Universiteit Leiden

ICT in Business

Intention to Use Go-Jek Service Application in Indonesia by applying Task Technology Fit and Social Capital

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Date : 29 July 2016

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MASTER'S THESIS

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List of abbreviations :

Abbreviation	Meaning	Page
AVE	Average Variance Extracted	
CB-SEM	Covariance-Based Structural Equation Modeling	19, 22
EOU	Ease Of Use	7
ICT	Information and Communications Technology	7, 9
iOS	iPhone OS	7
ITU	Intention To Use	7, 8, 9, 14, 15, 25, 26, 27, 28, 31
PLS	Partial Least Squares Path Modeling	19, 20, 26, 27
PLS-SEM	Partial Least Squares - Structural Equation Modeling	19, 20, 25, 29
R2	R-squared, the coefficient of determination	20, 25, 26, 27, 30, 31, 33
SC	Social Characteristics	15
STF	Social-Technology Fit	8, 9, 12, 14, 15, 26, 27, 28, 30, 31, 32, 33, 34
STRN	Sustainability Transitions Research Network	8
TAC	Task Characteristics	15, 39
TAM	Technology Acceptance Model	7, 8, 30, 34
TEC	Technology Characteristics	15, 25, 39, 40
TTF	Task-Technology Fit	7, 8, 9, 12, 14, 15, 18, 26, 27, 28, 29, 30, 31, 32, 33, 34

Abstract

This research investigates the intention of consumers to accept and use new mobile technology, in casu Go-Jek, by application of two models, i.e. the Task-Technology Fit and the Social Capital model. Go-Jek is one of the recent popular referral services by using a mobile application platform. Go-Jek attracted more than ten millions of users to download its mobile application, which has drawn much attention to study the success of the Go-Jek mobile application. Understanding the relationship between a user's intention and the actual utilization of the Go-Jek mobile application is necessary to explain the rapid acceptance from academic and to guide further growth from a business point of view.

However, prior research models for mobile application acceptance can hardly explain the impact on the intention to use this technology as insufficient research has been done on the fit in a combination of models.

This study investigates the impact of a combination of task-technology and social capital characteristics on users' intentions to use the Go-Jek mobile application by integrating the task-technology fit and social technology fit model. In this way, we also identify indicators that have a strong relationship with either social capital, technology or task characteristics in adopting Go-Jek mobile application.

Data of 216 Go-Jek mobile application users were collected from an online (Bahasa) questionnaire, and processed using SmartPLS (vs 3.0) for path analysis and hypothesis tests. The results show that the task-technology fit has a slightly more significant influence than social technology fit on users' intention to use the Go-Jek mobile application. Nevertheless, an integrated model provides a broader view and a more detailed explanation than using either of both models individually.

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Chapter 1 : Introduction

This section provides an overview of the problem addressed by, the goals, significance and the research questions for this study.

1.1. Go-Jek Multi Services

1.1.1. Overview

Since its first establishment in 2011, Go-Jek has grown to become one of Indonesia's most popular technical based services, because it can address the most hated daily problem for Indonesian which is traffic jams. Wall street Journal reported on July 2016, Go-Jek is going to raise up to US$400 million that will put the company's valuation to US$1.2 billion ("Go-Jek Is Reported to Be Raising a New Round of Funding. What's Next?" 2016).

People in Indonesia's capital Jakarta, where lack of modern public transport with horrible congested traffic, have warmly welcomed a ride-hailing apps such as Uber for car rides and Go-Jek for motorcycle rides. Basically, Uber and Go-Jek are referral services that have to come up with some special demanding features that will bring consumer to them which is responsible for referring its drivers to passengers (Woo and Bales 2016). Such services are part of a growing new sharing economy which is is built on using and sharing of products and services among others (Puschmann and Alt 2016). According to survey conducted by Nielsen in 2014 ("The Rise of the Sharing Economy in Indonesia | Bruegel" 2016), 87% of Indonesians are likely to use products or services from others in a shared community, compared to 66% of the global population.

As a matter of fact, Go-Jek has gradually changed into a mobile first company and partnered with many corporates. The company works with ojek drivers from all around city and offers a fast, reliable and convenient transportation, courier and food delivery service by using motorbike taxi in much more simple way, through smartphone application. Nowadays, Go-Jek company is not only providing service by using transportation based only, but also some services such as :

- GO-CLEAN* is daily cleaning service. It brings in professional cleaning services to clean and tidy up a dorm room, apartment and home.
- GO-GLAM* is our professional beauty treatment service. It brings beauty care services such as manicure-pedicure, cream bath, blow dry and more, directly to your home.
- GO-MASSAGE* is our wellness massage service. It brings in the services of professional masseurs to provide reflexology massage, scrub, full-bodied and much more, straight to your home.
- GO-TIX* is a mobile ticketing and event discovery mobile app with on-demand event ticket order and delivery service.
- GO-SHOPPING is a service that you can use to shop from a store.

All in all, Go-Jek as a transportation and logistics company, has remade the situation, slowly turning itself into an “everything-on-demand” business.

1.1.2. Application

Go-Jek Multi Services as the first motorcycle taxi in Jakarta has introduce a potentially radical innovation where information and communication technology (ICT) platform has been used as a taximeter. It seems to be the only ojek startup with its own smartphone app (Faisal 2016). Currently, this application does not only connect drivers to passengers, but in general term, it also connect service owners with the users. It allows users to order motorcycles, either for transportation, courier, or shopping services via smartphones but also providing information seeking and ordering for other services.

Go-Jek are basically referral services. Users can download and install the application in their smartphone. The apps work with Android, iOS and Windows phones. The GPS capabilities of smartphones allow both drivers and passengers know each other’s location which make sure when the ride will arrive. For its courier service, the company lets users track its packages in real-time via smartphone apps.

When opening the mobile app for the first time, users will be prompted to register. In the homepage, users can choose one of Go-Jek’s services. For most of the choices, users need to fill in information like the pickup address, delivery address, and pick up schedule. Afterwards, the mobile app will show the price. For payments, you can do it by cash, Go-Jek’s credits, or a corporate pin (only for cooperating companies). Users can buy credit using bank transfer or by sharing their Go-Jek promotion code to friends. Please read Appendix A to get more insight about features within Go-Jek application.

1.2. Problem Identification

There is no question that Go-Jek’s success story is also attributed to the success of its application to carry their services to their users. Therefore, understanding the relationships between technology acceptance and the utilization of the mobile application is essential to be analyzed.

The most frequently employed model to learn about technology acceptance and utilization are the technology acceptance model (TAM) and the task-technology fit (TTF) (Lu and Yang 2014). The TAM replaces many of Theory of Reasoned Action’s attitude measures with perceived usefulness (PU) and perceived ease of use (EOU).

There are many literature about integrating TAM and TTF. Another research has concluded that the perceived Ease Of Use (EOU) is also a function of TTF which is a part of TAM model (Mathieson and Keil 1998). However, some researchers has questioned about the accuracy of TAM. Bagozzi has presented an insightful paper for the analysis and critique of TAM and pointed out some limitations (Bagozzi 2007). He has confirmed that it is unreasonable to expect that those simple models would explain behavior fully across a wide range of technologies and adoption situations.

Similar situation will happen when only TTF model being applied to a complex context due to its simple framework. Therefore, Peng Lu (Lu and Yang 2014) has examined the task-technology fit with social capital construct to model the acceptance.

Furthermore, social capital is an interesting quality and is one of the biggest growth areas in organizational network research, although its specific dynamics are still being studied. In the most general terms, the concept is about the value of connection (Borgatti 2003), while further definitions will be introduced on Chapter 2.

After an extensive review of the mobile application literature, we found that little has been studied about the factors that drive the users' acceptance of this technology within a certain social context, specifically by integrating the application of TTF and STF. Therefore, this present study will emphasize more about how the TTF and STF, embracing task requirement and such technology function which is extended by social capital constructs are correlated with the performance and utilization of Go-Jek's application. Further definition about constructs being chosen will be discussed on Chapter 2.

1.3. Research Significance

Go-Jek's mobile application has been powerful as personal time-saver and has won multi-award in delivering convenience service. Some new startups may try to follow their impressive track record. They try to promote similar application services with Go-Jek. However, the newbie may end up with misleading since they are not really sure about aspects that should be prioritized and invested by using their limited resources. They need to identify strong factors affecting user behavioral intention to use such service and will optimize their resource on those factors. One of Go-Jek's key pillar is social impact. It will be helpful to examine users' perception about their role to stimulate economy and reduce unemployment in Indonesia.

The findings in this study may provide a useful insight for academic, service providers, business model developers and agents in online referral service. Since this business type has become more importance and potential for new trends, they will be valuable for further research.

Glaeser (Glaeser et al. 2000) has looked at the importance of social interactions in determining the economic performance of cities, which may lead us to looking at how social support the development of a whole economy. Frans Sengers (Sengers and Raven 2014) concludes that innovations in informal urban transport has opened up alternative mobility solution, not only for developing country but also for developed ones. He also asserted that the persistence of informal transport systems and the growth of innovations within developing countries prove to be relevant phenomena for defining prominent topics on the agenda of Sustainability Transitions Research Network (STRN).

1.4. Research Question

The main research question of this research is: To what extent Task-Technology Fit and Social Capital affect the intention to use Go-Jek Application Services in Indonesia?

In order to investigate this question and to get more insight, the following research questions need answering:

1. What indicators do have strong relationship with either social capital, technology or task characteristics which contribute to Intention to Use (ITU) of Go-Jek mobile application?
2. In term of predicting behavioral Intention to Use (ITU) Go-Jek service application services, which one is better between TTF and STF?
3. Taken together, do TTF and STF predict ITU better than either model alone?

1.5. Research Goal

Basically, the purpose of this thesis is to address the effectiveness of Go-Jek application used by individuals in society for carrying out their daily task. As it is such a wide topic of discussion, the present study only focus mainly to investigate the TTF and Social Capital to the intention to use of Go-Jek service application as an exploratory research (Bagozzi and Yi 1988). This study will complement lack of prior research to analyze mobile application based on TTF and STF.

The theory of task-technology fit (Goodhue and Thompson 1995) is employed, which suggests that ICT tools must show a 'fit' with the conditions of individuals in order to result in higher satisfaction and productivity. The TTF model still needs to be analyzed across different contexts to get more insight about sociology (Lu and Yang 2014). So far, it is still unclear if a good task-technology and social technology fit will impact a user's adoption of mobile application.

In particular, the study objectives were to:

1. Identify indicators that have strong relationship with either social capital, technology or task characteristics in order to define important area to be focused on.
   According to this, consecutive assessment procedures were done by following serial steps such as path model estimation, assessing constructs to define indicators that have strong relationship with either social capital, technology or task characteristics.
2. Identify which one is better predictor Behavioral Intention to Use (ITU) Go-Jek service application services between TTF and STF.
3. Identify whether TTF and STF taken together predict ITU better than either model alone. Despite the fact there is lack of research on the study about mobile application adoption by integrating only TTF and Social capital, it is evidence that combination of these models have better prediction of ITU [2] [10].

Chapter 2 : Literature review

A detailed literature search was performed using Science Direct, Jstore, Emerald, ProQuest, EBSCO, PsycArticles, and Dissertation Abstracts Online, IEEE, Google Scholar and ACM. There have been previous attempts at identifying different models of Task Technology Fit, Social Capital along with the insight of Go-Jek application. In the following sections, these attempts and their results which will represent constructs will be discussed.

2.1. Task Characteristic

To measure task characteristics, this study has adopted the Kim's constructs (M. J. Kim et al. 2015) which are related to Go-Jek's case in this study. Kim used six constructs of value, enjoyment, time saving, mobility and satisfaction which were all constructs used by prior researcher.

A. Value

Value in this study is defined as a satisfying deal with realistic price which is based on individual judgement. Accordingly, this study considers value as an important motivation for mobile application (Y. Kim and Crowston 2011).

B. Enjoyment

Enjoyment is defined as the fun or pleasure derived from using a technology, adding hedonic motivation as a predictor of consumers' behavioral intentions (Venkatesh, Thong, and Xu 2012). Of relevance to this study, in a mobile restaurant service setting, Cyr et al. (Cyr, Head, and Ivanov 2006) found perceived usefulness has a strong enjoyment function, and this has contributed to the degree of enjoyment experienced by users. Therefore, this study includes enjoyment as a main motivation.

C. Time saving

The time spent in making purchase from Go-Jek services compare to conventional services or other service purchase options.

D. Mobility

Mobility is defined as independency of time, place and payment tool when purchasing from Go-Jek services.

Kim has defined that user context related to time saving and mobility on mobile tourism application is derived from the task technology theory where other motivation such as value and enjoyment factors directly affected satisfaction. All of those factors were also examined as contributed factor to the actual of use mobile service as an extension of research about the intention to use (Tojib and Tsarenko 2012).

Tojib asserted that value, enjoyment, time saving and ease of use factor (represented by mobility factor) have strong influence to the actual of use.

The task characteristics as a group was studied by a research which demonstrated their significant effect to Task Technology Fit when it was applied into an information system (Goodhue and Thompson 1995). They found that the behavior of carrying out of tasks shows that a user engages with the technology. This is also supported by prior research that indicate the fitness between task and technology is only consider the nature of technology and the requirement of task itself (Liang et al. 2007).

Accordingly, we propose a hypothesis as follows:

H1a. Task characteristics are correlated with the perceived task technology fit in Go-Jek application.

2.2. Technology characteristic

Hoehle and Venkatesh (Hoehle and Venkatesh 2015) had introduced some constructs that represent mobile application usability conceptualization. In order to define technology characteristic factors are being used by Go-Jek application, the researchers pick a few relevant technology aspects as follows:

A. Collaboration

When appropriate your mobile application should make it easy for people to interact with others and share their location, opinions, and high scores. People generally expect that mobile applications can share information that is important to them.

B. Data preservation

Mobile applications stop when people press the home button to open another mobile application or use a feature, such as the phone call. Mobile applications should save user data as soon as possible and as often as reasonable because a termination may happen any time.

C. Effort minimization

The mobile application should make it easy for users to input their choices. Inputting information may take time and attention, therefore it is suggested to the application can easily find for itself, such as time, contacts or mobile phone information.

D. Subtle animation

In mobile application, animation is a great way to communicate effectively, as long as it does not slow them down and easy to manipulate. A subtle animations will greatly help people to visualize their actions.

Goodhue has asserted that technology must be utilized and have a good fit with tasks it support to have a positive impact to the user performance within information system (Goodhue and Thompson 1995).

Furthermore, similar with task characteristics, prior research has asserted that the fitness between task and technology is simply consider the nature of technology itself (Liang et al. 2007).

On the other side, a conceptual model has been developed to explain relationship between Technology Characteristics and Social Technology Fit. It was defined as functional characteristics of technology supporting the operation of society, such as mobile interactive function (Liao et al. 2014).

Lu and Yang has extended the TTF to social-technology fit by investigating the influence of task, social, and technology characteristics on users' intentions in the usage of social networking sites (Lu and Yang 2014). Therefore, by the similar situation with this study, the construct of perceived TTF and STF is defined as the perception of individuals in which the technology functions provided by Go-Jek application will effect both models.

Accordingly, we propose an hypothesis as follows::

H1b. Technology characteristics are correlated with the perceived task-technology fit in Go-Jek application.

H3b. Technology characteristics are correlated with the perceived social-technology fit in Go-Jek application.

2.3. Social Capital

Social capital is not defined well, nonetheless important concept, because it refers to the basic material of civil society (Onyx and Bullen 2000). Commonly defined as the resources which individuals and groups have access to by virtue of their membership in networks (Bourdieu 2011), but there are wide-ranging concepts of social capital.

Wendy Stone and Jody Hughes stated (Stone, Hughes, and others 2002) argued that social capital can be understood quite simply as networks of social relations characterized by norms of trust and reciprocity. The essence of social capital is quality social relations. Thus, social capital can be understood as a resource to collective action, which may lead to a broad range of outcomes, of varying social scale.

Social capital, according to Putnam (Putnam, Leonardi, and Nanetti 1994), consists of features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit. Social capital is embedded in social structures and together with associated norms it links people together and enables them to work more effectively towards common objectives. All in all, three main components are trust, social norms including obligations, and social networks and associations. He showed in massive empirical collection of data in Bowling Alone (Putnam 2001) and in the Saguaro projects since. Areas with high social capital work better on a range of indicators and produce better health and economic outcomes.

According to Eva Cox (Cox 2007), there has been too little attention paid to social capital. Social capital refers to the processes between people which establish networks, norms, social trust and facilitate coordination and cooperation for mutual benefit. These processes are also known as social fabric or glue, but she was deliberately using the term 'capital' because it invests the concept with the reflected status

from other forms of capital. Social capital is also appropriate because it can be measured and quantified so we can distribute its benefits and avoid its losses. Conceptually, social capital can include group processes in wide ranging settings: at the micro level in small tight groups like families and friendship, or even in larger loose groupings such as communities, societies and even nations.

This study itself has adopted few literatures to build some constructs. Three constructs are taken from a widely used concept of social capital encompasses three dimensions (structural, cognitive, and relational) as proposed by Nahapiet and Ghoshal (Nahapiet and Ghoshal 1998). These dimensions had been proven significantly by Kuan-Yu (Lin and Lu 2011) as three major factors facilitating continued intention to use social media, subsequently were adopted to this study as following:

A. Structural dimension : social interaction ties
   It refers to the network of interpersonal relationships formed by the ties or interactions of the members within a network. Mobile application nowadays provides users with communication tools (e.g., text, media such as video and photos) so that the users are more capable of interacting and communicating with other users to maintain and expand interpersonal networks.

B. Cognitive dimension: shared values
   The cognitive dimension comprises shared values developed when users have common goals or standards of value, or when their opinions and viewpoints on various topics discussed are alike. The more consistent the information found on the website is, the greater will be the intention to continue using the site

C. Relational dimension: trust
   The relational dimension comprises interpersonal relationships that develop with long-term interaction, the focus of which is on psychological and subjective relationships such as trust, friendship, and respect. Users may develop sense of trust through interaction and communication, further will cultivate to the intention to use.

Based on functional theory, Liao's research concept has asserted that social characteristics will give a better definition for the social networks and cause the impact on social-technology fit toward online social network (Liao et al. 2014). Therefore, with similar analogy we assumed that social characteristics also affects social technology fit in Go-Jek application.

Accordingly, we propose an hypothesis as follows:

H3a. Social capital characteristics are correlated with the perceived social technology fit in Go-Jek application.

2.4. Linking TTF to Go-Jek application use

According to Pusttchi, there is a significant relationship between TTF and perceived usefulness which led to the intention to use (Pousttchi and Wiedemann 2007). . Lee and Park asserted that perceived usefulness as part of TTF and value factor have a positive impact on intention to use (Lee et al. 2012). In addition, Kim has studied that a better task technology fit within mobile tourism application increases the usage which is determinant of intention to use (M. J. Kim et al. 2015) . Therefore, perceived TTF was predicted to be a precursor to Go-Jek application users' adoption.

Accordingly, we propose an hypothesis as follows:
H2. Perceived task-technology fit is correlated with the intention to use Go-Jek application.

2.5. Linking STF to Go-Jek application use

The perceived Social Technology Fit here means the degree of which technology assists an individual in fulfilling his or her social needs. Some researchers have indicated the ties based on social interaction are the main factor influencing users' continuous intention to use social network application (Kietzmann et al. 2011; Lu and Yang 2014), which we analogize to social aspect of using Go-Jek application.

Liao's study proposed that factors influencing Intention to Use (ITU) should consider both task characteristics and the relationship among network members, considered as Social-Technology Fit (STF) (Liao et al. 2014). In addition, an empirical testing of information technology tool by Venkatesh has proved that social influence have significant relationships with the intention to use technologies (Venkatesh et al. 2003).

Accordingly, we propose an hypothesis as follows:
H4. Perceived social-technology fit is correlated with the intention

2.6. Hypotheses outline

The TTF model is widely used for explaining and predicting how the fit between task requirements and technology functions may affect task performance and technology utilization. According to Goodheu (Goodhue and Thompson 1995), TTF is the degree to which a technology assists an individual in performing his or her portfolio of task.

Theoretically, this study integrates the Task-Technology Fit (TTF) model and social capital theory to explain why users have the intention to use Go-Jek application regarding their tasks and social needs. By adopting the outline model employed by Peng Lu (Lu and Yang 2014) (Figure 1) below depicts the proposed research model, which extends the TTF model by introducing the constructs of intention to use and social capital characteristics. Nonetheless, Peng Lu only emphasized the structural dimension while there are

broader definition about social capital (Nahapiet and Ghoshal 1998) for reason because their focus were more into relationship function of social media. Apart from that, this study employs all dimensions comprises of structural, cognitive and relational dimension which were represented by the use of mobile application.

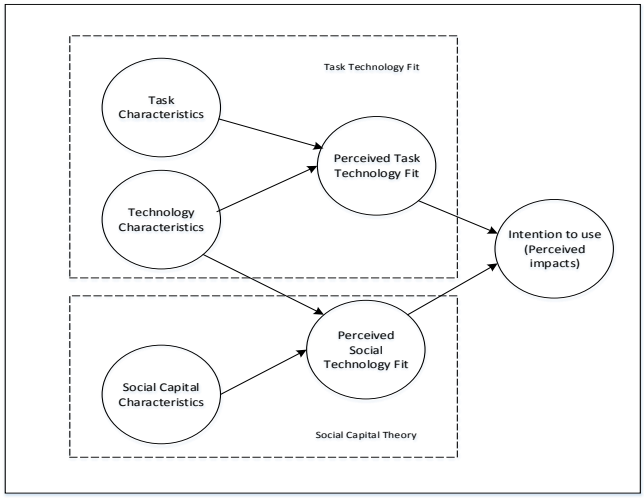

Figure 1 : Overview of prior research model (Pu & Yang)

Afterward, by pertaining to the list of references (Table 1) in previous discussion, we further refine our research model like being drawn in Figure 2 (Chapter 2). This research model includes six constructs: task characteristics (TAC), technology characteristics (TEC), social capital characteristics (SC), task-technology fit (TTF), social technology fit (STF), and intention to use (ITU). By using this model, we can find out whether this two characteristics complement or conflict with each other and how strong their impact to the intention to use of mobile application.

References	Research object	HYPOTHESIS					
		H1a	H1b	H2	H3a	H3b	H4
		TAC -> TTF	TEC -> TTF	TTF -> ITU	SOC -> STF	TEC -> STF	STF -> ITU
Goodhue and Thompson 1995	Information system	*	*				
Lin and Lu 2011	Social media						*
M. J. Kim et al. 2015	Mobile tourism application	*		*			
Lu and Yang 2014	Social media		*	*	*	*	*
Pousttchi and Wiedemann 2007	Mobile payment			*			
Lee et al. 2012	Mobile finance service			*			
Liang et al. 2007	Mobile technology	*	*				
Liao et al. 2014	Online social network				*	*	*
Tojib and Tsarenko 2012	Mobile service	*		*			

Table 1 : Recapitulation of references being used

Given all of the proposed hypotheses, the research model for the intention to use of Go-Jek service application is represented in figure 2 below:

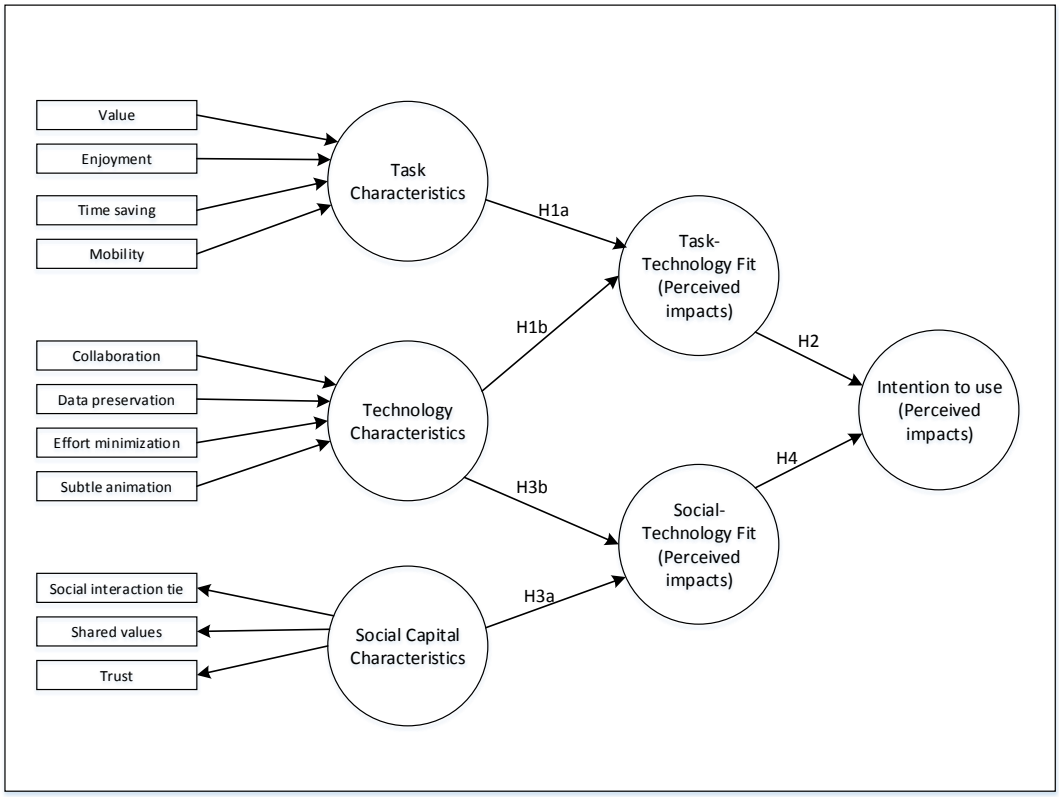

Figure 2 : Our proposed research model

Chapter 3 : Methodology

This chapter provides an overview of the methods used to answer our research questions, describing research approach, design, data gathering and analysis

3.1. Research Setting

The research questions being introduced previously, express a need for learning more about the concept model may be used for Go-Jek application services. Hence, a quantitative experimental approach research approach taken in order to meet the research objectives. Overall, this scientific method introduce hypotheses, doing quantitative experiments, and then either sustain or reject the hypotheses (verification or falsification of hypotheses) based on statistical analysis of the measured data.

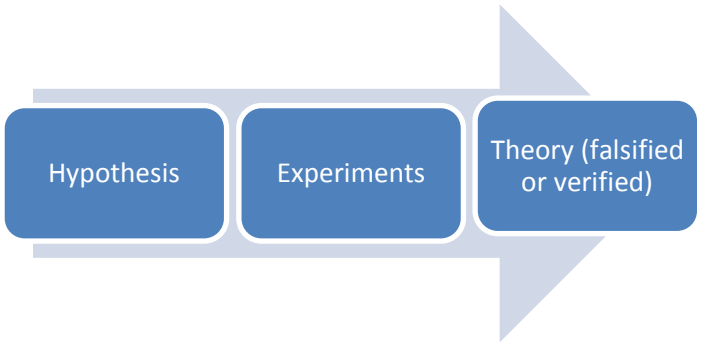

Figure 3 : Overview of quantitative experimental

The procedures employed to conduct this study are as follows. First, the relevant literatures were needed about mobile application utilization, with specific focus on the application of the TTF model and Social Capital, then we generated initial question items for each constructs of the proposed model. Second, we conducted a pretest with several respondents to revise initial items according to their suggestions, including the reliability of constructs. . Both pretest and adapted questionnaire were established by using the free Google form online survey.

After the questionnaire was formulated, it was posted online including the link in social media for potential successfully recruiting participants. We make sure the questionnaire is written in Bahasa (Indonesian language) by using website Indonesian translator and dictionary (sinonimkata.com and blabla.co.id) to ensure that the context of the questions is familiar to the respondents. Each respondent is meant to answer a series of questions, and the objectives of the study are clearly explained in the questionnaire. To increase the response rate, we try to offer compensation like a gift for those who completed the questionnaire.

To ensure validity of responses, we always try to check participants name, email and personal information. A quick validation will be employed to avoid respondent that answer without actually looking at the question.

This research is conducted to validate behavioral intention to use model and to determine parameter affecting such user behavior in Indonesia as perceived by them. The aspects looked into are their social characteristics and their responses to Go-Jek mobile application services.

Generally, Go-Jek application has been widely used with more than 10 million users had downloaded according to Google Play. Therefore, the survey was designed for general users without age, occupation or background limitation. All in all, we used 42 items in questionnaire, which are measured on a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7). There are 14 social capital items and 27 task technology characteristics in the questionnaire along with 3 question to measure intention to use.

3.2. Variable and Measurement Instruments

Overall, the questionnaires (see the detail in **Appendix B**) were mainly adapted from relevant prior studies and carefully modified to reflect the characteristics Go-Jek service application. Based on the literatures and question characteristics, the loading factors are described as follow:

NO	CONSTRUCTS & CONTENTS	CODE	REFERENCES
1	**Task Characteristics**	**TAC**	M. J. Kim (2015) & partially (Tojib and Tsarenko 2012)
	Value	VAL	M. J. Kim (2015) & Tojib and Tsarenko (2012)
	Enjoyment	ENJ	M. J. Kim (2015) & Tojib and Tsarenko (2012)
	Time saving	TIM	M. J. Kim (2015) & Tojib and Tsarenko (2012)
	Mobility	MOB	M. J. Kim (2015)
2	**Technology Characteristics**	**TEC**	Hoehle & Venkatesh (2015), (Liang et al. 2007)
	Collaboration	CLB	Hoehle & Venkatesh (2015)
	Data preservation	DAT	Hoehle & Venkatesh (2015)
	Effort minimization	EFF	Hoehle & Venkatesh (2015)
	Subtle visual effect/animation	ANI	Hoehle & Venkatesh (2015)
3	**Task Technology Fit**	**TTF**	Lu & Yang (2014), Tojib and Tsarenko (2012)
4	**Social Capital**	**SOC**	Nahapiet and Ghoshal (1998), Kuan Yu (2011) & Scrivens (2013)
	Social interaction ties	TIE	Kuan Yu (2011)
	Shared value	SHA	Kuan Yu (2011)
	Trust	TRU	Kuan Yu (2011)
5	**Social Technology Fit**	**STF**	Lu & Yang (2014)
6	**Intention To Use**	**ITU**	Lu & Yang (2014), Pousttchi and Wiedemann (2007), Lee et al. (2012)

Table 2 : Constructs measurement and references

In accordance with one of study objectives which is to identify indicators that have strong relationship with either social capital, technology or task characteristics, a serial assessment procedures were done to define indicators which have strong relationship with their constructs. The relationships between constructs and indicator variables are considered based on their outer loadings. Indicators that have strong relationship with its constructs are defined by having outer loading value of 0.70 or higher after bootstrapping, however value of 0.4 or higher is acceptable according to Hulland (Hulland 1999).

3.3. Statistical Analysis

The objective of this study are to develop and to understand the intention to use of Go-Jek service application by using Task technology Fit extended with Social Technology Fit, as well as to measure the goodness of fit between the structural model and the collected data. This study employed Structural Equation Model (SEM) based on partial similarities with few prior research [2] [21].

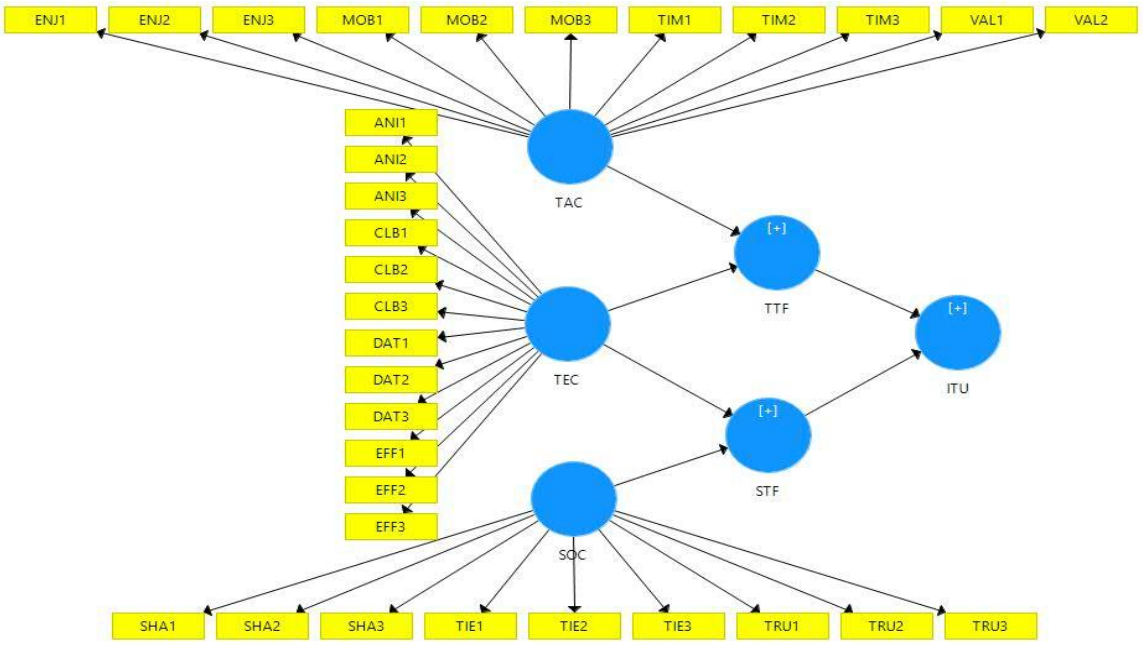

Table 3 : Measuring model with SmartPLS

Furthermore, based on the characteristic of this study, we use PLS-SEM method. To be specific, according to Hair (Hair, Ringle, and Sarstedt 2011), PLS-SEM's is able to work efficiently with a much wider range of sample sizes and increased model complexity, and its less restrictive assumptions about the data, it can address a broader range of problems than CB-SEM. However, researchers must always be aware of the differences in interpretation of the results.

Therefore, we employed assessment procedure by following serial steps such as path model estimation, assessing constructs and evaluation structure model (Figure 4) (Jr et al. 2016). It has included assessment of reliability and validity of construct variable by using Cronbach Alpha, Composite Reliability and Average Variance Extracted (AVE). Afterward, we will use PLS and bootstrap analysis to analysis the model while

we utilize SmartPLS for measurement. All data were processed using the SmartPLS version 3.0 for path analysis and hypotheses tests.

Lastly, we also adopted multi group analysis based on demographic to examine whether differences between path coefficients of some specific groups are statistically significant.

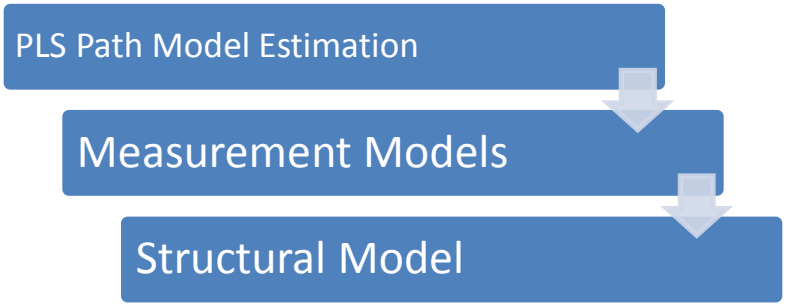

Figure 4 : Analysis procedure of PLS-SEM

Path model estimation comprises the statistical properties and parameter settings to run the PLS function and algorithm by using SmartPLS software. The next step is the evaluation of structure models which cover assessment of coefficients of determination (R2), size and significance of path coefficients. Assessment of the structural model results enables you to determine the model's capability to predict the target constructs.

Chapter 4 : Result

4.1. Data collection

The total number of valid questionnaires was 216, after subtracting 29 questionnaires with invalid or repeated answers by sample demographic as follow:

VARIABLE	FREQ	PERCENT
Age		
Young <25 yo	117	54%
Adult >= 25 yo	99	46%
Gender		
Male	113	52%
Female	103	48%
Education		
Low education (maximum High school)	96	44%
High education	120	56%
Working status		
Worker	122	56%
Unemployed (incl. student and housewife)	94	44%
Monthly spending		
< 100 USD	48	22%
USD 100 - 200	78	36%
USD 201 - 300	48	22%

Table 4 : Demographic profiles of respondents

To discuss the detail demographic, a total of 52% of the respondents were men, 88% belong to the 20–35-year-old age group; 60% were workers; 60% were office workers; 36% spent 101-200 USD per month.

4.2. Assessing Construct

Assessment or measurement of constructs comprises composite reliability to evaluate internal consistency, individual indicator reliability, and average variance extracted (AVE) to evaluate convergent validity (Jr et al. 2016). Discriminant validity refers to the extent to which constructs are distinct and uncorrelated.

Measurement	Check item in SmartPLS	References
RELIABILITY		
Internal Consistency Reliability	Composite reliability (CR)	CR should be 0.7 or higher. If it is an exploratory research, 0.6 or higher is acceptable. (Bagozzi and Yi, 1988)
Indicator Reliability	Outer loading (OL)	0.70 or higher is preferred. If it is an exploratory research, 0.4 or higher is acceptable. (Hulland, 1999)
VALIDITY		
Convergent validity	AVE	It should be 0.5 or higher (Bagozzi and Yi, 1988)
Discriminant validity	Cross loadings	Fornell and Larcker (1981) suggest that the "square root" of AVE of each latent variable should be greater than the correlations among the latent variables

Table 5 : Reliability and validity assessment

Constructs	Items	Indicator reliability : Outer loading > 0.4	Internal consistency		Convergence validity : AVE > 0.5
			Cronbach alpha > 0.7	Composite reliability > 0.7	
TAC	VAL1	0.761	0.9	0.917	0.505
	VAL2	0.662			
	ENJ1	0.772			
	ENJ2	0.825			
	ENJ3	0.811			
	TIM1	0.684			
	TIM2	0.661			
	TIM3	0.751			
	MOB1	0.673			
	MOB2	0.59			
	MOB3	0.579			
TEC	CLB1	0.718	0.914	0.927	0.516
	CLB2	0.741			
	CLB3	0.72			
	DAT1	0.629			
	DAT2	0.665			
	DAT3	0.66			
	EFF1	0.723			
	EFF2	0.741			
	EFF3	0.809			
	ANI1	0.732			
	ANI2	0.699			
	ANI3	0.762			
TTF	TTF1	0.903	0.862	0.916	0.784
	TTF2	0.871			
	TTF3	0.882			
SOC	TIE1	0.595	0.903	0.919	0.562
	TIE2	0.571			
	TIE3	0.641			
	SHA1	0.821			
	SHA2	0.837			
	SHA3	0.779			
	TRU1	0.805			
	TRU2	0.81			
	TRU3	0.827			
STF	STF1	0.912	0.897	0.936	0.83
	STF2	0.937			
	STF3	0.883			
ITU	ITU1	0.916	0.916	0.947	0.856
	ITU2	0.951			
	ITU3	0.908			

Table 6 : Reliability and validity measurement for indicator and constructs

As reported by table above, assessing construct in terms of composite and indicator reliability with convergent and discriminant validity are acceptable, which suggests sufficient levels of reliability and validity. The loading factors for all indicators within each construct are well above the acceptable threshold value for exploratory research. It can be seen that all of the indicators reliability value are much larger than the minimum acceptable level of 0.4 and close to the preferred level of 0.7. Strong outer

loading value has been shown by most those indicators except for DAT, MOB and TIE. Partial weakness strong loading has appeared within ANI2, TIM1, TIM2 and VAL2 indicator.

	TAC	TEC	TTF	SOC	STF	ITU
VAL1	**0.761**	0.517	0.589	0.539	0.588	0.588
VAL2	**0.662**	0.42	0.42	0.4	0.43	0.418
ENJ1	**0.772**	0.568	0.484	0.561	0.518	0.524
ENJ2	**0.825**	0.635	0.54	0.63	0.536	0.557
ENJ3	**0.811**	0.622	0.543	0.608	0.614	0.587
TIM1	**0.684**	0.471	0.503	0.435	0.434	0.416
TIM2	**0.661**	0.367	0.41	0.355	0.394	0.405
TIM3	**0.751**	0.485	0.558	0.526	0.542	0.492
MOB1	**0.673**	0.526	0.515	0.484	0.531	0.598
MOB2	**0.59**	0.441	0.439	0.391	0.47	0.437
MOB3	**0.579**	0.525	0.463	0.421	0.441	0.459
CLB1	0.447	**0.718**	0.472	0.633	0.503	0.53
CLB2	0.524	**0.741**	0.492	0.641	0.518	0.517
CLB3	0.502	**0.72**	0.434	0.645	0.48	0.527
DAT1	0.527	**0.629**	0.394	0.472	0.439	0.433
DAT2	0.525	**0.665**	0.38	0.478	0.399	0.396
DAT3	0.485	**0.66**	0.403	0.541	0.444	0.388
EFF1	0.585	**0.723**	0.482	0.599	0.493	0.546
EFF2	0.549	**0.741**	0.473	0.559	0.51	0.482
EFF3	0.558	**0.809**	0.515	0.601	0.541	0.533
ANI1	0.504	**0.732**	0.52	0.572	0.524	0.573
ANI2	0.487	**0.699**	0.491	0.575	0.503	0.561
ANI3	0.519	**0.762**	0.523	0.635	0.547	0.6
TTF1	0.652	0.621	**0.903**	0.65	0.682	0.71
TTF2	0.609	0.575	**0.871**	0.614	0.604	0.637
TTF3	0.613	0.532	**0.882**	0.603	0.598	0.652
TIE1	0.325	0.504	0.366	**0.595**	0.386	0.362
TIE2	0.299	0.482	0.318	**0.571**	0.356	0.308
TIE3	0.379	0.526	0.367	**0.641**	0.381	0.367
SHA1	0.611	0.657	0.565	**0.821**	0.71	0.649
SHA2	0.603	0.679	0.596	**0.837**	0.71	0.645
SHA3	0.549	0.599	0.55	**0.779**	0.626	0.55
TRU1	0.512	0.636	0.554	**0.805**	0.594	0.579
TRU2	0.603	0.656	0.615	**0.81**	0.661	0.607
TRU3	0.638	0.69	0.674	**0.827**	0.668	0.695
STF1	0.641	0.64	0.634	0.704	**0.912**	0.666
STF2	0.653	0.642	0.646	0.737	**0.937**	0.671
STF3	0.647	0.598	0.664	0.697	**0.883**	0.647
ITU1	0.677	0.659	0.696	0.707	0.711	**0.916**
ITU2	0.655	0.669	0.708	0.675	0.683	**0.951**
ITU3	0.633	0.647	0.689	0.649	0.619	**0.908**

Table 7 : Discriminant validity measurement with the highest value of indicator among the others (bold font)

The table above shows the cross-loadings for every indicator which has the highest value for the loading with its corresponding construct.

4.3. Evaluation Structure Model

When evaluating the PLS-SEM results for the structure model, the first step is to examine significance and the relevance of coefficients. By interpreting these results, we can identify the key constructs with the highest relevance to effect the target construct(s) in the structural model.

According to Hair et al (Jr et al. 2016), whether a path coefficient is significant, depends on its standard error that is obtained by using bootstrapping. When interpreting the results of a path model, we need to test the significance of all structural model relationships using t values and p values.

Path	Path Coefficient (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Hypothesis significant (p<0.05)
SOC -> STF	0.653	0.654	0.077	8.446	0	Significant
STF -> ITU	0.384	0.384	0.061	6.294	0	Significant
TAC -> TTF	0.491	0.494	0.072	6.872	0	Significant
TEC -> STF	0.159	0.162	0.079	2.021	0.043	Significant
TEC -> TTF	0.298	0.298	0.072	4.14	0	Significant
TTF -> ITU	0.481	0.483	0.061	7.868	0	Significant
*) significant for p<0.05						

Table 8 : Total effect / path coefficient, showing all paths are significant

The results in the table above imply our assumptions are supported and the hypotheses we made are mostly accepted. In fact, researchers usually assume a significance level of 5% where threshold for t value is >1.96. But when a study is exploratory in nature, researchers often assume a significance level of 10% where t value >1.65 for two-tailed test (Jr et al. 2016).

As stated by Cohen (Cohen 1988), result of 0.02, 0.15, and 0.35 are interpreted as small, medium, and large effect respectively. Therefore, most path coefficients in this model have relatively strong effect to their own target, while TEC->STF and TEC->TTF have medium effect sequentially. There is also evidence that path coefficient of TTF->ITU (0.481) are more significant than STF->ITU (0.384) although they both are assumed have large effect on ITU.

Next step, we are moving to evaluate the R2 value (coefficient of determination). This coefficient represents the amount of variance in the endogenous constructs impacted by all of the exogenous constructs linked to it.

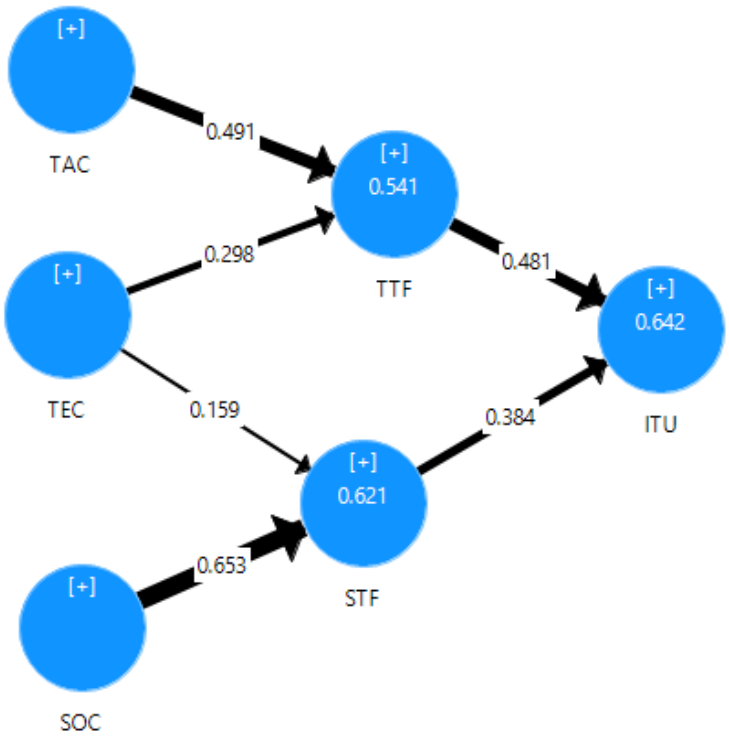

Figure 5 : Path coefficient with highlight of absolute value (including R2)

According to Hair et al (Jr et al. 2016), research that focuses on marketing issues, R2 values of 0.75, 0.50, or 0.25 for endogenous latent variables can be respectively described as substantial, moderate, or weak. From the study result, values of ITU, STF and TTF of 0.642, 0.621 and 0.541 are considered as moderate.

Regarding this study objective to identify the better predictor of Intention to Use (ITU) Go-Jek service application services between TTF and STF, we try to evaluate the condition when one of both constructs were measured with ITU without the present of its combatant construct.

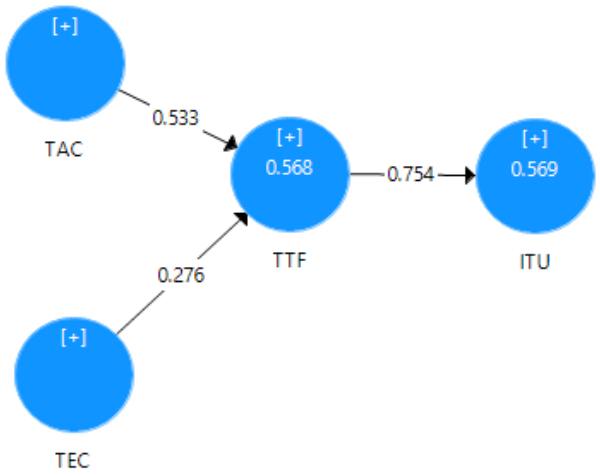

Figure 6 : PLS path analysis for TTF, when STF was removed

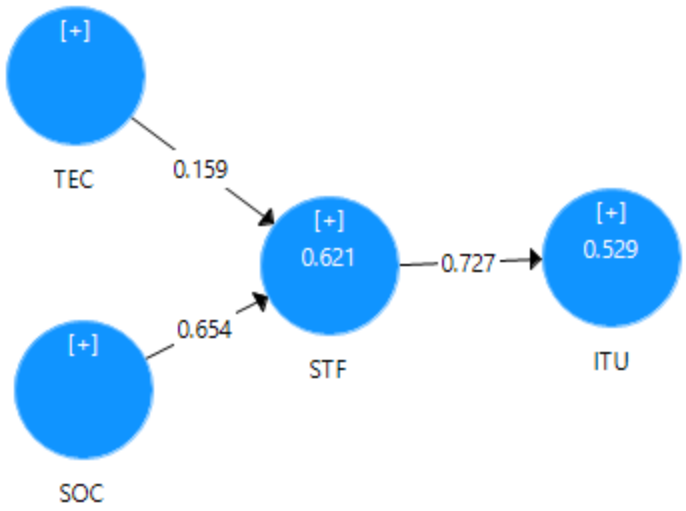

Figure 7 : PLS path analysis for STF, when TTF was removed

When social characteristics and social-technology fit are removed from the model, as shown in Fig. 6, the R2 value or explained variance of ITU is slightly decreased from 0.642 to 0.569. The relatively high R2 value in task-technology fit suggests the significance of TTF model on Go-Jek mobile application use.

On the other hand, if we remove task characteristics and task-technology fit from the model, as shown in Fig. 8, the R2 value or explained variance of ITU is decreased from 0.642 to 0.529. The relative small decreased R2 of ITU when STF was employed had shown that STF is considerable to explain variance of ITU. Therefore, these two results has revealed that both TTF and STF model are sufficient to explain or predict intention to use Go-Jek mobile application service.

4.4. Multi-Group Analysis

To get more insight about the proposed model, it is necessary to analyze the mobile application acceptance across different contexts. Therefore, this study also adopted multi group analysis to examine whether differences between path coefficients of some specific groups are statistically significant.

Demographic information related to Go-Jek mobile application was included such as gender, age, education level, working status and monthly money spending. According its application requires the groups to be of similar size (Jr et al. 2016). Therefore, after performing the data collection, some groups were defined based on demographic variables in order to obtain samples with considerable size based on age, gender, education level, working status and monthly spending.

Path	PC Combine	Education level			Working status			Monthly spending		
		High	Low	p-Value	Worker	Unemployed	p-Value	High	Low	p-Value
SOC -> STF	0.653	0.718	0.583	0.196	0.568	0.711	0.16	0.698	0.589	0.225
STF -> ITU	0.384	0.207	0.512	0.997	0.409	0.369	0.617	0.31	0.46	0.895
TAC -> TTF	0.491	0.502	0.491	0.475	0.583	0.469	0.779	0.473	0.539	0.683
TEC -> STF	0.159	0.106	0.218	0.756	0.299	0.071	0.937	0.038	0.272	0.943
TEC -> TTF	0.298	**0.388**	**0.177**	**0.084***	0.235	0.31	0.307	0.376	0.215	0.128
TTF -> ITU	0.481	**0.677**	**0.334**	**0.001*****	0.455	0.507	0.344	**0.606**	**0.38**	**0.029****
				*Notes : * Significant at p<0.1, ** Significant at p<0.05, *** Significant at p<0.01*						

Table 9 : MGA result based on education, working status and monthly spending

This finding indicates that high education level intensely impact the way of user adopting Go-Jek mobile application, from normal path coefficient of 0.481 to 0.679 while technology factor effect task technology fit from 0.298 to 0.388. With the similar impact, high monthly money spending affect path coefficient from TTF to ITU from 0.481 to 0.606.

Path	PC Combine	Age			Gender		
		Adult	Young	p-Value	Male	Female	p-Value
SOC -> STF	0.653	0.669	0.649	0.448	0.614	0.704	0.728
STF -> ITU	0.384	0.331	0.415	0.753	**0.519**	**0.178**	**0.001*****
TAC -> TTF	0.491	0.434	0.55	0.784	0.538	0.458	0.274
TEC -> STF	0.159	0.155	0.161	0.516	0.166	0.154	0.467
TEC -> TTF	0.298	0.39	0.216	0.119	0.207	0.401	0.917
TTF -> ITU	0.481	0.536	0.452	0.236	0.368	0.671	0.997
	*Notes : * Significant at p<0.1, ** Significant at p<0.05, *** Significant at p<0.01*						

Table 10 : : MGA result based on age and gender

Accordingly, the next multi group analysis based on age and gender has shown that male tent to believe that Social Technology Fit influence their decision to use Go-jek application compare to female, from 0.384 to 0.519. On the other hand, there was no significant discrepancy between adult and young respondents.

Chapter 5 : Discussion

5.1. Summary

We started by analyzing today's situation of mobile application acceptance factors to raise theoretical questions in the discipline of user acceptance theory. Thus we generated the following research questions "To what extent Task-Technology Fit and Social Capital affect the intention to use Go-Jek Application Services in Indonesia?"

Two theoretical paradigms that were selected to formulate our research model are The Task-Technology Fit (TTF) Theory and Social Technology Fit (STF). There are few literatures about integrating TAM and TTF. Following to this, some researches has concluded that TTF function are in line with TAM model [5]. This study specifically examines the main factors that drive technology acceptance by testing the effects of TTF and Social Influence within the context of TAM model. By adopting combination concept between TTF and STF model, our hypotheses predicted the following relations:

H1a. Task characteristics are correlated with the perceived task technology fit in Go-Jek application.

H1b. Technology characteristics are correlated with the perceived task-technology fit in Go-Jek application.

H2. Perceived task-technology fit is correlated with the intention to use Go-Jek application.

H3a. Social capital characteristics are correlated with the perceived social technology fit in Go-Jek application.

H3b. Technology characteristics are correlated with the perceived social-technology fit in Go-Jek application.

H4. Perceived social-technology fit is correlated with the intention.

After deployment a set of questionnaire, data were collected over a free online survey provided by Google form. When data collection was finished, a total of 245 participated in the study. Data analyses were performed by employing PLS-SEM and using SmartPLS version 3.0 software. The results showed full support for hypothesis H1a, H1b, H2, H3a and H4b.

However, there is exceptional attention with H3b that we may assume this hypothesis is significant within context of experimental researchers usually assume a significance level of 10% where t value >1.65 for two-tailed test (Jr et al. 2016). It is probably that technology characteristics indicator were taken by finding the match between Go-Jek mobile application feature selected from limited research about measuring mobile application. Due to the widely used of mobile devices, consumers expect various aspects such as user-friendly and well-designed mobile applications from service providers. Unfortunately, little

references has been available to evaluate existing mobile applications or in term to designing new mobile applications technology (Hoehle and Venkatesh 2015).

Based on the positive result implied by the large path coefficient (> 0.35) and moderate R2 value (>0.5), it is evidence that TTF and STF could predict the adoption of Go-Jek application and potentially effective to assess other mobile application. High path coefficient explain strong effect of one variable is on another variable. The weight of different path coefficients enables us to rank their relative statistical importance (Wong 2013). On the other side, a higher R2 is an indicator of a better goodness of fit for the observations. The usefulness of this parameter enable us to find the likelihood of future events falling within the predicted outcome.

Overall, according to these findings the followings could be inferred: First, positive task-technology fit was proven contributing highest impact to the intention to use of mobile application, especially by combination with social capital factors, the effect on users' intention to use would be maximized. Second, the results of this study show all endogenous constructs are satisfying for observation. Third, appropriate goodness of fit between technology characteristics within concept of TTF and STF needs to be examined in forming better measurement to adopt intention to use mobile application.

5.2. Identifying Strong Indicator within Constructs

In line with one of study objectives which is to identify indicators that have strong relationship with either social capital, technology or task characteristics, we identified indicators which have strong relationship with their constructs. Within technology characteristics, we found that Data Preservation has the least significant relationship with its constructs. In accordance with our previous discussion, there is a chance that we had chosen too specific criteria to represent mobile application feature, leading to insignificant measurement of combination TTF and STF model.

Our social capital structural model suggests that social interactions, shared values, and trust are the three major factors supporting intention to use of mobile application (Nahapiet and Ghoshal 1998) (Li, Yang, and others 2014). Of particular interest, our findings indicate that social interaction has the least significant direct relationship to adoption mobile application technology. This fact is in agreement with prior research (Lin and Lu 2011) that social interaction increases shared value and trust of using application related with communication tool that involve social interaction. This is due mainly to the environment presents value and mutual trust between users that usually develop gradually through continual interaction and communication.

5.3. Interaction effects between STF and TTF

There is tendency that when social characteristics are considered as phenomenon in our daily life, social-technology fit model will give significant impacts to adoption mobile application rather than use task-technology fit alone. This suggests only task or technology characteristic are not adequate to predict user intentions to use Go-Jek mobile application. Therefore, this study has presented an effective model to

examine users' intentions to use mobile application by adding social construct such as from social capital theory.

On the other side, a higher R2 belonging to social technology fit is an indicator of a better goodness of fit for the observations. Due to its relatively strong relationship with its indicator, the mobile application business player should be aware if there is change within social context, refer to study about social capital. Generally speaking, the results of this study show the fit between social characteristic and technology characteristics influences users' intentions to use mobile application.

5.4. Finding better predictor of ITU between STF and TTF

In regard to another study objective, which is to identify the better predictor behavioral Intention to Use (ITU) Go-Jek service application services between TTF and STF, the results reveal the task-technology fit was slightly more significant impacts on adoption mobile application rather than social-technology fit, which is mostly contributed by Task Characteristics.

These findings suggest that as much as task characteristics play an important role in shaping and changing users' perception due to its important task value on mobile application technologies and considered influential when it comes to the decisions of new users, toward an intention to actually use them. Eventually, it will suggest that mobile application companies should concentrate their marketing efforts on enhancing their task characteristics and technology (e.g. by strengthening task value and software feature).

5.5. Theoretical Contribution

Taken collectively, the results from this study contribute to demonstrate the validity of Task Technology Fit extended with Social Task Technology Fit. First, this finding provide valuable insight on users' intention to use mobile application and explore considerable indicators within Task, Technology and Social characteristics. Secondly, it would refine conception ideas in social research field about social capital exploration by using mobile application platform. Thirdly, the findings may encourage academia and present opportunities for further research because although the conceptual model for the study provided several precursor research, there is a need to find another objective measurements by looking on other side, for example involving a profound study about social psychology.

5.6. Business Implication

In regard with the relatively strong indicators being shown by Task Characteristics, providing mobile application feature that trigger users' task needs is beneficial for referral service provider. By doing so, users are more likely to feel connected with their mobile app because those who emphasize more on time, value and mobility may gain useful experience of the mobile app with the benefit of enjoyment.

This study also encourages referral service provider to become aware with social capital factors, particularly for shared and trust value. Companies may develop their product with ideas come from their

online community. In this way, they services are expected to reflect their customer value and building customer engagement. Maintaining trust factor could be done by consistently trustworthy information, well-established customer care or security payment innovation. Furthermore, due to Go-Jek's campaign objective is also highlighting the social impact, there's a high possibility of success if similar campaign is delivered in other country.

Interestingly, multi-group analysis indicates specific groups such as gender, high education level and high monthly spending intensely impact the users' intention to use Go-Jek mobile application. In order to grasp attention of such groups, referral service provider may apply incentive and reward system based on users' expense, or probably by offering innovative feature based on gender and education level of user. This way is also beneficial for gaining users retention.

5.7. Limitations and Future Research

The same case with all studies, this thesis should be interpreted with regards to the inherent limitations during the project. Although these findings are encouraging and useful, like all research, our study has its limitations. .

First, whether our findings can be generalized to all types of mobile application is not defined yet. Further study is necessary to verify our findings to a broader view. One method-related issue in this exploratory study is probably the inadequacy of comprehensive study about technology characteristics related to Go-Jek mobile application. Second, some inconsiderable path coefficients may have been due to a relative small sample size with a Indonesian sample, provided that we suggest a larger and broader sample size for future studies, employing combination TTF and STF models within the context of mobile application environment and experimental designs research. Third, although the conceptual model for the study provided several precursor research, this study is a typical exploratory and needs further studies to reconfirm the findings

Chapter 6 : Conclusion

This research attempts to identify and examine TTF and Social Capital model to the intention to use of Go-Jek mobile application service. For this purpose, the TTF and STF models have been integrated into the TAM theory and successfully tested through experimental processes. Both model represent an important theoretical contribution toward understanding intention to use mobile application utilization. According to our study objectives, this study integrates the TTF model and social capital theory to explain users' adoption to Go-Jek mobile application respect to their delivered tasks and social environment. We found that a good fitness between task-technology fit and social-technology fit has a significant effect on intention to use this mobile application.

Furthermore, our results also showed that task-technology fit is slightly more essential than social-technology fit for evaluating the intention to use of Go-Jek application. However, regarding to its relatively higher coefficient of determination (R2 of STF), the application provider should be more aware if there is a change within social situation, refer to social capital in this study. On the other hand, our study shows technology characteristics contribute moderate but not considerable impact in supporting both models, probably because its indicators were selected from limited research about measuring mobile application

The proposed integrated model provides a broader view and detail explanation rather than using either of both model individually. Probably, the findings can be used as reference for future research about mobile application adoption with the Social Capital factors. Finding the better indicator for technology characteristics within the combination of TTF and STF is also important to get more significant result.

For practical implication, it is really necessary to understand factors that may influence the measurement of mobile application adoption for business and academic setting. For business, mobile application companies should concentrate their marketing efforts not only to enhancing their task characteristics and technology but also by paying attention to the social capital at the moment. On the other side, given the significant effect on intention to use, an academic may utilize social capital characteristics of the use of mobile application to accentuate of generation theory along with task technology and social technology fit application within mobile application platform.

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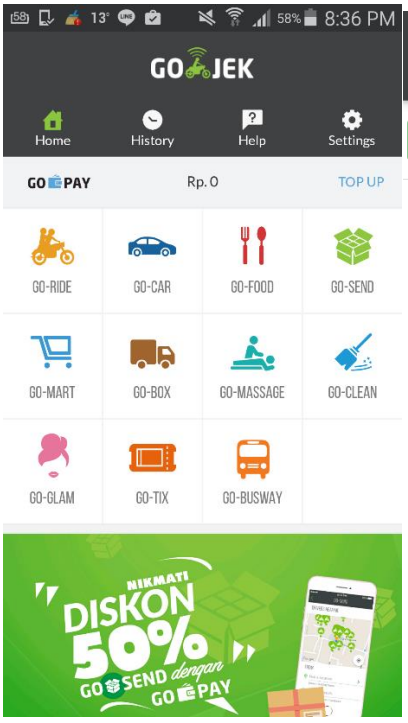
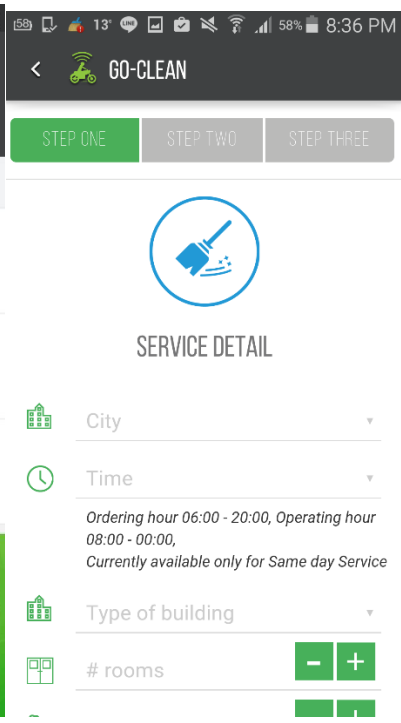
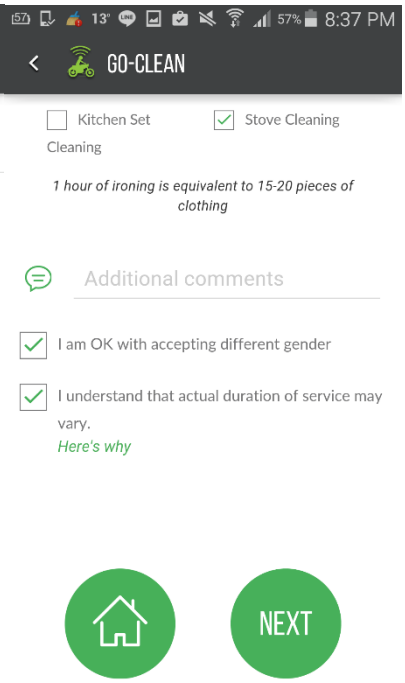
Appendix A : Go-Jek Mobile Application



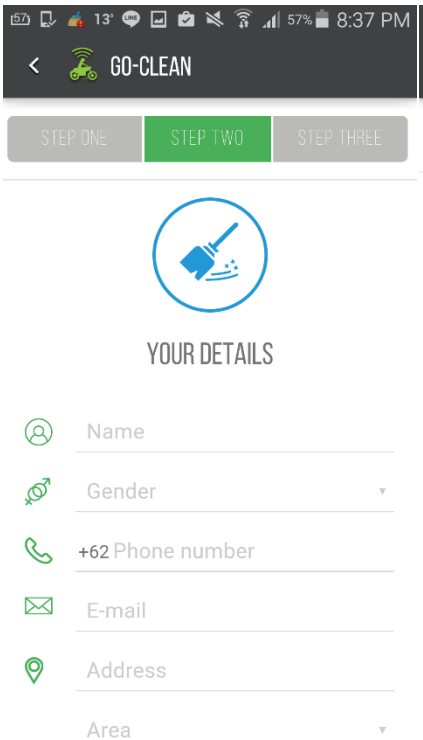
Overview



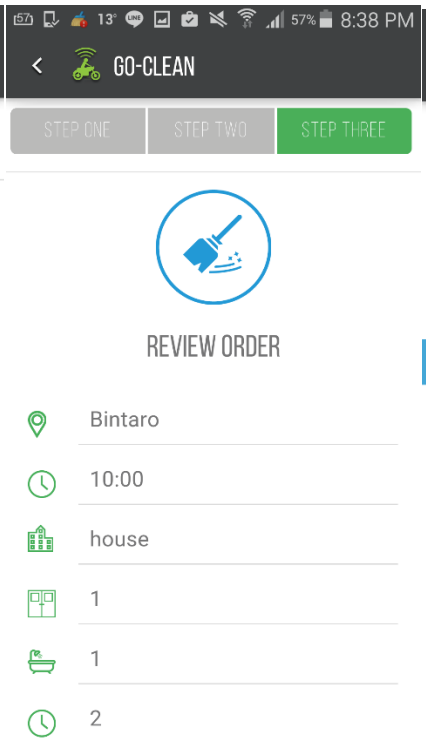
Service feature



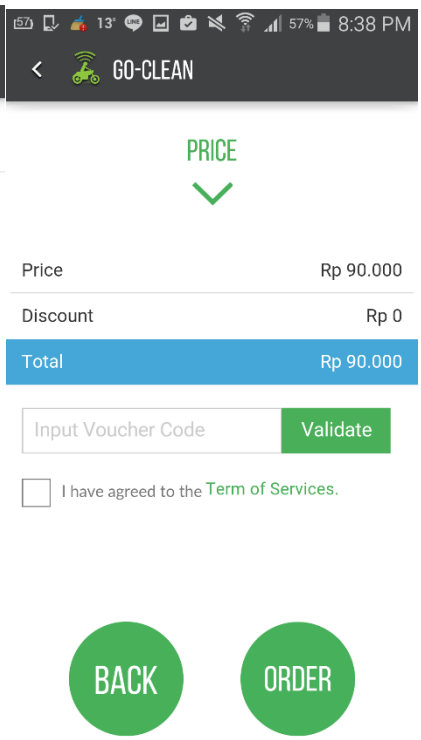
User agreement



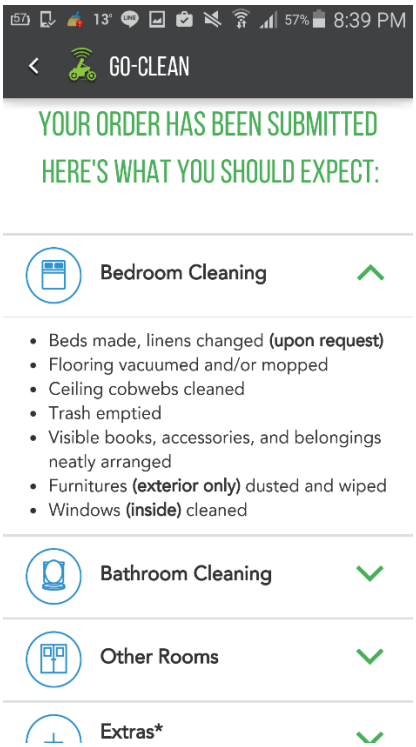
User detail



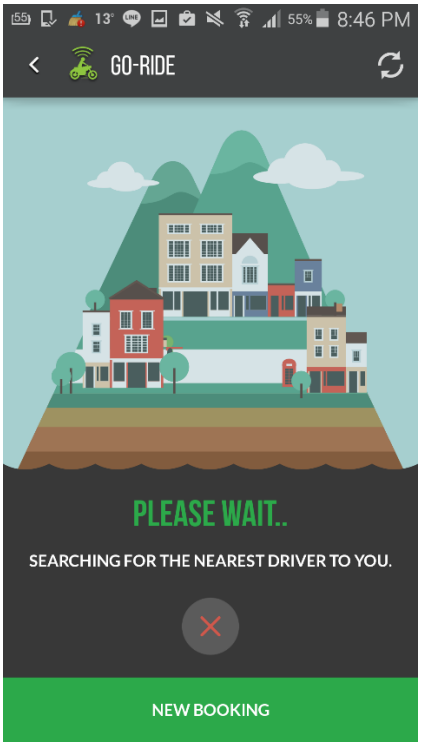
Review order



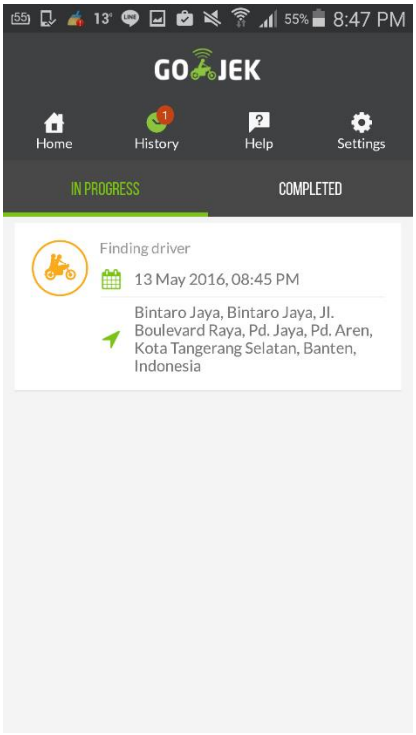
Pavment



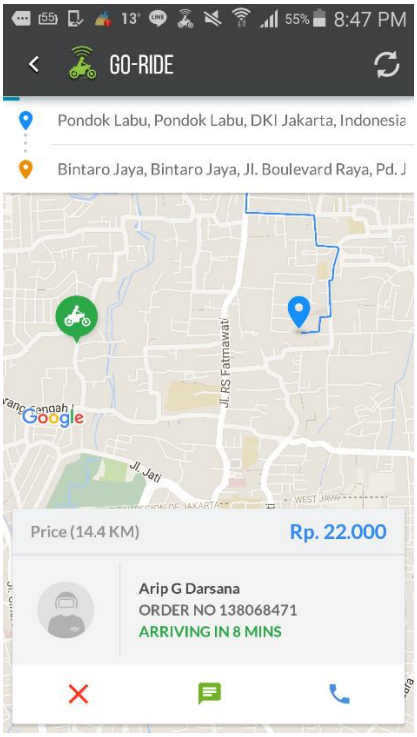
Review order w/ detail



Waiting animation



Data preservation



GPS tracking

Appendix B : List of questionnaires

Question #	Item / construct	Indicator
	TASK CHARACTERISTIC	**TAC**
	Value : the importance or worth of something for someone	**VAL**
1	The Gojek services offer excellent value for my money.	VAL1
2	It is a good deal to purchase services on Gojek application compared with other service options (e.g Uber, Grab bike, Tiki).	VAL2
	Enjoyment	**ENJ**
3	Gojek services mobile application is enjoyable to use.	ENJ1
4	Gojek services mobile application is interesting.	ENJ2
5	Purchasing Gojek services via mobile application is fun.	ENJ3
	Time saving	**TIM**
6	The time spent to purchase Gojek services is less than conventional services.	TIM1
7	By purchasing service from Gojek services, I can save more time than I could by using other service options (e.g Uber, Grab bike, Tiki).	TIM2
8	If saving time is considered, purchasing from Gojek application is the right choice.	TIM3
	Mobility	**MOB**
9	Purchasing from Gojek services is independent of time.	MOB1
10	Purchasing from Gojek services is independent of place.	MOB2
11	I can substitute the need for cash or credit card by using Gojek credit	MOB3
	TECHNOLOGY CHARACTERISTIC	**TEC**
	Collaboration	**CLB**
17	Gojek application allows you to connect with other people.	CLB1
18	Gojek application supports collaboration with others.	CLB2
19	Gojek application helps you to interact with others.	CLB3
	Data preservation	**DAT**
20	Gojek application automatically saves your data when you close the application.	DAT1
21	Gojek application doesn't require you to manually save your data when you quit the application.	DAT2
22	Gojek application allows you to quit the application and restart at the same stage when re-entering it.	DAT3
	Effort minimization	**EFF**
23	Gojek application makes it easy for you to input your choice.	EFF1
24	Gojek application minimizes effort for you to type information.	EFF2
25	Gojek application allows you to perform tasks without having to reinput data.	EFF3
	Subtle visual effect/animation	**ANI**

26	Gojek application uses visual effect/animation effectively to communicate content.	ANI1
27	Gojek application doesn't overuse visual effect/animation.	ANI2
28	Gojek application uses subtle visual effect/animation to communicate content.	ANI3
	TASK TECHNOLOGY FIT	**TTF**
29	In my opinion, Gojek's functions are suitable for helping me to fulfill my needs.	TTF1
30	In my opinion, Gojek's functions are really helping me to fulfill my needs.	TTF2
31	In my opinion, Gojek's functions are fit for my requirement.	TTF3
	SOCIAL CAPITAL	**SOC**
	Social interaction ties	**TIE**
32	I engage in a high level of interaction with other mobile users.	TIE1
33	I spend considerable time interacting with other mobile users.	TIE2
34	I have frequent communication with other mobile users.	TIE3
	Shared value	**SHA**
35	In my opinion the application Gojek carry information / ideas that reflect my values (eg Gojek aims to improve the welfare of workers in a variety of informal sector in Indonesia with the principle of sharing economy, where individuals can borrow or rent the assets belonging to someone else)	SHA1
36	I agree with what Gojek application consider to be important (e.g. Gojek's activity emphasizes three fundamental values: speed, innovation, and social impact).	SHA2
37	Gojek application activities are in line with my personal values (reflection to Gojek's new features such as delivery, cleaning service, home salon, massage).	SHA3
	Trust	**TRU**
38	Gojek application enthusiastically address problem of their members (user or agent).	TRU1
39	Gojek application provide trustworthy information.	TRU2
40	In general, Gojek application and services are very trustworthy.	TRU3
	SOCIAL TECHNOLOGY FIT	**STF**
54	In my opinion, Gojek's functions are suitable for helping people with current social situation.	STF1
55	In my opinion, Gojek's functions are really helping people with current social situation.	STF2
56	In my opinion, Gojek's functions are fit with user's social situation.	STF3
	INTENTION TO USE	**ITU**
57	Decide to use Gojek service application is a good idea	ITU1
58	In general, I am willing to use Gojek service application	ITU2
59	Once I have used Gojek service application, I will continue to use it	ITU3