# Digitalize Aksara Lampung as Culture Preservation in Digital Era



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# Why?

- Lampung is one of Indonesia heritage. Lampung have it's own languange and character to communicate and interact inside Lampung society.
- Lampung characters face challenge in modern age because less and less people use it to communicate especially because there were no default support for Lampung character in computer system.
- Development of aksara Lampung in digital font (Meizano & Martinus, 2015) were meant to rejuvenate people interest in using aksara Lampung as a way to communicate using computer based media.
- The font were tested in against expert, and received favorable review.
- To support convenience and user friendly for public; use by computer based system such as desktop pc, smartphone and tablet from the get go.
- One way to provide this by proposing the font to Unicode standard. If included in Unicode standard, the font can be used directly, without installing a separate font file.
- To make sure the font proposed to Unicode is the highest standard in quality and usability, it is important to measure user experience (UX) in Lampung characters usability.

#### The Unicode Standard

- The Unicode Standard is the universal character encoding standard for written characters and text.
- Required in new Internet protocols and implemented in all modern operating systems and computer languages such as Java and C#, Unicode is the basis of software that must function all around the world.
- With Unicode, the information technology industry has replaced proliferating character sets with data stability, global interoperability and data interchange, simplified software, and reduced development costs.

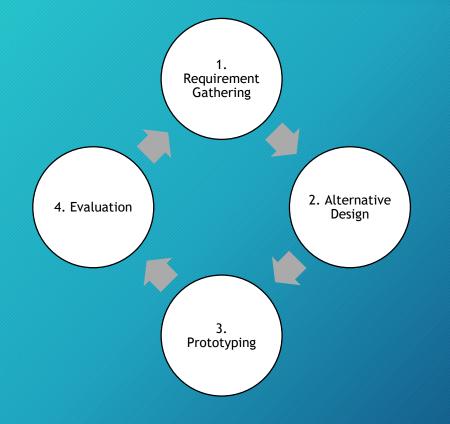
## Lampung Characters and Transliteration

٨	ka	Ņ	ga	Ņ	nga	<b>√</b>	ра	J	ba
ע	ma	h	ta	<b>\</b>	da	m	na	เท	са
ĸ	ja	M	nya	w	ya	٨	a	Ν	la
N	ra	И	sa	ß	wa	И	ha	ý	gha

# Lampung Characters and Transliteration (2)

U •••	i	n •••	é	I •••	e	-	ang
4 •••	ar	=	an	• ; •	Ο	• = •	u
••••	au	•••1	ai	И	ah	/	non- vocal

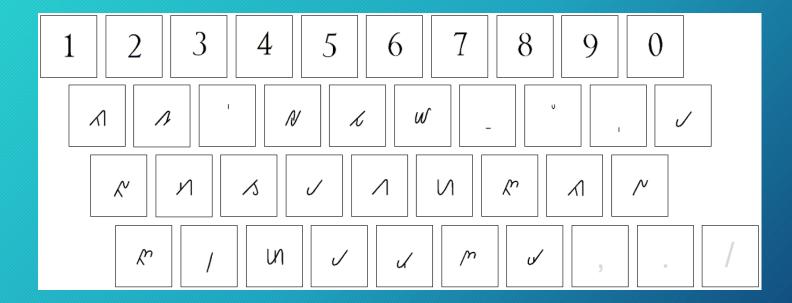
# UX Methodology



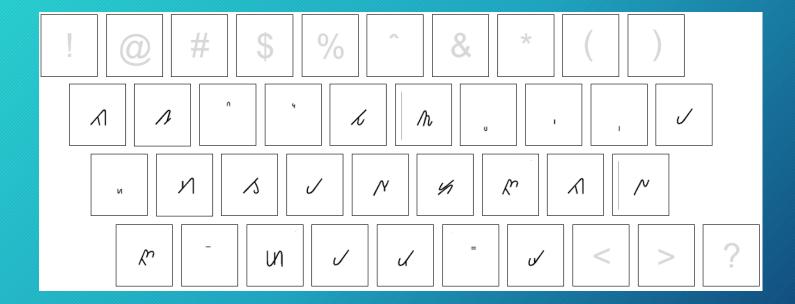
#### Requirement

- There are two main parameters that need to be measure:
  - Readability
  - Accessability

# **Keyboard Layout**



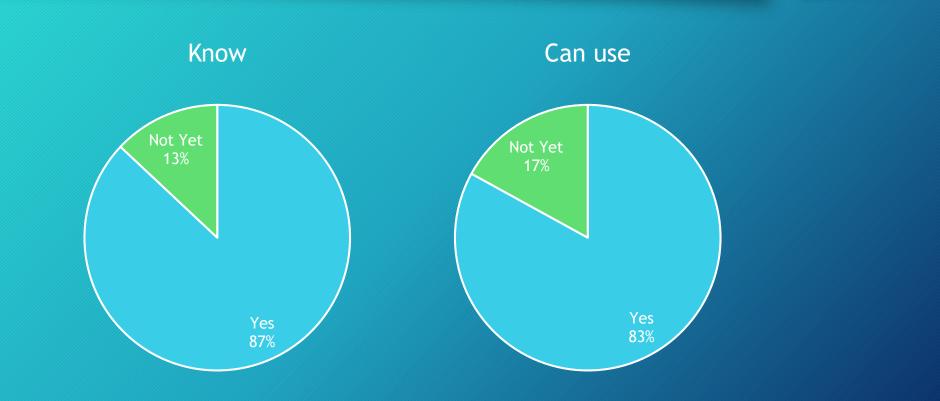
## Keyboard Layout with SHIFT



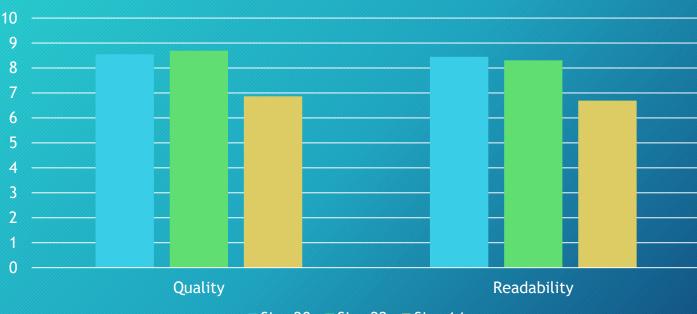
# Evaluation

- 30 participants
- Young people
- Knowledge of Lampung character
- Usability testing:
  - Reading
  - Typing
- Lampung characters usage recommendations

## Knowledge of Lampung Characters



# Reading (Font Size)

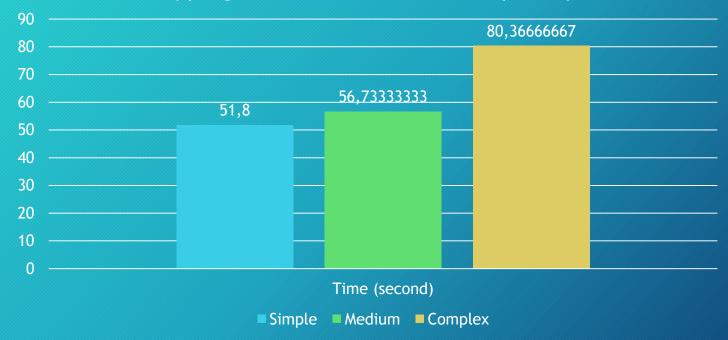


Readability base on Font Size

Size 28 Size 22 Size 14

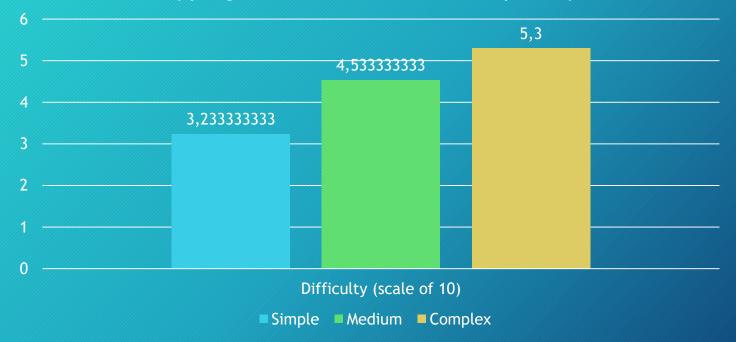
# Typing Time

#### Typing based on sentence complexity



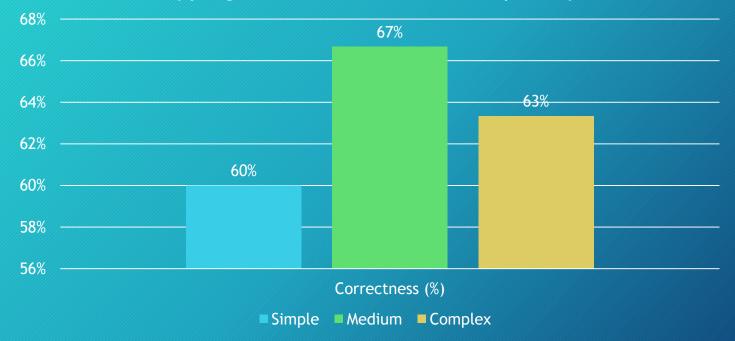
# Typing Difficulty

#### Typing based on sentence complexity

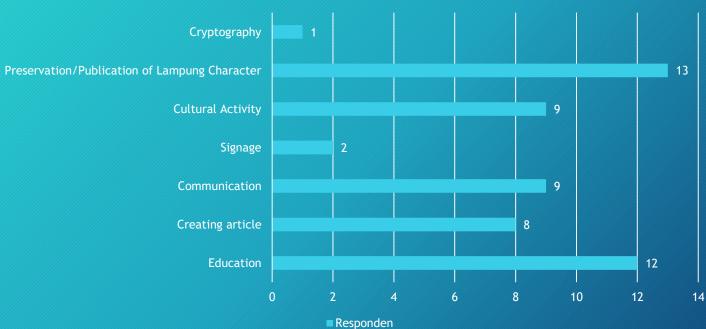


# Typing Correctness

#### Typing based on sentence complexity



## Usage Recommendation



Lampung Character Recommendation

## Conclusion

- Based on data, there are some refinement need to be done to achieve a better digital font. A larger default character and some refinement on typography.
- The font itself manage to achieve a favorable review on usable and useful aspect of UX.
- According responses users, digital aksara Lampung have to be spread out more, in order to support the local value and uniqueness of Lampung.

# Thank You



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