

Behavioral Intention to Use @*wifi.id* Services in Indonesia

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Abstract--- Internet access becomes popular in Indonesia and PT Telkom is the biggest operator *wifi* internet access in Indonesia nowadays. PT Telkom has main target and will need fund for about US\$ 200,000,000.-. This is a very significant investment that hopefully it can improve revenue. On the other side the revenue does not meet the target and only reaches $\pm 25\%$.

Regarding to this situation and hope to grab big demand on internet access customers, there is a very important way to conduct research about consumers' behavior of @*wifi.id* users. Using the insights from an extensive review of literature and the discussions with people from the operator there is a conceptual model that fit for consumers' behavior. That model is called *Unified Theory Acceptance and Use of Technology (UTAUT)*. In this research the UTAUT model is modified to match with the real conditions. It is named modified UTAUT model and in this research it is used to predict behavior intention of the @*wifi.id* use in Indonesia. From this model the Behavioral Intention (BI) of user is influenced by several independent variables. They are Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Price Value (PV), and Content (C), of which influence are moderated by Age (A) and Gender (G). The next step is Behavior Intention (BI) influence to Use Behavior (BU).

This research result shows that R-Square for this model is 0,548 and from the result of running smart PLS informs that four independent variables (Social Influence (SI), Price Value (PV), Content (C), Performance Expectancy (PE)) give positive significant influence and two variables (Effort Expectancy (EE), Facilitating Conditions (FC)) don't give significant influence to Behavior Intention (BI). This research also shows that Behavior Intention (BI) gives positive significant influence to the Use Behavior (BU) of @*wifi.id* user.

Regarding to the result of this research, the recommendation point for the operator @*wifi.id* is that PT Telkom should create the program that will impact to the usage of @*wifi.id*. The program will cover and strengthen several aspects, including the connectivity, the content and the community. To realize these programs PT Telkom must improve the maintenance system and the system itself which develops new content that is needed by @*wifi.id* users and also to strengthen and to develop @*wifi.id* community.

Keywords : @*wifi.id*, *wifi* Services, Unified Theory of Acceptance and Use of Technology;

I. WIFI SERVICES IN INDONESIA

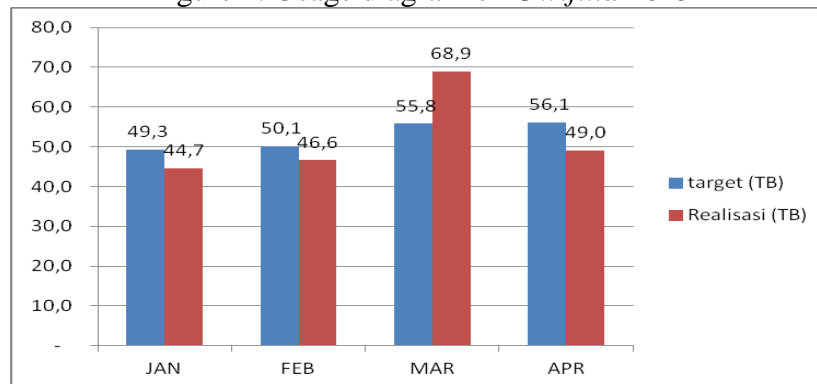
The number of Internet users in Indonesia is increasing in recent years. This condition offers big opportunity for all communication operators. Surely they want to get new revenue stream from the digital business. @wifi.id services as new stream product in the market but unfortunately from the beginning @wifi.id usage does not reach the target yet. The real data shows the acceptance of the users is not good enough shows on Table.1.

Table 1. Realization of @wifi.id Revenue 2014

MOUNTH	JAN	FEB	MAR	APR	MEI	JUNI	JULI	AUG	SEP	OKT	NOV	DES
TARGET (M)	5,6	7,2	6,2	9,5	15,7	21,2	27,2	28	29,4	16,5	10,3	10,2
REAL (M)	2	3,6	4,6	8,9	14,8	14,9	20,3	20	25,9	14,2	7,6	6,6
PERCENTAGE	36%	50%	74%	94%	94%	70%	75%	71%	88%	86%	74%	65%

@wifi.id as a new product in Indonesian market is not automatically responded by the market. According to table 1, the usage or revenue is always below the target. There are a lot of factors that make this product successful competing with others in the market. The usage of @wifi.id give a clear explanation that this product has not been successfully received by the internet users in Indonesia yet. The usage data of @wifi.id is shown in Figure 1.

Figure 1. Usage diagram of @wifi.id 2015



According to this condition and the using insights from an extensive review of literature and also discussion with people from the operator, there is a conceptual model that fit for consumer behavior is *Unified Theory Acceptance and Use of Technology (UTAUT)*. In this research the UTAUT model is modified to meet the real conditions and named modified UTAUT.

II. MODIFIED UTAUT MODEL FOR BEHAVIORAL INETNTION TO USE @WIFI.ID

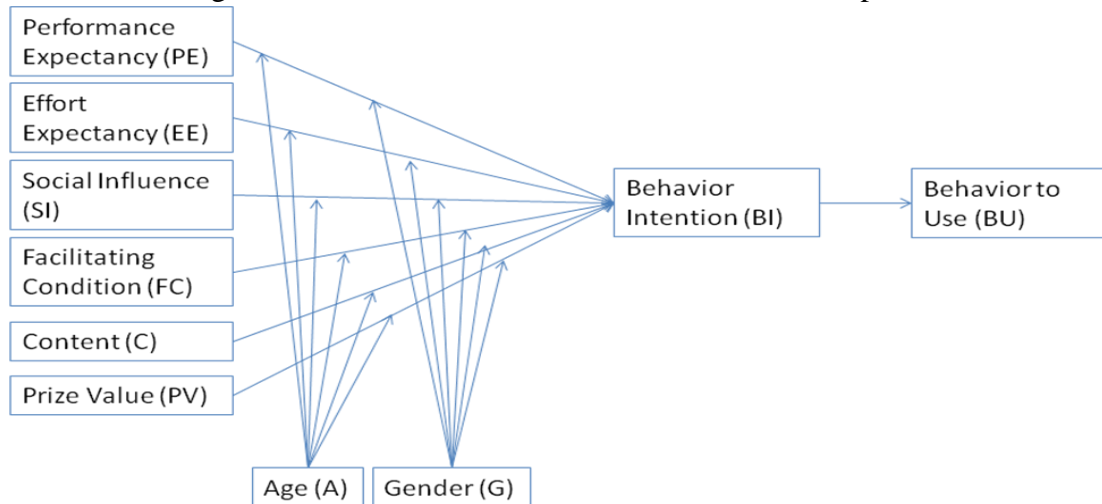
2.1 Conceptual Model

Indrawati (2012, 2014) had modified UTAUT model from Venkatesh et al. (2003) which added main variable content and removed the variable Experience and Voluntariness of the Use. In this research the model does not only focus on the behavior intention like Indrawati (2012, 2014), but also focus on the research about use behavior. Base on modified UTAUT model, the variables consist of :

1. Performance expectancy, several perceptions from this variable are *perceived of usefulness, extrinsic motivation, job fit, relative advantage and outcome expectation*.
2. Effort expectancy, this variable explains how easy to use the technology or product even for the new user. Perceived ease of use, complexity and ease of use build this variable.
3. social influence, The indicators are subjective norm, social factors, and image

4. facilitating condition, the indicators such as facility, readiness and capability of the user in using technology.
5. Content, the creative material created by professionals to be used by a large number of people and distributed through technology
6. Price Value, consumers cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using them
7. Behavior Intention, the extent of deliberate determination of the use behavior, and the participant’s actual use behavior
8. Use Behavior, the extent of deliberate determination of the use behavior, and the participant’s actual use.

Figure 2. Modified UTAUT Model on @wifi.id Adoption



According to the model, there are several hypotheses on this research. The hypotheses that developed are :

- H.1. Performance expectancy (PE) positive significantly influence behavioral intention (BI).
- H.2. Effort expectancy (EE) positive significantly influence behavioral intention (BI).
- H.3. Social influence (SI) positive significantly influence behavioral intention (BI).
- H.4. Facilitating conditions (FC) positive significantly influence behavioral intention (BI).
- H.5. Content (C) positive significantly influence behavioral intention (BI).
- H.6. Prize Value (PV) positive significantly influence the behavioral intention (BI).
- H.7. behavioral intention (BI) positive significantly influence the behavioral of Use (BU).
- H.8. Age (A) and Gender (G) are becoming the moderator influence of independent variable to Behavioral Intention (BI).

2.2 Research Matrik

There are several researches that already conducted and show several results based on the literature study that related with the adoption of technology. The previous research is shown on Table 2.

Table 2. Research Matrik

	Venkatesh(2003)	Im, Hong, Kang (2010)	Indrawati et al (2014)	Sundaravej (2006)	Peters, Heuvelman (2007)	Propossed Research
Performance Expectancy (PE)	✓	✓	✓	✓	✓	✓
Effort Expectancy (EE)	✓	✓	✓	✓	✓	✓
Social Influence (SI)	✓	✓	✓	✓	✓	✓
Facilitating Conditions (FC)	✓	✓	✓	✓	✓	✓
Hedonic Motivation (HM)	✓					

Price Value (PV)	✓		✓			✓
Habit (H)	✓				✓	
Attitude (A)				✓	✓	
Self Efficacy (SE)				✓		
Anxiety (A)				✓		
Content (C)			✓			✓
Age (A)	✓		✓	✓	✓	✓
Gender (G)	✓		✓	✓	✓	✓
Income (I)			✓			
Behaviour Intention (BI)	✓	✓	✓	✓	✓	✓
Behaviour to Use (BU)						✓

2.3 Data Collection

The survey of the user about fast internet access @wifi.id is conducted in Indonesia. The survey which was conducted in 5 big cities is to user @wifi.id in Indonesia. The total valid data from the survey and distribution respondents is shown on Table 4.

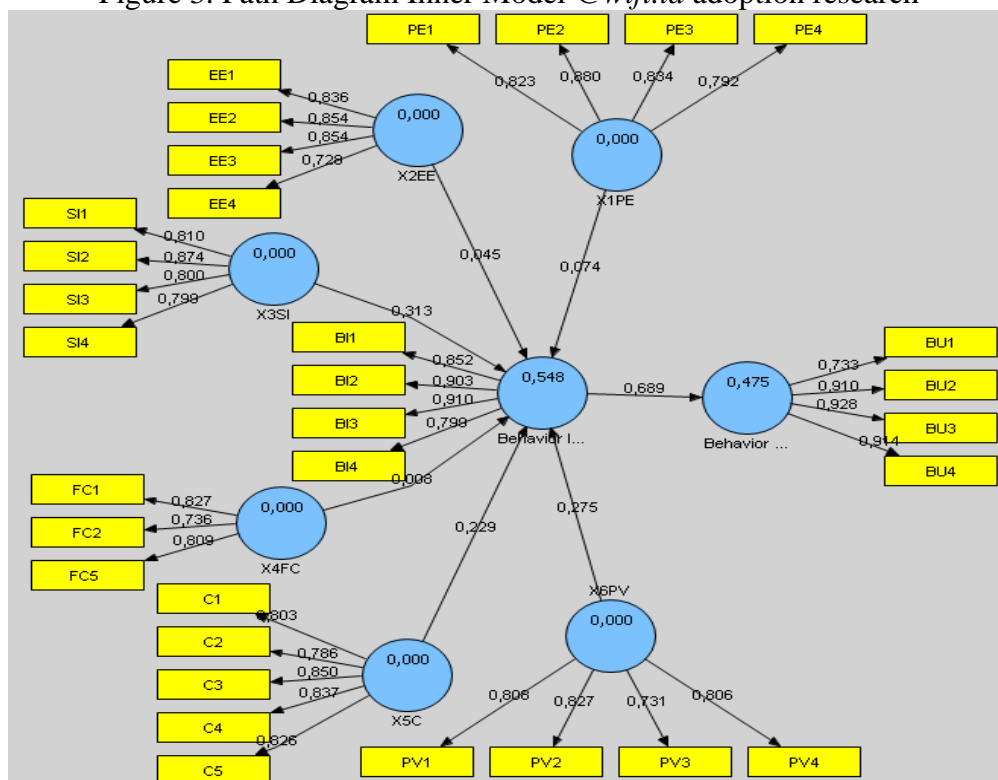
Table 4. Valid Respondent from @wifi.id adoption research

City	Respondent	Not User	Not Complete	Data Valid
Jakarta	213	4	4	205
Bandung	215	5	1	209
Surabaya	207	3	3	201
Medan	203	5	3	195
Makasar	190	2	2	186
Total	1028	19	13	996
Percentage	100%	2%	1%	97%

III. THE RESULT OF RESEARCH AND ANALYZE

Using of Smart PLS for model @wifi.id adoption research shown on Figure 3.

Figure 3. Path Diagram Inner Model @wifi.id adoption research



The result of processing data using Smart PLS gives *R-Squared* 0,548 and t-value test shown on Table 5.

Table 5. T-value test construct model @*wifi.id* adoption research

	Original Sample (O)	T Statistics (O/STERR)	Result	Decision
BI → BU	0,689	34,917 > 1,96	Significant	Hypothesis accepted
X1PE → BI	0,074	1,979 > 1,96	Significant	Hypothesis accepted
X2EE → BI	0,045	1,260 < 1,96	Not Significant	Hypothesis not accepted
X3SI → BI	0,313	9,318 > 1,96	Significant	Hypothesis accepted
X4FC → BI	-0,008	0,223 < 1,96	Not Significant	Hypothesis not accepted
X5C → BI	0,229	6,456 > 1,96	Significant	Hypothesis accepted
X6PV → BI	0,275	7,867 > 1,96	Significant	Hypothesis accepted

Base on Table 5 there are 5 Hypothesis that accepted and 2 Hypothesis that not accepted.

Result Bootstrapping process 1000x for the data gender shows Table 6 and Table 7 shows Bootstrapping result from data age group

Table 6. Bootstrapping result from data gender group

	Total result			man			Woman		
	Path	Standard Error	T Statistics	Path	Standard Error	T Statistics	Path	Standard Error	T Statistics
BI -> BU	0,689	0,020	34,927	0,678	0,025	26,625	0,700	0,031	22,408
X1PE -> BI	0,083	0,034	2,441	0,070	0,040	1,748	0,141	0,060	2,360
X3SI -> BI	0,319	0,033	9,641	0,335	0,043	7,850	0,334	0,046	7,237
X5C -> BI	0,240	0,031	7,693	0,218	0,038	5,789	0,256	0,057	4,477
X6PV -> BI	0,279	0,035	8,084	0,294	0,044	6,707	0,208	0,055	3,807

Table 7. Bootstrapping result from data age group

	Total result			young			Old		
	Path	Standard Error	T Statistics	Path	Standard Error	T Statistics	Path	Standard Error	T Statistics
BI -> BU	0,689	0,020	34,927	0,683	0,021	32,761	0,695	0,068	10,277
X1PE -> BI	0,083	0,034	2,441	0,088	0,038	2,291	0,059	0,122	0,484
X3SI -> BI	0,319	0,033	9,641	0,313	0,035	8,956	0,426	0,190	2,244
X5C -> BI	0,240	0,031	7,693	0,246	0,035	7,049	0,080	0,218	0,365
X6PV -> BI	0,279	0,035	8,084	0,276	0,036	7,744	0,262	0,127	2,063

Table 6 and Table 7 are showing that Age and Gender aren't influenced the influence of independent variables (Performance expectancy (PE), Effort expectancy (EE), Social influence (SI), Facilitating conditions (FC), Content (C), Prize Value (PV)) to dependent variable Behavior Intention (BI). According to these results, the final result describes the Age and Gender do not become the moderator model on @*wifi.id* adoption research.

IV. CONCLUSION

1. To Use Modified Utaut model predicts the behavior of the users in adopting the @wifi.id. The result of the *R-Squared* research is 0,548.
2. Independent variables are Social influence (SI), Prize Value (PV), Content (C), Performance expectancy (PE,) positive significantly influence to Behavior Intention (BI) and the other side Effort expectancy (EE) and Facilitating conditions (FC) do not significantly influence Behavior Intention (BI).
3. Age and Gender do not moderate the influence of independent variable (Social influence (SI), Prize Value (PV), Content (C), Performance expectancy (PE,) positive significantly influence to Behavior Intention (BI).
4. Behavioral Intention (BI) positive significantly influences Use Behavioral (BU).
5. Incompetence or instability of a model research across samples may result in an incorrect measurement of research outcomes.

V. REFFERENCE

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