 88%, which falls into the "Excellent" category. The ease of using the Likert Scale as a behavioural measurement tool should be carefully considered to avoid errors in data analysis.

4. CONCLUSION

The research presented in this journal highlights the significant benefits of using digital invitations compared to traditional physical invitations. These benefits include cost efficiency, reduced environmental impact, and ease of management. In today's digital era, digital invitations are considered a more practical and efficient alternative, as they minimize printing costs and the delivery time typically required for physical invitations. Additionally, using digital invitations contributes to environmental preservation by reducing paper usage. Data analysis from the distributed survey shows that most respondents gave positive feedback on the digital invitation design we created. The design considers aesthetic aspects and includes interactive and multimedia elements to enhance the user experience. Respondents found the digital invitation easy to use and beneficial, with information presented clearly and accessible quickly. This reflects the importance of applying Human-Computer Interaction (HCI) principles in the digital invitation design process to optimize user experience.

Besides efficiency and functionality, this research emphasizes improving data security and testing across various devices. Recommendations include adding interactive features to increase user engagement. Education and campaigns about the public's benefits of digital invitations are also considered significant in promoting the adoption of this technology. The study concludes that an interactive and user-friendly digital invitation design can provide high user satisfaction and has the potential to replace traditional physical invitations shortly. Overall, this journal provides valuable insights into the benefits and potential of digital invitations in simplifying and expediting the invitation process. By considering user needs and preferences, digital invitations can be more efficient, cost-effective, and environmentally friendly, in line with current information technology advancements.

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