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How Cultural Values Shift Due to the ICT Mastery on Young People in Indonesia?

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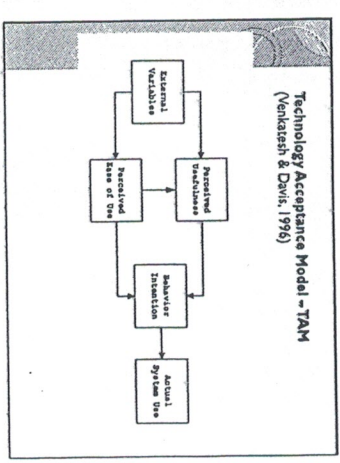**Cultural shift, illustrated in Pang (2013) cover page**

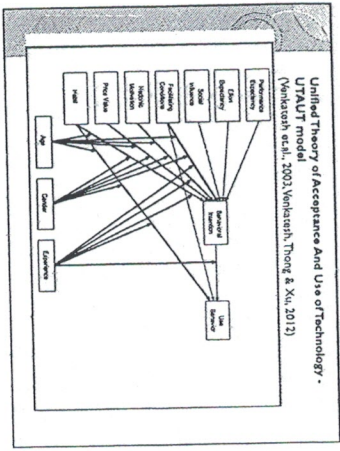## INTRODUCTION (5): The Cultural Values (Hofstede)

- individualism-collectivism; uncertainty avoidance; power distance (strength of social hierarchy), masculinity-femininity, task orientation vs. person-orientation.
- Schwartz's and Hofstede's theory of values:
  - Hofstede → [individualism vs] collectivism (the most widely used).
  - Schwartz → conformity, tradition and benevolence.

INTRODUCTION (1)

- In Indonesia, internet and mobile technologies have been a newly allowances of technology used by people from different social economic, and education levels.
- In everyday life, it was observed that people activities being different than before the arrival of these technology.
- Shifting of behavior or values has been studied by researchers in many countries.
  (e.g., Hansen, Postmes, van der Vinne, & van Thiel, 2012)
  The effects of supplying laptops to children in Ethiopia: More individualistic in values, but was not always associated with a reduction in collectivist values.

INTRODUCTION (3)

- In Indonesia, the research related to new relationships and changes in human behavior due to the newly allowances of technology is still limited.
- Indigenous cultural value is one of the factors that can make ICT related behavior in Indonesia different with other countries.
- This study is a preliminary exploration study from a larger research project aimed at describing the behavior of ICT in young generation - associated with local culture value.
- The initial exploration was conducted in a junior high school located at Kalimantan (Borneo).

INTRODUCTION (6)

Basic Human Values potentially affect the behavior of ICT related issues → but has never been considered as influencing factor.

Factors that have been considered:
- perceived of usefulness, and perceived ease of used (Technology Acceptance Model - TAM) (Davis, 1989; Venkatesh & Davis, 2000).
- cultural values, such as habit & hedonic motivation (Unified Theory of Acceptance And Use of Technology - UTAUT) model
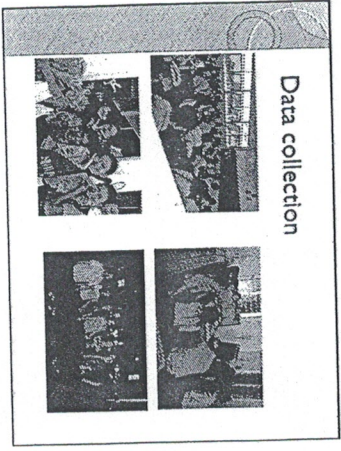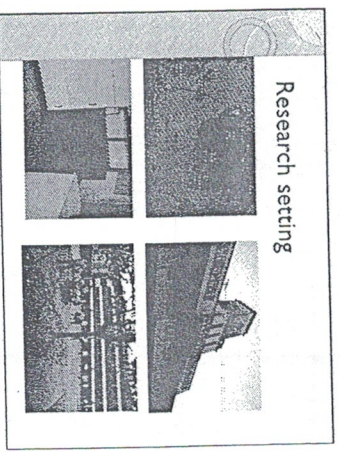
(Venkatesh et.al., 2003; Venkatesh, Thong & Xu, 2012).

INTRODUCTION (2)

Some issues related to the cultural shift (Pang, 2013):
1) relationships with information technologies are tremendously deep and express unique human capacities;
2) the world has become a more distracting place, and there might be solutions for bringing the extended mind back under control;
3) it is necessary to be contemplative about technology;
4) the people can redesign their extended mind.

INTRODUCTION (4): The 10 Values

- Theory of Basic Human Values (Schwartz, 1990, 2006).
(Schwartz, 2006, p.3). Values refer to desirable goals that motivate action values drive behavior, and determine the direction of human behavior.

Schwartz's 10 Values (2006):

1. Self - direction
2. Stimulation
3. Hedonism
4. Achievement
5. Power
6. Security
7. Conformity
8. Tradition
9. Benevolence
10. Universalism

Technology Acceptance Model - TAM
(Venkatesh & Davis, 1996)

External Variables → Perceived Ease of Use, Perceived Usefulness → Behavior Intention → Actual System Use

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Unified Theory of Acceptance And Use of Technology - UTAUT model
(Venkatesh et.al., 2003; Venkatesh, Thong & Xu, 2012)

Data collection

METHOD (4): Procedure

1. Preparation
   - informed consent
   - Questionnaire development
2. Data collection:
   - Filling in the questionnaire in the class (during 1 hour learning session)
   - Semi-structured Interview/Focus group discussions (FGD) (12 students who were randomly selected) to deepen the results obtained from the questionnaire.

METHOD (1): Research Setting

- Data Collected from P city, Kalimantan (Borneo)
- City "P" (Bappeda Kota Pontianak 2011):
  - Capital city of West Kalimantan.
  - Population: 565,856 (55,629 adolescents; 159,146 children
  - Occupation: business, services, and industries.
  - Ethnicity:
    - Chinese (31.2 %)
    - Malays (26.1 %)
    - Bugis (13.1 %)
    - Javanese (11.7 %)
    - Madurese (6.4 %)
    - the rest of others (Dayak etc.).

METHOD (2): Participants

- 150 students in a private junior high school in City "P" (students' family background represent the biggest proportion of the population in city "P").
- average age: 14 years.
- 77 (51%) male, 73 (49%) female
- 139 (93%) were native born in city P
- 136 (91%) lived with their parents.

METHOD (5): Analysis

- Questionnaire:
  - Multiple choices → descriptive statistical analysis.
  - Essay → textual coding analysis & descriptive statistical analysis.
- Semi structure interview/FGD:
  - Transcription → qualitative descriptive analysis.

Research setting

METHOD (3): The Questionnaire

"Mobile & internet technology for high school students Questionnaires" (5 of 9 parts):

1. Demographics.
2. Device category for internet and mobile technology.
3. Changes in behavior after using the internet and mobile technology.
4. Human values which are developed based on ten basic human values (Schwartz, 2006), Asking to give a rank from 1 to 10 toward the list.
5. Nine dimensions of technology acceptance questionnaires [informed by Venkatesh et.al.(2003, 2012), Limayem and Hirt (2003), and Cheung and Limayem (2005)].

Analysis (1): Basic Human Values

The rank from the most important to the least important of values:

1. Independence
2. Achievement
3. Benevolence
4. Safety feeling
5. Universalism
6. Conformity
7. Tradition
8. Hedonism
9. Stimulation
10. Power.

Analysis (2): The Shift of Culture

Shift in Cultural Dimensions of Collectivism Values and Other Concern (the following table)

Analysis (4): The Shift of Culture

- There is a clear shift from collectivism to individual culture dimensions due to the internet and mobile technology.

Implicit subjective meaning in collectivism:

- modesty and humbleness → participants observed that quite a lot of their friends who are becoming arrogant since they are using the internet and mobile technology.
- mutual respect, good manners and courtesy → since the use of the internet flourishing, some of their friends become less well mannered in their attitude.
- Collectivism culture also implied meaning of mutual concern and real join activities → their peers became no longer care about social environment, and do not carry out join activities.

RESULT

- The participants perceived a clear shift in cultural dimensions of collectivism values.
- By using Schwartz's (2006) theory of human value, independence and achievement became the first and second most important values, while benevolence, conformity and tradition were placed in the number 3, 6 and 7.
- Correspondingly, by using Hofstede et.al. (2010) concept of human culture, collectivism value shifted to more individualistic in nature.

Analysis (3): The Shift in Culture

- Collectivism eagerness of people to place the group concern above the individual interest.
- There has been a clear shift in cultural dimensions of collectivism values among the participants.
- The shift were shown from the question asked, "Do you observe your friends have changed after they used internet and mobile technology? Please explain."
- Two main answer:
  - "yes, they are changing" (70%)
  - "no, they don't change" (30%).
- The explanation for their answers:
  - Four categories to answer "yes";
  - one category for "no" answer.

Analysis (5): The Shift of Culture

Two other findings:

The changes in terms of achievement diminished interest in learning and achievement since they exposed to the internet and mobile technology. But also positive changes (allowed them to associates with wider horizons, and more networked)

Although there is a hint of ICT, especially in the case of internet and mobile technology which has the potential to disrupt the students' learning process, there are positive signs of self-regulation and maintenance of manners as well. ... how they cope with the temptation to use internet and mobile technology while they study. 11 of 12 FGD participants mentioned how to control themselves not to use internet and mobile technology when they meet with their grandfather or grandmother, 11 of the 12 FGD participants said that they would not use internet and mobile technology when they met their grandparents.

Conclusion

- The new affordances technology naturally became part of the adolescent's lives.
- The use of internet and mobile technology changes in the social relations and cultural values:
  - the real dimension of collectivism to a somewhat similar to cyber-collectivism.
  - the use of the technology requires users to focus on the tools not the social environment around them → the original culture more of collectivism evolve into more of individualism.

Analysis (6): Technology Acceptance findings

Dimensions	Examples of Items	Mean	SD	Category

*) 1-2 = low; 3-5 = medium; 6-7 = high

Conclusion (2)

- The cultural shift could be interpreted from the technology acceptance findings.
- The participants' individual-focused orientation (performance expectancy, effort expectancy, facilitating condition, and hedonic motivation) were categorized as high.

DISCUSSION (1)

Research implication: Explanatory models of ICT influenced cultural shift phenomenon in Indonesia, which has the potential of predicting future techno-cultural values amongst the young generation in Indonesia.

DISCUSSION (2)

Predictable changes:
- The trend of using ICT, especially the internet and mobile phones among teenagers as well as adults will increase.
- A change in the values of the original culture will increasingly from collectivism to individualism.
- Adolescent relationship which initially dominated by the direct or face to face relationship become more virtual in nature.
- There will be an increase in the phenomenon of "distraction addiction" (a term introduced by Pang, 2013) on the future younger generation.

DISCUSSION (3)

Research limitation: conducted at only one school in one city in Indonesia, a preliminary picture of the behavior of adolescents in Indonesia related to acceptance of ICT, especially the internet and mobile technology.

Acknowledgements

Thank you