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The use of pictogram in electronic appliance

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ABSTRACT

The aim of the research is to describe the types of use of pictograms and the reasons for using pictograms. This type of research is descriptive qualitative. The first data sources are two, five from the manual book and the second, transcription of interview data. This research focuses on the types of use of pictograms and the reasons for using pictograms. Data was obtained by documentation and data analysis was carried out by collecting data, data was divided based on the type of use of pictograms and analysis of the reasons for using pictograms based on interviews. In the end, analyzing the use of pictograms by electronic equipment manuals and the reasons for their use relies on Davies' theory. The results of the research are: From data analysis, 57 pictograms were found that were used in five electronic manuals, namely: Oppo Reno6 cellphone, Panasonic rice cooker, Panasonic microwave, Asus laptop, LG washing machine, 27 of these pictograms are representational, 21 are arbitrary symbols and 9 are symbols. abstract. Moreover, according to interviews, pictograms are easier to understand than words by electronic users. It can be concluded that pictograms can be used in electronic equipment.



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INTRODUCTION

A pictogram is an iconic sign that represents complex facts without resorting to words or sounds. According to Calori (En & Bebit, 2021), pictograms are symbols that define objects, activities, and concepts into a visual form that is simple and informative. A pictogram isan image created by people for quick and clear communication without the use of words, to draw attention to something (Payuk & Zakrimal, 2020). Important to note, for example, that shape codes, excess information, elements size, uniformity, and simplicity are the Five elements that find important in designing pictograms according to Arthur and Zhamalik (Kamran, 2021). Pictograms are used as guidance for people to understand how to operate or set up new products (Syafitri, 2018). A pictogram is a simplified pictorial representation that's commonly used to guide people and tell them how to achieve a certain goal. Adir (Green et al., 2015) stated that a pictogram has to accomplish the three dimensions of communication: (1) warning, (2) information, and (3) guiding. Allowing a fast and efficient displacement, and also pictograms are necessary to be (Pascu et al., 2018): (1) easily identify, (2) available, (3) legible, (4) timeless,(5) easy to visualization.

According to De Angelis and Dumont (2018), pictograms are frequently brought up as a potential means of communicating information regarding nuclear waste disposal sites in the distant future, when human language will no longer be comprehensible. According to Rokade (2015), pictograms are a quick and easy way to communicate without using words or writing. They are also a wayfinding aid that can be interpreted quickly or clearly, provide information, save time for users, draw attention, and be useful for libraries and users themselves. Hassan (2015) conducted additional research with the aim of comprehending the attributes and traits of pictograms. The benefits of employing pictograms in their "iconic" form are examined in this study, along with how the context of a pictogram affects how it is understood (Dowse, 2021; Stones et al., 2016). The "appearance" of pictograms is also influenced by cultural determinism, where variations in the cultural environment can lead to variations

in representation without altering the pictogram's fundamental significance.

Using pictograms in a manual of electronic appliances gives the advantage for the reader such as 1. Knowing the product specification. 2. Helping the readers to understand the product. 3. Guiding the reader on how to use the product. 4. Being more eye-catching. 5. Faster visual perceptions (Asus, 2014; LG, 2019; Oppo, 2021; Panasonic, 2015, 2016). This paper discusses the use of pictogram in manual of electronic appliance. Here are some reasons why pictograms are needed in the manual of electronic appliances:

- 1. Found that many people are confused with the operation of the electronic appliances in result they have difficulty to use it.
- 2. Many people don't understand the language used in the manual book especially it'swritten in English.
- 3. To avoid people from the risk of destroying the product.
- 4. To help people understand and optimize the function of electronic appliances.
- 5. To provide a troubleshoot for users.
- 6. To inform the maximum benefit gained given by the electronic.
- 7. To make the instructions more simple and easier to understand.

Based on this phenomenon, the problem formulation are what types of pictograms use in manual of electronic appliances? And why pictograms are use in manual of electronic appliances? The primary objective of this study are to show the reader types of the use of pictogram in electronic manual of appliance and the reason of pictogram being used in electronic appliance.

RESEARCH METHODS

In the research the researcher would use two sources of data. First, manual book. Second, transcription of interview. Manual book is a handbook that function to helping the customers in dealing their problem with their problems. Manual book help the readers to operate new electronic tools that new for them (Shachak et al., 2013). A manual book typically contains a wealth of information about how to operate the device, security concerns, electrical requirements, and further technical operation guidelines.

Because the analysis and interpretation of the textual material in context is the main emphasis of this study, a descriptive qualitative technique was adopted. Qualitative inquirerdeals with data in this research that are in the form of words or pictures rather than numbers and statistics (Yilmaz, 2013). Materials can include textbooks, newspapers, magazines, papers, films, manuscripts, articles, electronic books, etc.

Hancock (Hashimov, 2015) stated that documentation is a wide range of written materials can produce qualitative information. The data can be policy documents, mission statements, annual report, books, etc (Katz, 2015). However, this research is a collection of data through documentation of the manual of the electronic appliances and the transcription of the interview.

RESULTS AND DISCUSSION

Result

Based on the data analysis, the researcher found that from the data analysis found 57 pictograms use in five electronic manual books which are Oppo Reno6 mobile phone, Panasonic rice cooker, Panasonic microwave, Asus laptop, LG washing machine. From 57 pictograms found that 27 of the pictograms are representational, 21 are arbitrary and 9 are abstract symbols. All the symbols are different one another and the meaning also different.

Based on the data and the interview that have done, there are few reason for using pictogram. According to the user pictograms are: 1. Easier to recognized and recalled far better than words. 2. Pictograms are improve the legability of warnings. From the transcription of the video of using 1g washing machine, pictograms may better when undertaking a familiar or routine task. 4. Pictograms more noticeable or attention grabbing than words. 5. They potentially more accurately and more quickly than words.

Discussion

Based on the research findings, found that most of the pictograms from the electronic manual book which are Oppo Reno6 mobile phone, Panasonic rice cooker, Panasonic microwave, Asus laptop, LG washing machine are representational, follow by arbitrary symbols and fewer abstract symbols. According to Dreyfuss (Chompoobutr et al., 2013), there are three categories of pictogram use, such as representational, arbitrary symbols, and abstract symbols.

Based on the data and the interview that have done, there are few reason for using pictogram. According to the user pictograms are: 1. Easier to recognized and recalled far better than words. 2. Pictograms are improve the legability of warnings. 3. From the transcription of the video of using lg washing machine, pictograms may better when undertaking a familiar or routine task. 4. Pictograms more noticeable or attentiongrabbing than words. 5. They potentially more accurately and more quickly than words. As what davies (2000:2) Claim there are seven reason for using pictograms, which is:

- 1. By using Pictograms warnings become more noticeable or "attention-grabbing".
- 2. They can serve as an "instant remainder" of a hazard or an established message.
- 3. They may improve warning comprehension for those with visual literacy difficulties.
- 4. They have the potential to be interpreted more accurately and more quickly thanwords.
- 5. They can be recognized and recalled far better than words.
- 6. They can improve the legibility of warnings.
- 7. Pictograms or brief textual information may be better when undertaking a familiar routine task.

CONCLUSION

Pictogram is a visual sign created by human beings for purpose of helping communication without sound or written word has to reach the function as a substitute and as an enhancement for written and verbal language in manual of the electronic appliance. From the research findings conducted by the researcher with the title "The Use of Pictogram in Manual of Electronic Appliance", it can conclude that, from 57 of data picture of pictogram from five of manual book, types of pictogram use that often use is representational, arbitrary symbols, and abstract symbols. There is 27 pictogram that is representational in this research. While 21 of them are arbitrary symbols and 9 of them are abstract symbols.

From the research conclude that there few reason for using pictograms according to the user of the electronic and the transcription of the video of manual of LG washing machine. 1. Easier to recognized and recalled far better than words. 2. Pictograms are improve the legability of warnings. 3. From the transcription of the video of using Instagram washing machine, pictograms may better when undertaking a familiar or routine task. 4. Pictograms more noticeable or attention grabbing than words. 5. They potentially more accurately and more quickly than words. Pictograms it self is more notice able and more easier to understand by the user. Pictograms are use to guide the user to do what they need to do. Also make the userunderstand about the product.

REFERENCES

- Asus. (2014). *Notebook pc e-manual*. https://www.manualslib.com/manual/899079/Asus-X205t.html#manual
- Chompoobutr, S., Potibal, P., Boriboon, M., & Phantachat, W. (2013). Perception and multimeaning analysis of graphic symbols for thai picture-based communication system. *Disability and Rehabilitation:* Assistive Technology, 8(2), 102–107. https://doi.org/10.3109/17483107.2012.737531
- De Angelis, R., & Dumont, J.-N. (2018). *Can we use pictogram in a long term communication system related to a radioactive waste repository?* https://shs.hal.science/halshs-03927688/
- Dowse, R. (2021). Designing and reporting pictogram research: Problems, pitfalls and lessons learnt. *Research in Social and Administrative Pharmacy*, 17(6), 1208–1215. https://doi.org/10.1016/j.sapharm.2020.08.013
- En, C., & Bebit, M. P. Bin. (2021). Analysis of the existing healthcare signages for the elderly in Kota Kinabalu: For effective healthcare signages. *Jurnal Gendang Alam (GA)*, 11(2), 1–20. https://doi.org/10.51200/ga.v11i2.3571
- Green, C., Kottke, P., Han, X., Woodrum, C., Sarvey, T., Asrar, P., Zhang, X., Joshi, Y., Fedorov, A., & Sitaraman, S. (2015). A review of two-phase forced cooling in three-dimensional stacked electronics: technology integration. *Journal of Electronic Packaging*, 137(4), 40802. https://doi.org/10.1115/1.4031481
- Hashimov, E. (2015). Qualitative data analysis: A methods sourcebook and the coding manual for qualitative researchers: Matthew b. miles, a. michael huberman, and johnny saldaña. Taylor & Francis. https://doi.org/10.1080/10572252.2015.975966
- Hassan, E. M. M. (2015). The semiotics of pictogram in the signage systems. *International Design Journal*, 5(2), 301–315. https://journals.ekb.eg/article_101372.html
- Kamran, A. (2021). The power of pictograms: a study and guide on how to create inclusive navigational signage using pictograms to address low situational literacy. https://openresearch.ocadu.ca/id/eprint/3513/
- Katz, J. (2015). A theory of qualitative methodology: The social system of analytic fieldwork. *Méthod* (e) s: African Review of Social Sciences Methodology, 1(1–2), 131–146. https://doi.org/10.1080/23754745.2015.1017282
- LG. (2019). Owner's manual washing machine. PT. LG Electronics Indonesia.
- Oppo. (2021). Oppo smartphone color os 6.0 user guide. Oppo Electronics Crop.
- Panasonic. (2015). Operating instruction and cook book microwave oven household use only. Panasonic NZ Ltd.
- Panasonic. (2016). Operating instructions electric rice cooker (household use). Panasonic Manufacturing Malaysia Berhad.
- Pascu, N. E., Adir, V., Adir, G., & Hornea, M. V. (2018). Pictogram language. *Journal of Industrial Design and Engineering Graphics*, 13(1), 21–24. http://sorging.ro/jideg/index.php/jideg/article/view/97#
- Payuk, E. E. T., & Zakrimal, Z. (2020). Semiotic analysis in instagram logo. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 8(1), 332–339. https://doi.org/10.24256/ideas.v8i1.1383
- Rokade, S. M. (2015). Role of pictograms in library: A study. *American Journal of Educational Research*, *3*(8), 1062–1067. https://doi.org/10.12691/education-3-8-19

Vol 1 No 2 February 2022

- Shachak, A., Dow, R., Barnsley, J., Tu, K., Domb, S., Jadad, A. R., & Lemieux-Charles, L. (2013). User manuals for a primary care electronic medical record system: A mixed-methods study of user-and vendor-generated documents. *IEEE Transactions on Professional Communication*, 56(3), 194–209. https://ieeexplore.ieee.org/abstract/document/6523189/
- Stones, C., Knapp, P., & Closs, S. J. (2016). Creating a better picture of chronic pain: improving pain pictogram designs through systematic evaluation of user responses. *British Journal of Pain*, 10(4), 177–185. https://doi.org/10.1177/2049463716657365
- Syafitri, Y. (2018). *Pictograms used in pt. pertamina instalasi medan group: a semiotic analysis*. https://repositori.usu.ac.id/handle/123456789/3605
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311–325. https://doi.org/10.1111/ejed.12014