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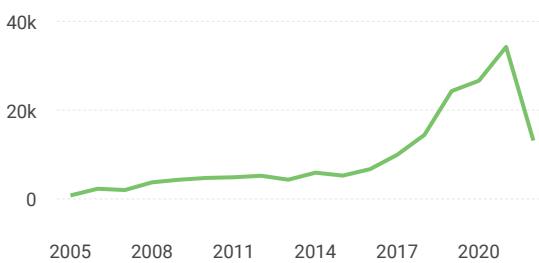
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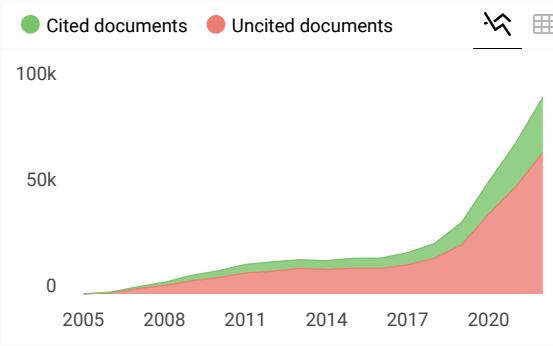
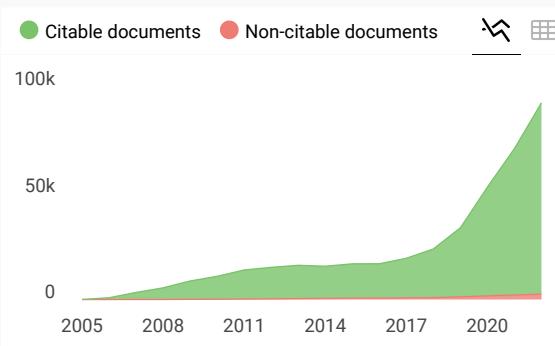
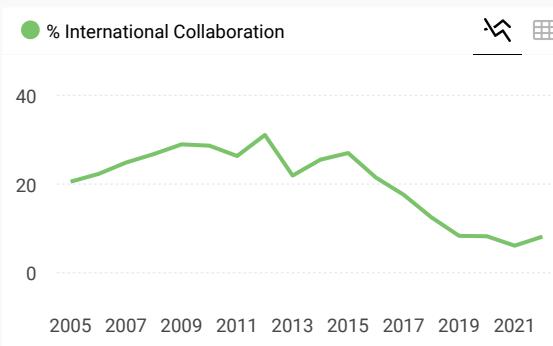
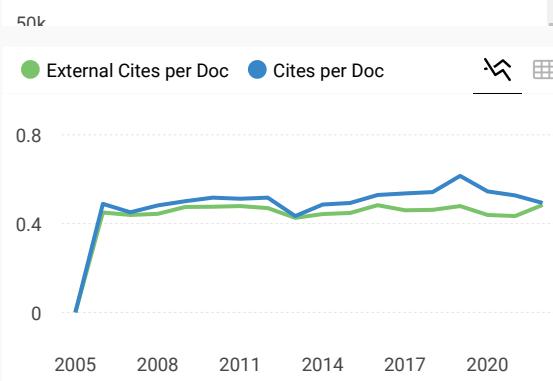


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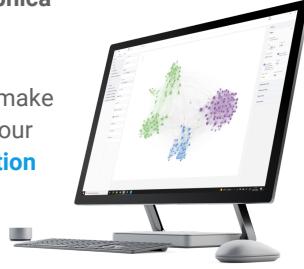
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# Virtual application technology of citizen journalism based on mobile user experience

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**Abstract.** At present, the development of citizen journalism in the era of globalization and information technology is increasingly developing because of the presence of the internet and application technology that are in demand by readers and writers to develop their potential. The technology that is developing at this time is to use an Android technology mobile application that is very supportive of its operation. However, Citizen Journalism must be careful in using and filtering information from irresponsible blogs so that they can deceive the informant and easily incite an information that has not been proven by the truth of the news. Therefore, this research will make a citizen journalism application based on mobile technology in the platform of an Android and AJAX programming mobile. The results of the research show that the Mobile Technology Citizen Journalism application can be tested by sending or accessing news or information content on the server using a GPRS connection. Tests carried out include features, reliability, suitability, easy to use, and perception of the quality of this Mobile application.

## 1. Introduction

The development of technology has now developed and is inherent in modern human life. Internet and social media are one of them which is very influential for the development of this technology, and also the development of information technology now it is also very utilized by media companies even to the public which as one of the tools to attract readers and disseminate important information around them is through Citizen Journalism.

Online citizen journalism is also increasingly attached to human life, along with the development of the internet and information technology. The development of citizen journalism makes people have alternative news and perspectives about a fact from various parties and groups. So now we no longer need to localize a view with only one particular profession. Anyone or ordinary citizen can become a journalist by writing a blog, writing news or posting pictures on a social media account which can contain events that are not tracked by conventional journalists, there are many facets to each story or news, which can be appointed to be the coolest topic. Citizen journalism is an activity in which the role of journalists or journalistic activities can be carried out by people who are formally not journalists. The activities that he does are the same as those of journalists in general, namely gathering information, writing news, editing and broadcasting it. A general finding is that novel evidence of the social impact



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of research can be found in social media, becoming relevant platforms for scientists to spread quantitative and qualitative evidence of social impact in social media to capture the interest of citizens [1].

Freedom in terms of access or delivery of information owned by citizen journalism which is in line with the development of online journalism that continues to increase, causing the existence of citizen journalism will continue to exist in the world of technology.

In addition to the strength of citizen journalism, where citizen journalism allows the public to exchange information about things that can make the public more open-minded, citizen journalism also has obstacles that are difficult to avoid which can automatically become challenges for the existence of citizen journalism in the future.

## 2. Citizen journalism and technology

One of the most accepted and inclusive definitions of citizen journalism has been put forward in New Media [2]. They define citizen journalism as the act of non-professionals, playing an active role in the process of collecting, reporting, analysing and disseminating news and information. This definition covers all the possible activities of citizen journalists in existence [3]. Citizen journalism can be interpreted as the involvement of citizens in preaching something. Without exception, every citizen can become a reporter on social media online networks.

### 2.1. Social media

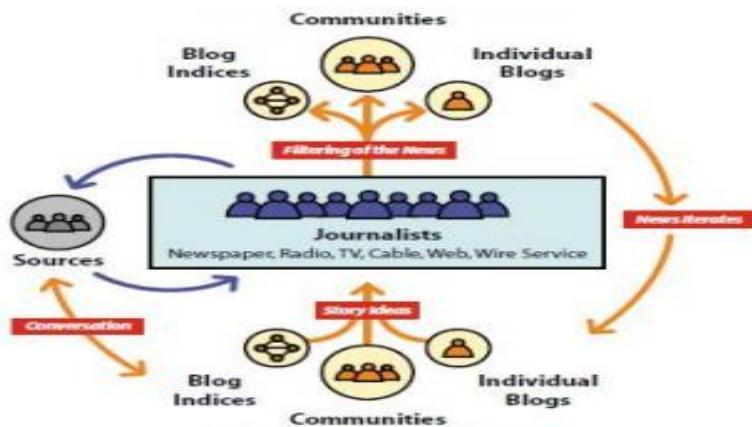
Social media is a bridge for journalists that refers to new media that uses technology in creating open interaction, participation and collaboration where everyone has the opportunity to voice their ideas, opinions and experiences through online media in the form of words or visual material [4].

### 2.2. User experience and user satisfaction

The user experience is central to interaction design. By this, it is meant how a product behaves and is used by people in the real world. It is important to point out that one cannot design a user experience, only design for a user experience [5]. Where User Experience can understand feelings, motivations and value values more than a product, so users get more value than subjective efficiency, effectiveness and satisfaction. A User Experience designer does not design the same thing as a designer User Interface. User Experience designer creates a strategy that brings a solution [6]. There are many aspects of the user experience that can be considered and ways of taking them into account when designing interactive products. Of central importance are the usability, the functionality, the aesthetics, the content, the look and feel, and the sensual and emotional appeal. Extending the findings of previous research on the use of citizen journalism websites, this model connects usability with user satisfaction, trust, and loyalty of citizen journalism to use technology in the regulation of cellular services on social media [7].

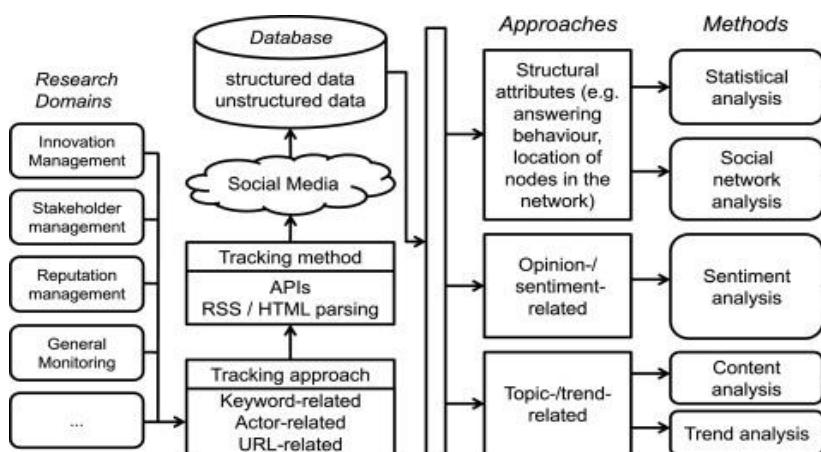
## 3. Analysis and design system

The user experience is very important for the success of this citizen journalism application. Therefore, cell phone applications targeted at citizens must be designed and developed so that they can be used, usability, and attitudes and intentions to use that will help ensure a high level of acceptance. Testing must be done, and the purpose of the test is to receive feedback from participants so that the level of usefulness of this application can be determined. An overview of the citizen journalism application can be seen in Figure 1.



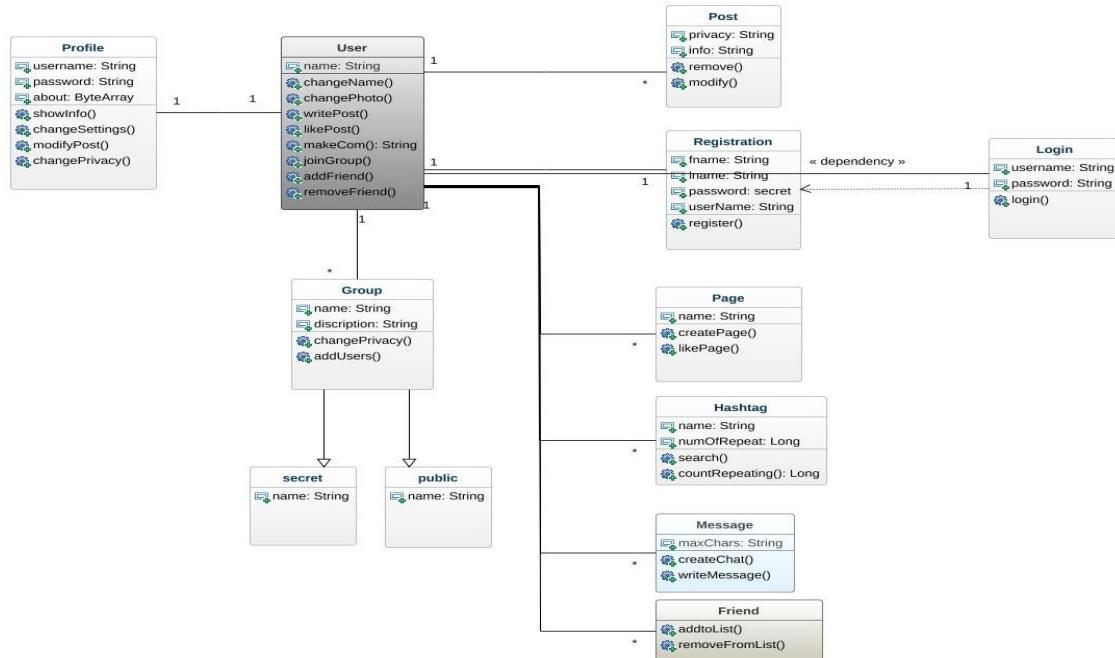
**Figure 1.** The Overview Citizen Journalism Application.

The results show that adding some features to the design will be useful and will increase the overall usability of the application. The process of application citizen journalism can be seen in Figure 2.



**Figure 2.** The Process Citizen Journalism Application

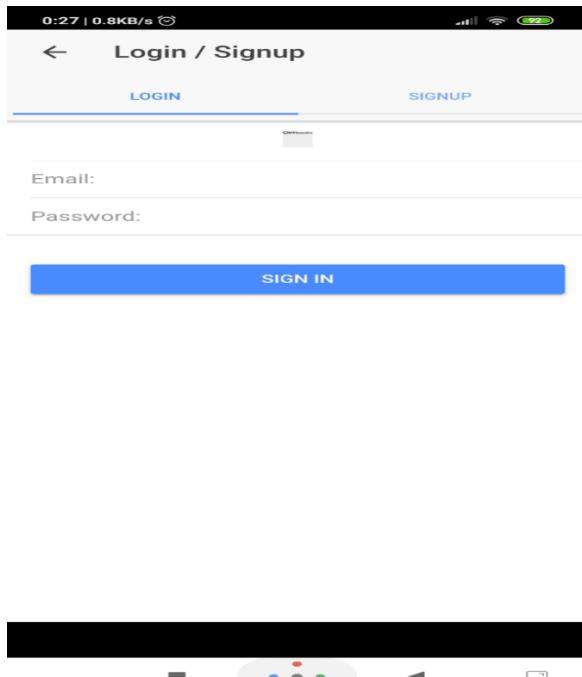
The creation of the Entity-Relationship Diagram (ERD) for citizen journalism databases requires 12 tables that are interconnected between one another. The Entity-Relationship Diagram (ERD) citizen journalism can be seen in Figure 3.



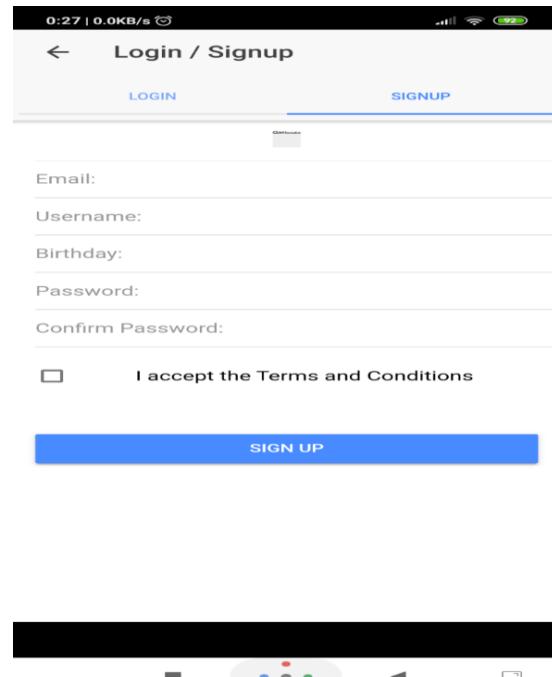
**Figure 3.** The Entity Relationship Diagram Citizen Journalism Application

#### 4. Implementation system

This testing process is carried out on Android devices that have been designed. The Interface testing will be done by testing the Samsung Type A8 mobile application on Citizen Journalism Application. As for testing the interface login sign in can be seen in Figure 4 for sign in, for testing the interface sign up can be seen in Figure 5.

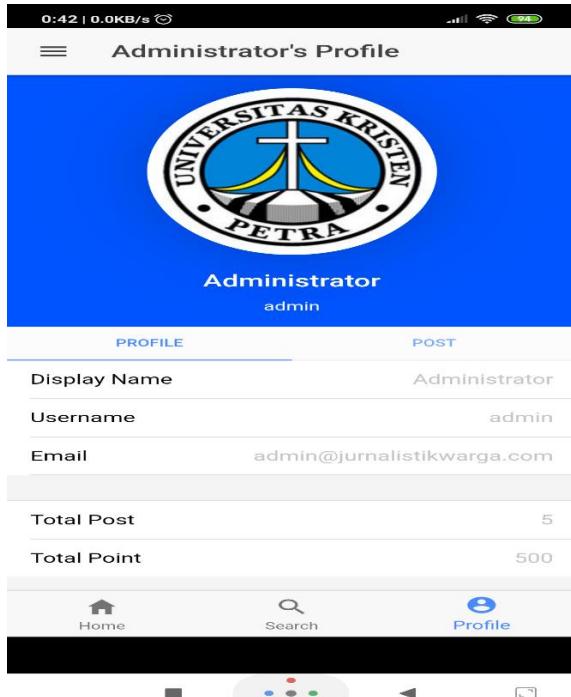


**Figure 4.** The Interface Login Sign In.

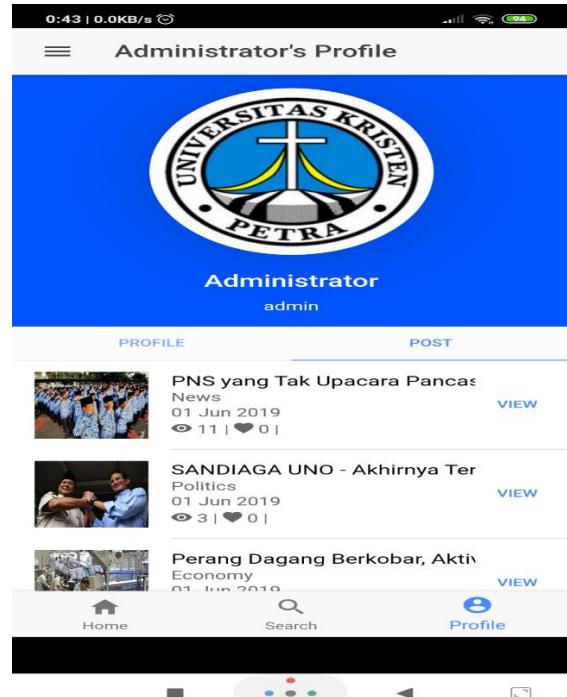


**Figure 5.** The Interface Sign Up

After the user has successfully logged in, the users can post news that will be displayed on the home page of the citizen journalism application. Certainly, they have to wait for approval from the administrator. On the administrator interface can be seen Figure 6, the administrator can see the number of news posts that have been added, and the administrator can do his approval and can even add comments to articles can be seen Figure 7.

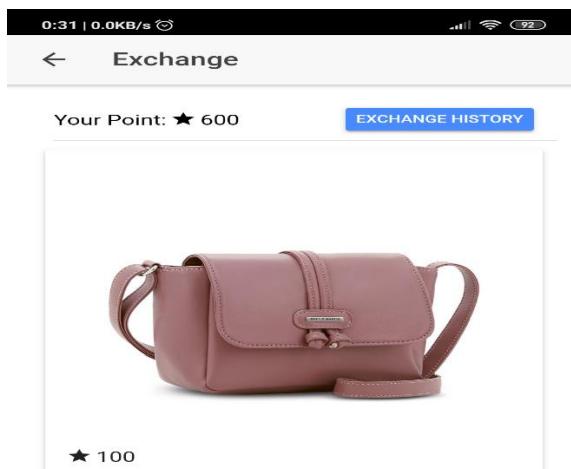


**Figure 6.** The Interface Administrator Profile

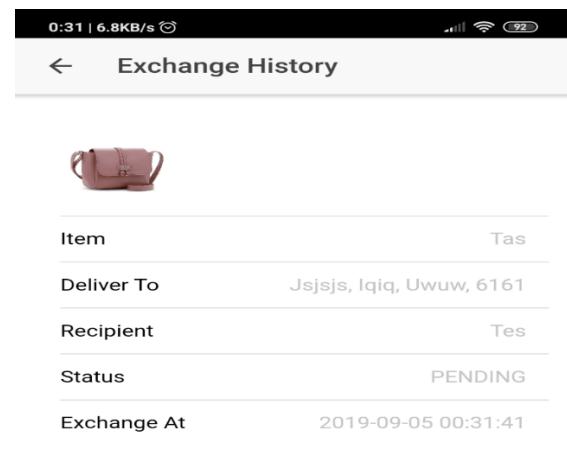


**Figure 7.** The Interface Post News

On this page is the exchange of rewards for active users, by exchanging various items or gifts using points that are already owned can be seen in Figure 8. Details of merchandise can be seen in Figure 9.



**Figure 8.** The Interface Redeem Merchandise



**Figure 9.** The Interface Detail Redeem

## 5. Conclusion

The design and development of citizen journalism applications, according to the experience of the user, has several conclusions that can be drawn, including the interest in users and citizens of online journalism who use this mobile-based application, and strived to encourage users to be more transparent with ease and openness in reporting news in other social media. Professional journalists must start creating blogs creatively so that they will get informative feedback from readers.

## Acknowledgments

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## References

- [1] Pulido C M, Redondo Sama G, Sordé-Martí, T, and Flecha, R. 2018. Social impact in social media: A new method to evaluate the social impact of research. *PloS one*, 13(8), e0203117.
- [2] Bowman S and Willis C 2003 We Media: How Audiences are Shaping the Future of News and Information. A Seminal Report. Reston: The Media Centre at the American Press Institute. Retrieved from goo.gl/WSjaZc. [Accessed: 26th August 2019]
- [3] Noor Rabia 2017 Citizen journalism vs mainstream journalism: a study on challenges posed by amateurs. *Athens Journal of Mass Media and Communication* 3.1 (2017): 55-76.
- [4] Lattimore Dan. et.al. 2010 Public Relations Profesi dan Praktik (3rd ed). Jakarta: Salemba Humanika.
- [5] Yvonne Rogers, Helen Sharp and Jenny Preece 2015 *Interaction Design ; Beyond Human Computer Interaction 4<sup>th</sup>* John Wiley & Sons Ltd Publisher.
- [6] Flowers, E. (2012). UX is not UI. Retrieved October 22, 2017, from <http://www.helloerik.com/ux-is-not-ui>
- [7] Lee D, Moon J, Kim Y. J, and Mun, Y. Y. 2015. Antecedents and consequences of mobile phone usability: Linking simplicity and interactivity to satisfaction, trust, and brand loyalty. *Information & Management*, 52(3), 295-304.