The Acceptance of Using Social Mobile Application for learning in Hong Kong's Higher Education

Authors: Kwan Keung NG, Ching Hong LUK, Wai Ming LAM
Caritas Institute of Higher Education & Caritas Bianchi College of Careers

Presented by: Dr Eric LUK

Abstract

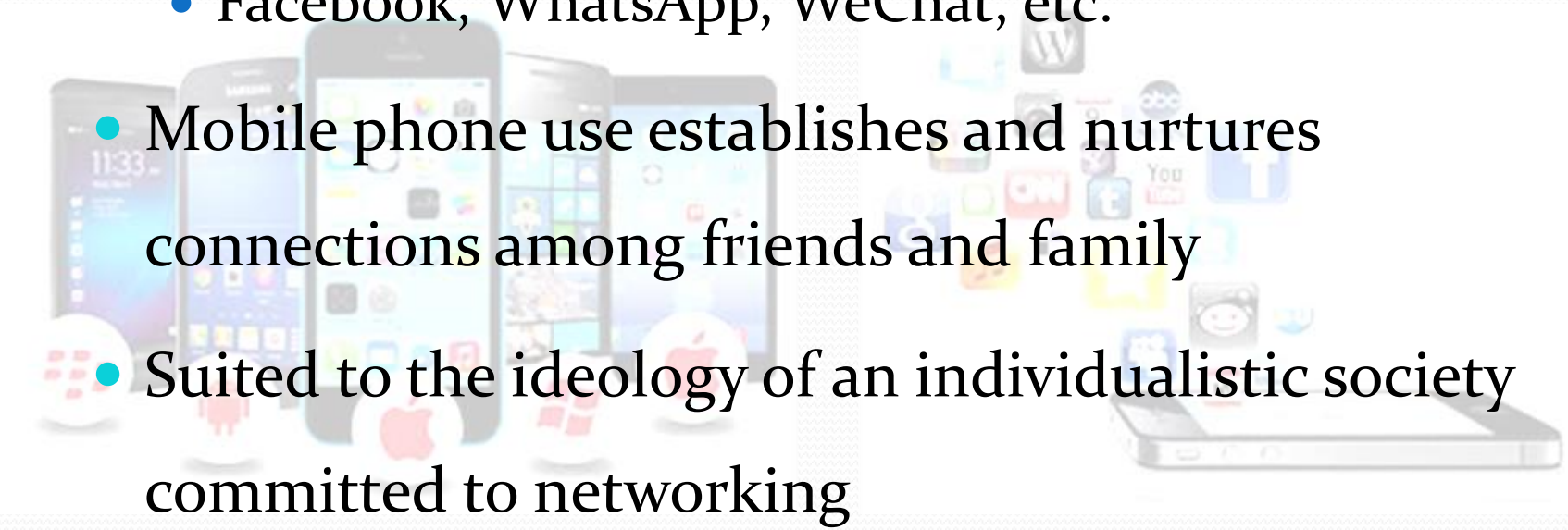
- Serves as an extended research of our previous research study in another conference ISET 2016 called “The Impact of Social Mobile Application on Students’ Learning Interest and Academic Performance in Hong Kong’s Higher Education” (*Ng, Luk and Lam, 2016*).
- Using social mobile application for communication is common in this generation and development is driving innovation
- Social mobile applications take many social forms depending on a particular application

Abstract

- The aim:
- To investigate the acceptance of using social mobile application, i.e. WeChat
- How? by using the UTAUT model to investigate their behavioral intention and use behavior of WeChat for their learning,
- Why? WeChat is the most common social mobile application in China and there are a significant proportion of Chinese students in Hong Kong higher education.

Mobile Usage

- Social Communication Applications
  - Facebook, WhatsApp, WeChat, etc.
- Mobile phone use establishes and nurtures connections among friends and family
- Suited to the ideology of an individualistic society committed to networking

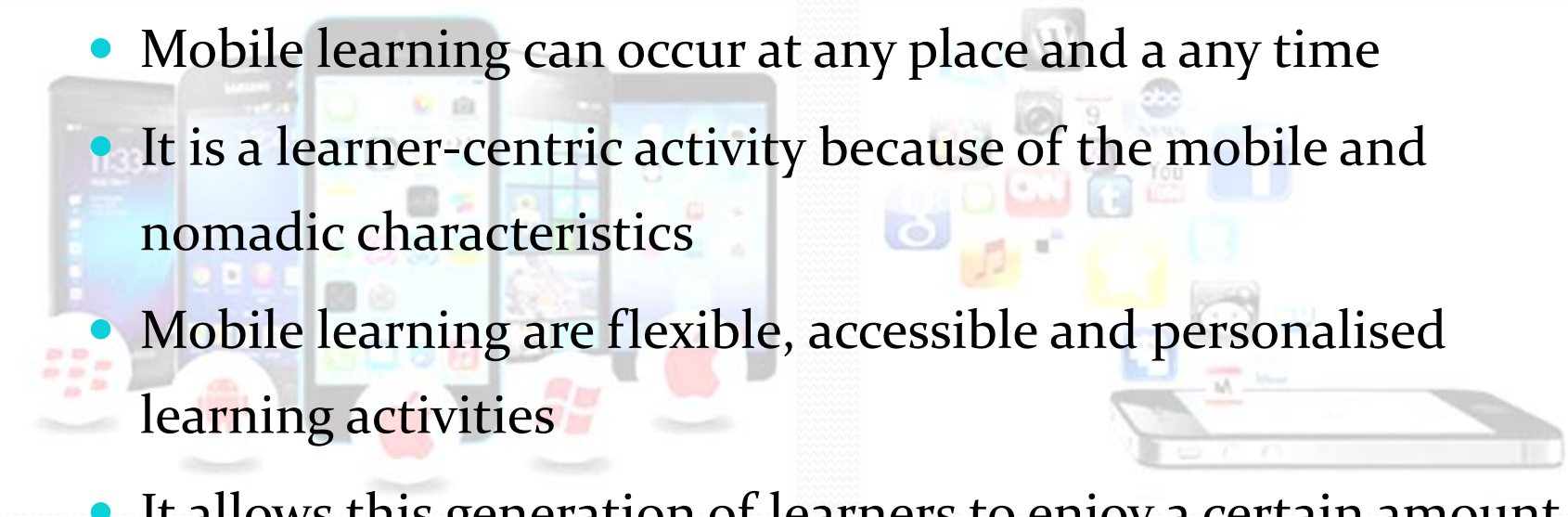


Mobile Learning in Education

- Mobile learning emphasizes on the mobility of learners and the mobility of learning
- Mobile learning encourages us to abandon the constraints of habitual ways of thinking, learning, communicating designing and reacting
- Mobile learning enhances availability and accessibility of information networks , engages students in learning related activities in diverse physical locations, and supports project based work
- Mobile learning improves communication and collaborative learning in the classroom and enables quick content delivery
- Mobile learning provides support for learning and training, and mobile technologies contributes and supports learners studying a variety of subjects

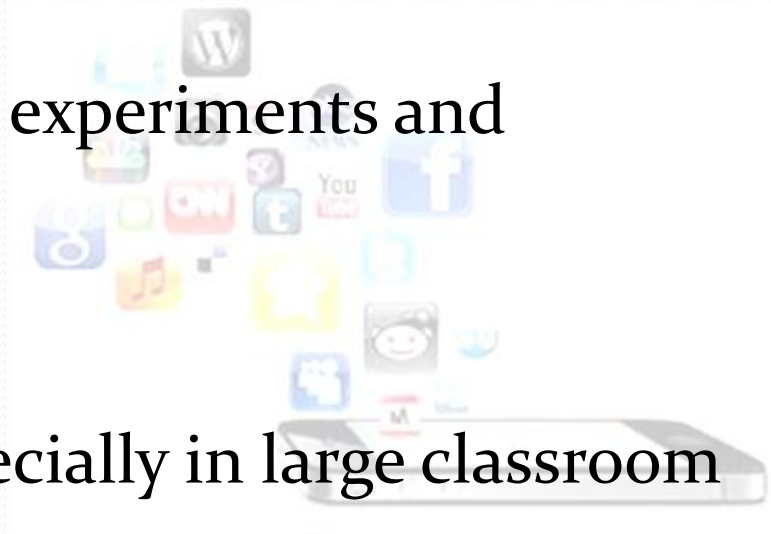
Mobility of Technology & Learning

- Personal Computer is mostly bound by location and time availability
- Mobile learning can occur at any place and a any time
- It is a learner-centric activity because of the mobile and nomadic characteristics
- Mobile learning are flexible, accessible and personalised learning activities
- It allows this generation of learners to enjoy a certain amount of freedom and independence



Mobile phones could be used for the educational and course-related activities

- Access information, record data, create podcasts
- Gather data for classroom experiments and demonstrations
- Enhance interactivity especially in large classroom settings.

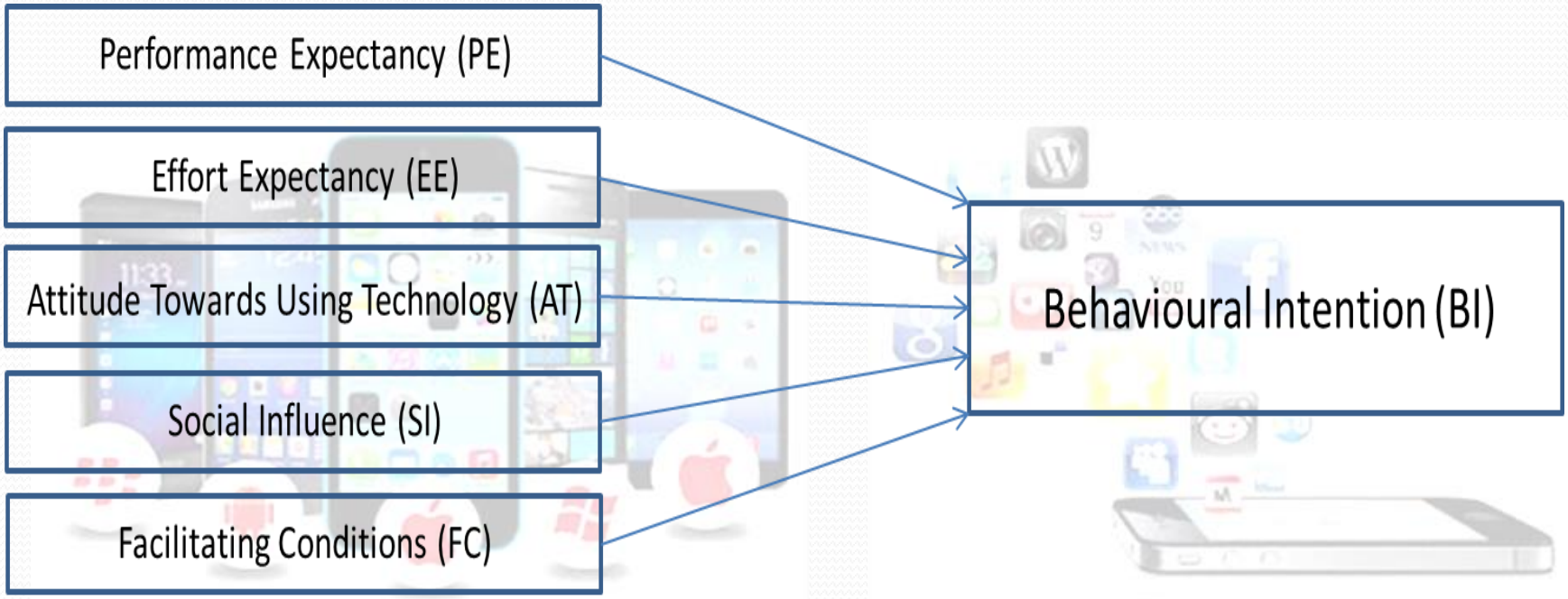


WeChat

- WeChat is a mobile text and voice messaging communication service developed by Tencent in China, which was released in 2011
- Features:

Voice Chat	Group Chat	Moments
Free Call	Video Call	Sticker Gallery
Broadcast MSG	Friend Radar	Favorite MSG
Group Chat QR Code	Chat History Backup	Web WeChat
Shake	People Nearby	Walkie Talkie

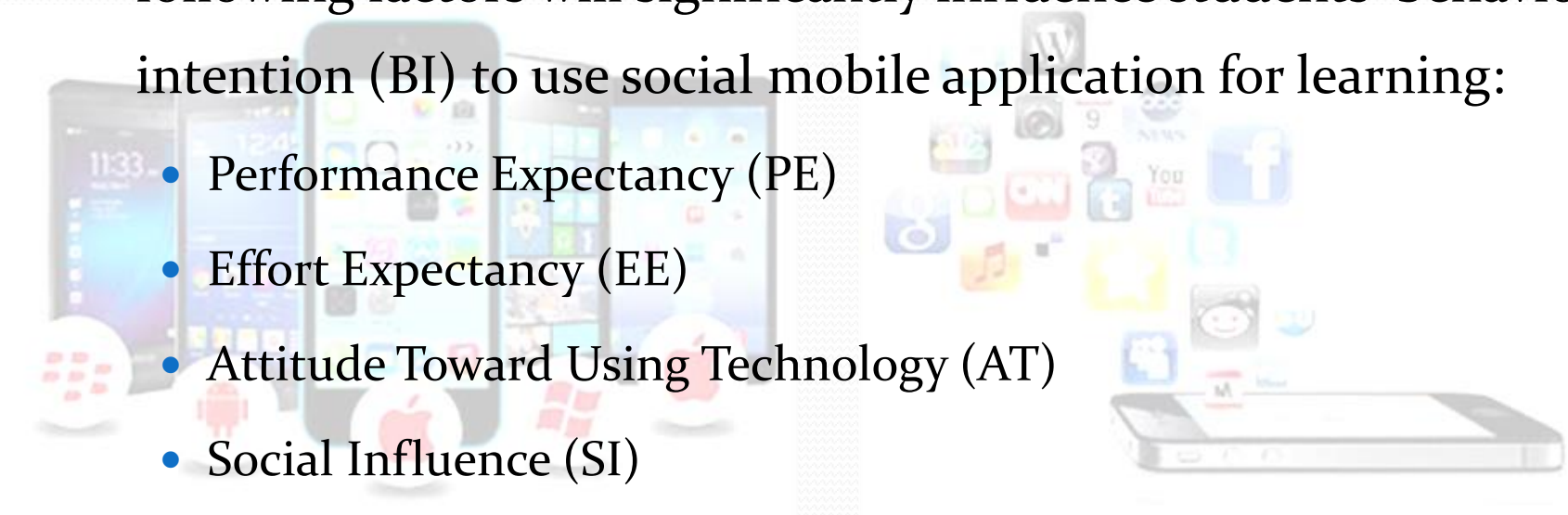
The unified theory of acceptance and use of technology (UTAUT)



Adopted from Venkatesh, Morris, Davis & Davis (2003)

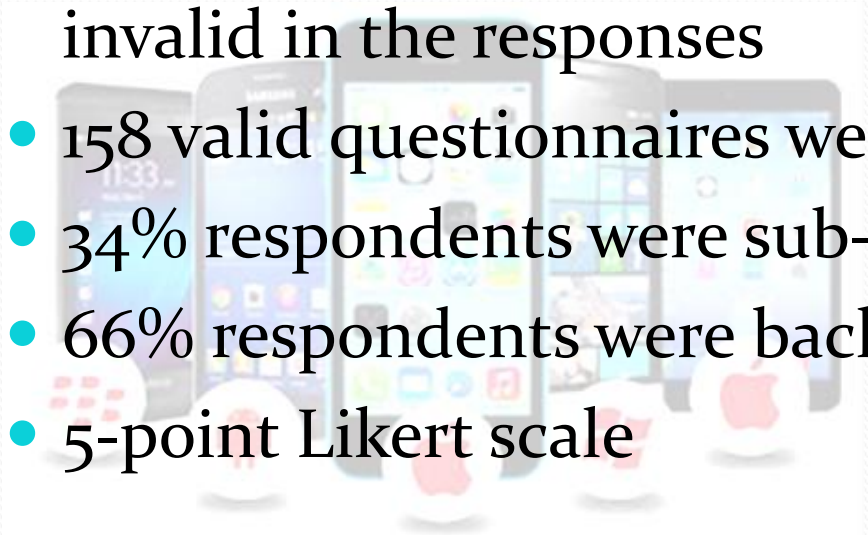
Research Methodology

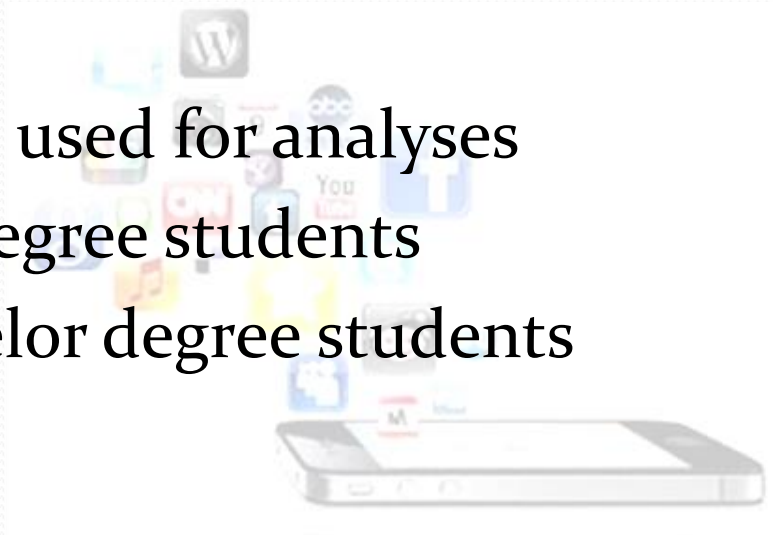
- Questionnaires were collected based on UTAUT to test if the following factors will significantly influence students' behavioral intention (BI) to use social mobile application for learning:
  - Performance Expectancy (PE)
  - Effort Expectancy (EE)
  - Attitude Toward Using Technology (AT)
  - Social Influence (SI)
  - Facilitating Conditions (FC)



Research Methodology

- 173 questionnaires were collected and 15 questionnaires were unusable due to incompletion or invalid in the responses
- 158 valid questionnaires were used for analyses
- 34% respondents were sub-degree students
- 66% respondents were bachelor degree students
- 5-point Likert scale





Questions Allocation

	Items / Scales
PE :	**Performance Expectancy**
PE1	I believe WeChat-Learning enables me to learn the principles and theories effectively.
PE2	I believe WeChat-Learning enhances my interests in learning my courses in the programme.
PE3	I think WeChat-Learning improves my academic result in my courses in the programme.
PE4	I think WeChat-Learning helps me to complete my homework, assignment, test and examination.
PE5	I think WeChat-Learning is useful for me to study my courses in the programme.
EE :	**Effort Expectancy**
EE1	I think the design of the WeChat-Learning is easy for me to use.
EE2	I think the discussion group in the WeChat-Learning is easy to join and share.
EE3	I think WeChat-Learning helps me to understand what I have learnt from the teaching material.
EE4	I think WeChat-Learning makes me easier to learn the theories and concepts in my courses.
AT :	**Attitude toward Using Technology**
AT1	I would like to use Social Media (e.g. WeChat) to learn.
AT2	I think using Social Media (e.g. WeChat) is a good idea to learn concepts in my courses.
AT3	I think using WeChat-Learning to learn my courses makes the courses more interesting.
AT4	I think it is fun to learn through WeChat-Learning.
SI :	**Social Influence**
SI1	I think I should use Social Media to learn since it is a trend to learn online in academia.
SI2	I believe my classmates and lecturer encourage me to use the WeChat-Learning.
SI3	I think I use WeChat-Learning because my classmates also use the WeChat-Learning.
SI4	I believe my lecturer supports us to use the WeChat-Learning.
FC :	**Facilitating Conditions**
FC1	My mobile supports me to use the WeChat-Learning.
FC2	I have knowledge to use the WeChat Apps.
FC3	I think that using the WeChat-Learning fits my preferred learning style.
FC4	I believe my classmates and teacher are available for help if I have problem in using WeChat Learning.
BI :	**Behavioral Intention to Use the System**
BI1	I believe I will use WeChat-Learning in my future courses.
BI2	I think I will intend to use WeChat-Learning with my classmates in coming semesters.
BI3	I plan to use WeChat-Learning to improve my learning effectiveness in future.

Finding and Analysis (1)

Table 1: Summary of the responses in term of Mean and Standard Deviation

	PE	PE1	PE2	PE3	PE4	PE5	**EE**	EE1	EE2	EE3	EE4	**BI**	BI1	BI2	BI3
Mean	**3.36**	3.34	3.34	3.24	3.47	3.43	**3.55**	3.73	3.71	3.41	3.34	**3.53**	3.56	3.53	3.50
S.D.	**0.98**	0.98	0.98	0.95	0.99	0.99	**0.98**	1.01	0.98	0.99	0.90	**0.99**	0.90	0.97	1.01

	AT	AT1	AT2	AT3	AT4	**SI**	SI1	SI2	SI3	SI4	**FC**	FC1	FC2	FC3	FC4
Mean	**3.55**	3.59	3.66	3.51	3.44	**3.43**	3.58	3.37	3.32	3.46	**3.67**	3.79	3.91	3.32	3.65
S.D.	**0.92**	0.78	0.93	1.08	1.04	**0.96**	0.78	0.93	1.08	1.04	**0.97**	0.97	0.92	0.97	0.91

Finding and Analysis (2)

Table 2: Cronbach Alpha and the Average Variance Extracted (AVE) analysis

	AVE	Composite Reliability	R Square	Cronhachs Aplha	Commuality	Redundancy
PE	0.74842	0.937		0.915986	0.74842	
EE	0.726068	0.91379		0.874407	0.726069	
AT	0.755516	0.925089		0.891864	0.755516	
SI	0.678753	0.893577		0.840269	0.678753	
FC	0.613855	0.863638		0.79249	0.613855	
BI	0.875723	0.954832	0.793564	0.929065	0.875723	0.201629

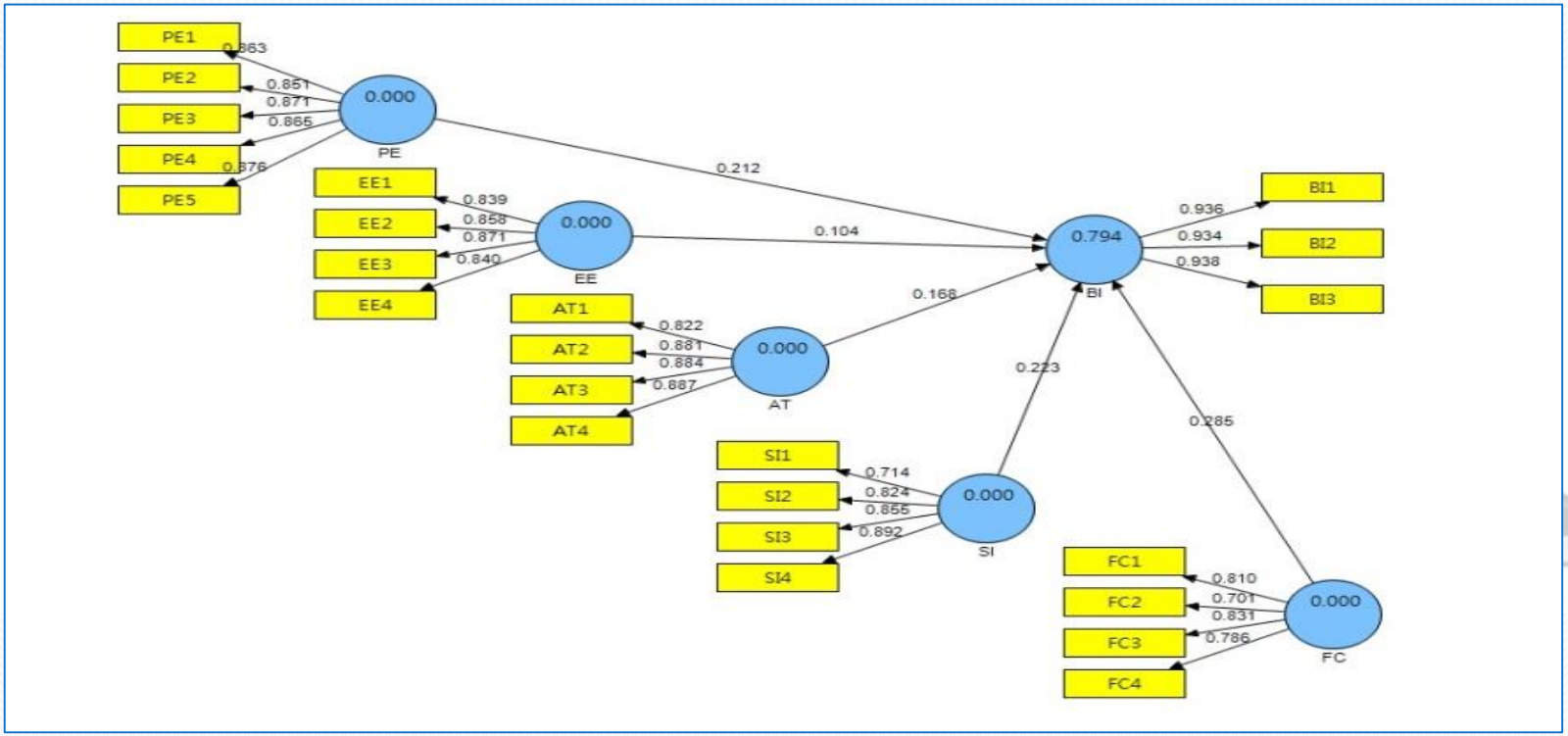
Finding and Analysis (3)

Table 3: Latent Variable Correlations Table

	PE	EE	AT	SI	FC	BI
PE	1					
EE	0.840652	1				
AT	0.653237	0.767286	1			
SI	0.74758	0.780362	0.779756	1		
FC	0.693546	0.782351	0.737667	0.803035	1	
BI	0.773582	0.808206	0.770374	0.822491	0.816383	1

Finding and Analysis (4)

Diagram A: PLS-SEM Path Analysis



Finding and Analysis (5)

Table 4: Research Test Results

Factor → BI (Behavioural Intention)		Beta Value	T Statistics
H1: Performance Expectancy	→ BI	0.212	3.349914
H2: Effort Expectancy	→ BI	0.104	1.318956
H3: Attitude Towards Using Technology	→ BI	0.168	2.591052
H4: Social Influence	→ BI	0.223	3.269126
H5: Facilitating Conditions	→ BI	0.285	4.464645

Limitations and Further Research

- This is a preliminary research on students' behavioral intention on using WeChat
- Limited sample size
- All studying business and hospitality management
- Other schools/departments and other higher education institutes can be investigated in future studies
- Other social media applications can be investigated in future studies
- Comparison of academic performance between users and non-users of WeChat can be conducted in future studies

Conclusion

- The results show that all five constructs have above average mean score, meaning that students have adequate knowledge and up-to-date equipment to learn through social media
- This study shows that students generally support using WeChat would help their studies and enhance their learning interest
- According to correlation analysis, four constructs, except effort expectancy (EE), significantly influence behavior intention

Conclusion

- The ease of using WeChat (Effort Expectancy) may not influence their behavior intention to use WeChat in their studies because they are familiar with using various types of social media
- Institutions can consider facilitating students' learning by implementing social media applications to enhance classroom teaching


Q&A


Thank You