

Designing User Interface (UI) & User Experience (UX) Mobile Website Templates Digital Wedding Invitations

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ABSTRACT

Wedding invitations have been using the conventional way, with paper. Costs are not cheap, invitation printing takes a long time, and environmental issues in the use of paper. Wedding invitations no longer use paper media. Wedding invitations with user interface (UI) and user experience (UX) designs provide a new experience. UI/UX design is an important stage because it gives an initial impression to potential users. The design of digital wedding invitations uses a design thinking method approach which consists of several stages, namely empathize, define, ideate, prototype, and testing. Empathize process using questionnaires and interviews. Respondents to the questionnaire were 92 people with an age range of 25 to 35 years and had a middle to upper economic level. Apart from being well educated, the respondents are active internet users. The results showed that respondents preferred the simple modern invitation design style. In the define process, users need several digital wedding invitation templates with international and traditional nuances. It is designed to be interactive, user friendly, and has features that can be customized. Furthermore, the ideation process is carried out based on the analysis of the define process, namely the design of mobile website templates for digital wedding invitations. Bride and groom are made easy with several template choices. The prototype process is carried out by getting the initial design, then testing it and doing it iteratively to get feedback from the bride and groom in order to get the digital wedding invitations that the bride and groom need.

Keywords: digital wedding invitations, user interface (UI) and user experience (UX), design thinking.

INTRODUCTION

Wedding is one of the most important and memorable days in a person's life. Wedding invitation design is one of the important things and at the same time forms the first impression of the invited guests on the wedding style to be used (Danielle DiMercurio, 2011). The internet revolution has introduced more modern methods and changed the way couples think about booking invitations. Based on trends, more people are ordering invitations digitally than by using paper invitations. This can be seen from a search through Google Trends that compares searches for the word digital invitation and invitation cards. Keyword searches for "digital invitation" had an average of 56 percent and "invitation card" 49 percent. The data is the result of searches for the last 12 months (August 20, 2021–August 20, 2022). The five regions in Indonesia that are most interested in digital invitations are Southeast Sulawesi (82 percent), Central Sulawesi (80 percent), South Sulawesi (77 percent), West Nusa Tenggara (73 percent), and Central Kalimantan (71 percent). Digital invitations are considered to be a convenient solution to have cool and stylish invitations, save costs, and can be accessed anywhere and anytime as long as the user is connected to the internet. Digital wedding invitations are also more attractive because they are able to present interactive wedding information (UI / UX), photo collages, videos, background music, Google Maps, and other features needed by couples and also make it easier for invited guests when going to attend the wedding.

The rapid development of technology and the Internet revolution made changes in human behavior and changes in methods in various fields, abandoning manual methods, and replacing them with the use of modern technology. According to a report by We Are Social, there are 204.7 million internet users in

Indonesia as of January 2022 (Cindy Mutia Annur, 2022). The development of the use of smart phones (smartphones) one of them changes the way humans communicate. Newzoo's report shows that there are 170.4 million smartphone users in Indonesia. Smartphone penetration has reached 61.7% of the total population (Pusparisa Yosepha, 2021). The results of the BPS Susenas in 2018, smartphone ownership in the millennial generation amounted to 93.02 percent. The highest use of smart phones at the age of 19-24 years, namely 89.51 percent and 94.22 percent. The age of 25-30 years is 86.78 percent (Ahmad et al., 2020).

Meanwhile, paper has become a medium commonly used for writing, printing, painting, and various other uses, including making invitations. Paper is also part of human civilization. With paper, humans can write, read, and communicate. However, on the other hand, to make 1 kilogram of paper, 3 kilograms of wood are needed. This will have an impact on massive deforestation to meet the world's paper needs. Currently, Indonesia's native natural forests are shrinking so that Indonesia has lost 72 percent of its native forests. In addition, paper also contributes 25 percent of waste. Coupled with other garbage, this makes the environmental situation worse (Barber and Schweithelm, 1997).

Millennials are the generation born between 1980 and 1995 (Foot and Stoffman, 1998). This generation is also often referred to as "Baby Boom Echo" because millennials are the children of Baby Boomers (1946-1965) (Burke et al., 2015). According to the results of the 2020 Population Census, there are 69.38 million (25.87 percent) millennials in Indonesia (Jayani Hadya Dwi, 2021). The millennial generation is a tech-savvy generation, which prioritizes communication technology. Two characteristics that characterize each other are interconnected and seem to be unlimited. The existence of the internet, Wi-Fi, laptops, and smartphones allows them to connect with each other and have a global perspective (Imelda, 2019).

Previous research was conducted by Vienna Pertiwi Putri Wardani and Anak Agung Gede Bagus Udayana in 2021 with the title "E-Invitation as an Industrial Era 4.0 Business Opportunity in Bali". The problem discussed in this previous study is the potential for electronic invitations to work in business and daily life. By using qualitative descriptive methods, the research seeks to explore information about the importance of using e-invitation in the pandemic era and becoming a business opportunity. The results of research by Vienna Pertiwi and Anak Agung Gede Bagus Udayana show that in the 4.0 era that utilizes technology, e-invitation has good business potential, especially in Bali (Pertiwi et al., 2021). This research is still reviewing the potential of e-invitation in general and has not provided recommendations for what kind of digital invitation users need. The research this time builds on previous research by producing recommendations for digital wedding invitations needed by brides-to-be and invited guests.

Based on the description above, several research questions can be formulated. First, how to design digital wedding invitations to appeal to millennials in Indonesia? Second, how to design UI/UX mobile website templates for digital wedding invitations as one of the media that can be used to invite invited guests? Therefore, the purpose of this study is to produce digital wedding invitation designs that are attractive to the millennial generation in Indonesia and produce mobile website designs for digital wedding invitation templates as one of the media that can be used to invite invited guests. The problem boundaries are divided into three categories, namely content, media, and targets. The content contained in this digital wedding invitation includes detailed information on the wedding event, a couple's self-description, Google Maps features, photo collages, videos, countdowns, and other features. The content is the result of interviewing several married couples who have used digital wedding invitations. The media used in this design is in the form of Android-based mobile apps. Invitations are template-shaped and interactively designed. Furthermore, the main target of designing this application is the millennial generation in Indonesia.

METHODS

This study used the design thinking method by David Kelly and Tim Brown. Design thinking is a design design method whose process is carried out repeatedly (iterative) in order to understand users,

challenge hypotheses, and redefine problems in order to get solutions or products that are useful to users. The key word of this method is the process of empathy. The process of empathy helps designers gain experience, motivation, and a complete understanding of users and their needs. By carrying out the process of empathy, designers put aside hypotheses and biases that are built. In addition to the empathy process, there are four more steps in the application of design thinking, namely define, ideate, prototype, and test.

Empathize is The process of understanding and sensing potential users' problems. The activities carried out are the distribution of questionnaires, direct interviews, secondary data. Define is the process of analyzing data obtained from the empathize process with the aim of determining the problem statement that becomes the point of view of the research. Ideate is the ideation process as a form of solution / answer to the problem statement. This process is also the cornerstone in development to the prototype stage. Prototype is the initial process of designing the product to be created and functioning to detect errors from the beginning and acquire new possibilities. This initial design will later be tested to users to get responses and feedback. Testing is done by collecting feedback from users. This process is iterative with the aim of getting a product that suits the user.

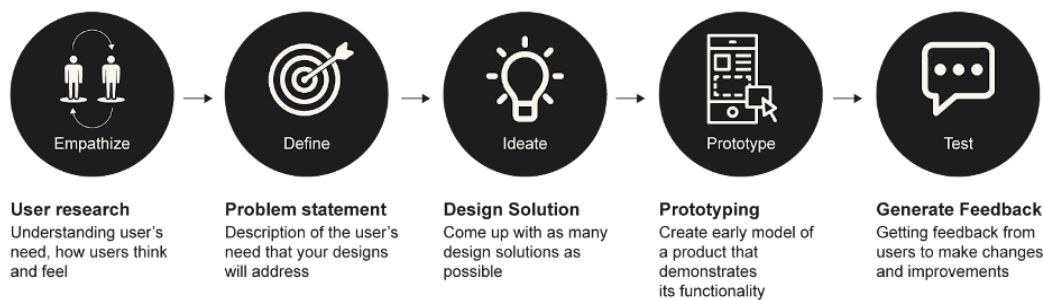


Figure 1. Image caption.
(Source: Parlindungan Siregar, 2022)

RESULTS

Empathize

Questionnaire on Target Users

The first variable, respondents were asked to answer several questions related to gender, domicile, and profession. Based on the data from the questionnaire, respondents were dominated by women, as much as 62.9 percent, compared to men who were 37.1 percent. Most respondents live in big cities in Indonesia, especially in Java. Jakarta City is at the top of the list, followed by Bekasi and Tangerang City. Most respondents work as private employees with a percentage of 71.9 percent. Next followed by the self-employed profession 14.6 percent and housewives 5.6 percent.

Questionnaire Regarding Internet and Smartphone Use

The second variable, respondents were asked to answer several questions related to internet use, devices that are often used to access the internet, the use of smart phones (smartphones) and the number of smart phones owned by respondents. From the results of the questionnaire, all respondents used the internet quite often. The majority of respondents (91.0 percent) access the internet using smart phone devices, followed by the use of laptop devices as much as 6.7 percent. Indonesia's millennial generation is very influenced by technological developments (savvy technology). This is evident from the results of a questionnaire that shows all respondents (100 percent) use smartphones in daily life. Furthermore, 37 percent of respondents own a smartphone with more than one device.

Questionnaire Regarding Digital Wedding Invitations

The third variable, respondents were asked to answer several questions related to knowledge and interest in digital wedding invitations, reasons for using them, design styles of interest, as well as the level of respondents' desire to use digital wedding invitations and respondents' wishes to suggest to

others. The results of the questionnaire showed that the majority of respondents (98.9 percent) knew about digital wedding invitations and only a few respondents (1.1 percent) did not know about digital wedding invitations. As many as 95.5 percent of respondents are interested in digital wedding invitations. The results of the questionnaire showed, respondents in this case the millennial generation considered the use of digital wedding invitations to provide many benefits, such as more attractive invitations because they were designed interactive and many features (30.3 percent). The next benefit is felt in terms of cost (69.7 percent). Digital wedding invitations are paperless and save on shipping costs. As many as 68.5 percent of respondents like digital wedding invitations with modern simple design styles, elegant classics 29.2 percent and feminine romance 2.2 percent. The results of the questionnaire also showed that 97.8 percent of respondents had a desire to use and suggest digital wedding invitations to family and friends who were getting married. To further deepen the research, interviews were conducted with several resource persons, namely the unmarried and married millennial generation. The online interview activity (Zoom Meeting application) aims to find out their interests and experiences using digital wedding invitations.

Interview Results of Unmarried Respondents

The interview results showed that potential users (respondents) were interested in using digital wedding invitations. Respondents consider that the use of digital wedding invitations has become a trend in the Indonesian millennial generation. Digital wedding invitations can save costs, such as eliminating printing costs and sending invitations to invited guests. In addition, respondents like the features presented, namely photo collages, videos, Google Maps, RSVP, live streaming, digital envelopes, countdown, background music, and various other features that can be adjusted to your needs. Respondents like the simple modern style of digital wedding invitation design because it feels neater, cleaner, and information can be read more clearly. However, on the other hand, Indonesian people are still thick with the culture of each region. This is shown by some respondents and respondents' families wanting traditional digital wedding invitations.

Interview Results of Respondents of Digital Wedding Invitation Users Who Are Married

The interview results showed that respondents were satisfied with the use of digital wedding invitations because it saves in terms of cost and the use of features that help respondents in preparing for the wedding, in this case arranging invited guests. However, from the advantages contained in digital wedding invitations, there are weaknesses that respondents feel. Respondents consider the use of too many features to make invitations ineffective because they do not match the characteristics of invited guests. The use of the digital envelope feature in some regions of Indonesia is considered impolite. Respondents expect the features of digital wedding invitations to be tailored to the needs of respondents. In addition, respondents felt barriers when sending digital wedding invitations to baby boomers' families and invited guests. Baby boomers are used to printed invitations being delivered directly by the bride and groom or family. The use of digital wedding invitations by baby boomers is considered impolite and there are limitations in knowledge of digital technology. Respondents also found it difficult to find vendors or digital wedding invitation websites that could be tailored to their wishes. Respondents want some design templates that can be a comparison in determining the digital wedding invitation design they need.

Comparative Study of Similar Products

To further deepen the research, a comparative study of similar products was conducted. Similar products that will be analyzed are Wedew and Our Wedding.

1) Wedew.id

Wedew is a website that provides several digital wedding invitation design templates. The invitation design used has international nuances, such as simple, modern and classic elegant design styles. Wedew has advantages in terms of customization. Prospective users can create and define their own invitations, ranging from colors, fonts, hierarchy, custom domains, and features to be used. Prospective users no longer need to look for invitation vendors to arrange digital wedding invitations. Prospective users can independently (self service) make invitations that are liked and needed. However, on the other hand, Wedew has disadvantages, such as the unavailability of traditional digital wedding invitation design templates. As is known, marriage

in Indonesia is closely related to culture. Many weddings in Indonesia are still held following the culture of each bride-to-be. In addition, Wedew's user interface is quite crowded so it is less user friendly. Prospective users are flooded with features that make it difficult to use Wedew.id website templates. The large selection of templates provided Wedew.id make users also have difficulty choosing the desired invitation.

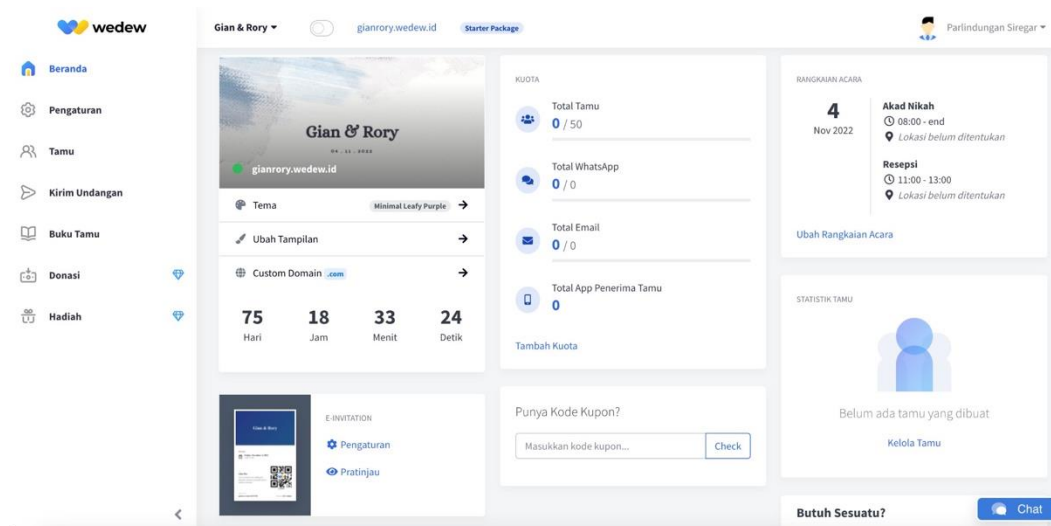


Figure 2. User interface of Wedew.id.
(Source: Wedew.id, 2022)

2) Our Wedding

Similar to Wedew.id, Our Wedding is also a website that provides several digital wedding invitation templates that can be customized. Potential users can also independently create digital wedding invitations as they wish. Our Wedding has a simpler and more user friendly user interface compared to Wedew.id website templates. However, Our Wedding also has a weakness, namely the absence of traditional digital wedding invitation templates.

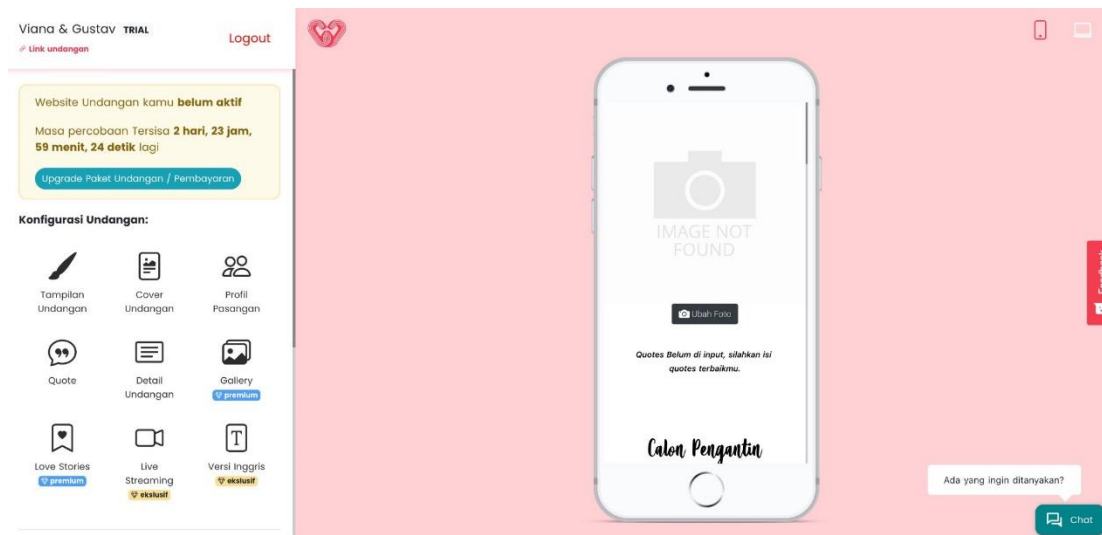


Figure 3. User interface of Our Wedding.
(Source: Our Wedding, 2022)

Define

Based on data obtained from the empathize process, namely the distribution of questionnaires, interview activities, and secondary data in the form of comparative studies of similar products, digital wedding invitations are attractive to the Indonesian millennial generation because they are paperless,

do not produce waste in physical form and are more environmentally friendly, as well as cost, time, space, energy, and productivity efficiency. Digital wedding invitations are also considered more attractive because they are interactive and have features, such as photo collages, videos, Google Maps, RSVP, live streaming, digital envelopes, countdown, background music and other features, which provide a new experience to users. These digital wedding invitations have a great opportunity to be used by millennials because this generation likes different things. The opportunity to use digital media is quite large because the use of the internet is increasingly widespread and massive.

In addition to its advantages, digital wedding invitations also have disadvantages, namely digital wedding invitation links are sometimes not opened by invited guests. Furthermore, the view of the public, especially the baby boomers, that wedding invitations should be sent directly and in physical form because they are considered more polite and more appreciative of invited guests.

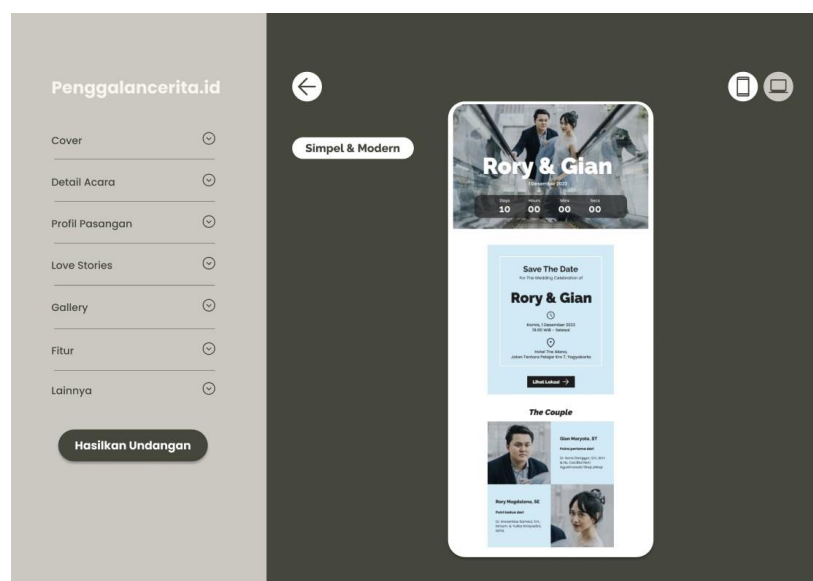
From the analysis process above, it can be concluded that potential users need several digital wedding invitation templates with international and traditional nuances. International digital wedding invitations consist of several design styles, namely simple, modern, classic, elegant, and feminine romance. In addition, digital wedding invitations should be supported by features that can be customized, can meet the needs of couples and help invited guests access the wedding. The link (domain) of digital wedding invitations is made shorter and has elements of the couple's name to make it easier for invited guests to recognize. The invitation is elegantly designed and attaches the name of the invited guest on the front page before entering the wedding information page with the aim of honoring the invited guest.

Ideate

Based on the analysis obtained from the define process, ideation is generated from the core of the problem, namely the needs of prospective users for several digital wedding invitation templates of international and traditional nuances, interactive design, and have customizable features. The ideation obtained is the design of user interface (UI) and user experience (UX) mobile website templates digital wedding invitations for the Indonesian millennial generation. This website template consists of several international and traditional nuance templates that will give couples the flexibility (self service) to determine the invitation design that suits their needs. Website templates are designed to be user friendly making it easier for prospective users to make digital wedding invitations on this website.

Prototype

This process is an implementation of ideation obtained from the previous process. The results of the prototype will later be tested to several potential users to get initial feedback from the design.



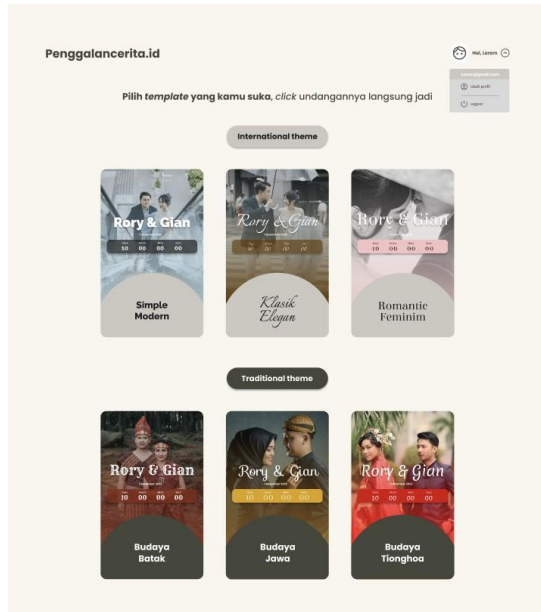


Figure 4. User interface of Penggalancerita.id.
(Source: Parlindungan Siregar, 2022)

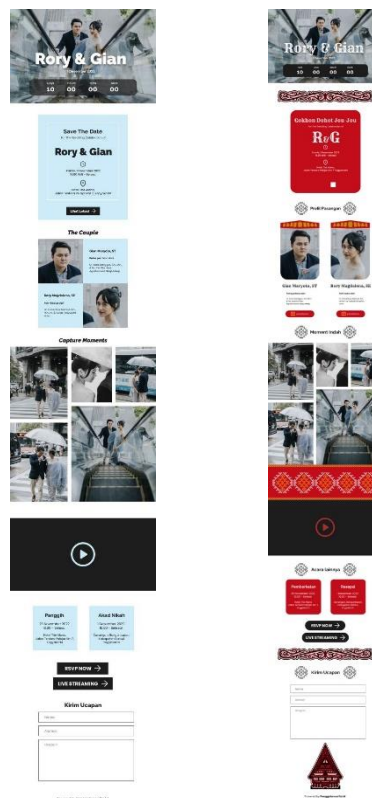


Figure 5. Hierarchy of Penggalancerita.id.
(Source: Parlindungan Siregar, 2022)

Testing

The testing process is carried out repeatedly (iterative) in order to get the digital wedding invitations needed by users.

CONCLUSION

Based on the results of the research conducted, the design thinking method becomes a solutive and innovative method for a problem, by re-questioning the hypothesis built then carrying out the empathize process. The empathize process is carried out using questionnaires, interview activities, secondary data in the form of comparative studies of similar products. From the questionnaire data, respondents amounted to 92 people with an age range of 25-35 years (the age of the Indonesian millennial generation), with an upper middle economic level. In terms of psychographics, respondents are well-educated. From the behavioral side, respondents are active internet users. The majority of respondents stated that they prefer a simple modern invitation design. User interface and user experience (UI / UX) should not be too crowded, user friendly still has an elegant impression, and the information conveyed can be seen clearly. In the process of define, researchers concluded that prospective users need several wedding invitation template designs with international and traditional nuances, designed with interactive, and customizable features. Furthermore, the ideation process is carried out based on the analysis of the define process, which is a design of user interface (UI) and user experience (UX) design of mobile website templates digital wedding invitations for the Indonesian millennial generation. Couples are made easy with the multiple template options they need. The prototype process is carried out by getting an initial UI / UX design with high fidelity quality. The testing process is carried out repeatedly (iterative) to get feedback from users and later get digital wedding invitations that are useful for users, namely the millennial generation in Indonesia.

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