

# Adoption of Innovation of Go-Car Driver Application in Conventional Taxi Driver in Semarang City

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# Abstract

The use of a manual system for conventional taxis causes companies to lose money because they cannot compete with private cars using the Go-Car online application. A new breakthrough made by conventional taxi companies is to work with the Go-Car applicator. Conventional taxi drivers are pleased with the presence of the Go-Car Application in the company. The purpose of this study is to determine the adoption of innovations that occur in GO-CAR partners in the city of Semarang, the role of communication in the process of innovation diffusion so that it becomes a GO-CAR partner in the city of Semarang, and the factors that influence the adoption of innovations, namely individual factors and social factors. Method. The method used is a qualitative research method. The subjects used in the study are GO-CAR partners from GO-JEK Indonesia who are still active as partners. Sources of data used in this study include primary data, that is data obtained directly when researchers are in the field or research location. It can be in the form of GO-CAR partners' daily activities while working, and the results of interviews with predetermined informants and secondary data are supporting data from data obtained from research sites or primary data, literature studies, such as journals, theses, books and documents. Secondary data in this study can also be obtained through the official website of GO-JEK. This research data collection technique uses in-depth interviews using open-ended questions and documents as past data from the research object in order to obtain information about the state of the object before the GO-CAR from GO-JEK Indonesia in Semarang City. Technical analysis using the Miles and Huberman (2014) model, namely condensing, presenting, and concluding or verifying data from the data obtained. The results showed that there was diffusion of innovation in conventional taxi drivers using the Go-Car Driver application in Semarang in the form of acceptance of a new culture of innovation in the conventional taxi company and innovation diffusion occurred in conventional taxi drivers using the Go-Car Driver application in the City Semarang and the acceptance of a new culture of innovation in this conventional taxi company. There is a difference in the concept of the innovation adoption decision process from several informants of this research, namely the reversal of the persuasion process with the decision process of several informants due to the role of the authoritarian figure in the adoption decision process. In this study, interpersonal communication channels proved to be more effective than mass media channels in the diffusion process of the Go-Car Driver Application in conventional taxi drivers in the city of Semarang.

# Keywords: Adoption; Innovation; Go-Car Application

#### A. Introduction

The development of smart phone technology is currently experiencing a very rapid increase, especially in Asia. This technology emerged as a major form of electronic communication system in many regions of Africa and Asia (Tenhunen, 2008). Tenhunen (2008) argues that this new communication system influences and attracts views from the local social, cultural, and political processes. Smart phone technology not only functions as a communication tool, but can also be used as a medium of transactions, ranging from banking transactions to the purchase of transportation products and services designed in the form of applications. Osman et al. (2012) suggested that most cellphones today are intended as 'smartphones' because they do not have the power of computing and sophisticated connectivity compared to contemporary cellphones. Along with the fundamental ability of smartphones to make voice, video, SMS and MMS calls, smartphones have been repositioned as "new information media (May and Hearn 2013 in Osman et al., 2012).

Gafni and Geri (2013) suggest that smart phones allow their holders to use most of the services available on the Web, such as e-mail, access to social networks, search, and more (Gerpott, Thomas, & Weichert, 2012). Smartphone owners are increasing, even though most of them don't use many of these advanced functions. In other words, smartphones have expanded the list of information processing functionalities, such as managing personal time schedules, accessing internet content, editing documents, utilizing location awareness functions, and many others. One example is the use of online (online) transportation applications.

This rapidly changing technological development is certainly having an impact on Indonesia (UNDP, 2013). Major changes have occurred, including digital commercialization (internet marketing), namely the relationship of goods and service providers with customers who are supported by digital applications. GO-JEK is a company founded by Nadiem Makarim as a child of the nation who has a desire for change in his country, Nadiem is a graduate of Harvard Business School majoring in Master of Business Administration (Wikipedia, 2019). As a worker in Jakarta, Nadiem gained many experiences in the world of transportation especially in Jakarta with a motorcycle taxi driver which was then used as an idea in the establishment of GO-JEK (Wikipedia, 2019). From the experience he gained, an idea came in the form of innovation, an application that connects consumers and service providers directly (Wikipedia, 2019).

Lionberger and Gwin in the book Mardikanto (2010) say that innovation is not something new, but it is something that is considered to be able to provide renewal to be better in society (Mardikanto, 2010). On October 13, 2010 GO-JEK officially stood with only 20 drivers (Wikipedia, 2019). This establishment is speculation in making an innovation in a developing country. Developing countries need a new innovation, but can not determine whether the innovation is acceptable or not considering the demographics of developing countries whose population dynamics are difficult to analyze with certainty. The innovation that was established was in the form of an online-based transportation application.

Online transportation is an innovation from conventional transportation that is collaborated with application technology on smart phones. This technological innovation in online transportation answers the needs of people who want fast, efficient, and inexpensive transportation compared to conventional transportation. Along with market needs, this online transportation application continues to grow in line with consumer needs, such as shuttle services, product ordering services, shipping goods, etc. The online transportation application is also considered to be easy and friendly to use by its users, according to data from one of the online transportation companies, namely Go-Jek, there are 15 million uses of Go-Jek services which are served by 900,000 by Go-driver partners. Jek (tekno.kompas.com).

The rapid development of online transportation applications in Indonesia does not mean there are no obstacles, but there are also obstacles experienced by online taxi drivers. Online taxis as new and technology-based jobs make online taxi drivers need to adapt to this new technology or new culture. Operations that require these stages require a process to be able to adapt well to the new culture. The Demographic Institute of the University of Indonesia (2017) conducted a survey in 10 cities in Indonesia that are considered as major cities in Indonesia, namely Medan, Palembang, Bandung, Jakarta (Greater Jakarta), Yogyakarta, Semarang, Surabaya, Bali, Balikpapan, and Makassar. The survey involved 7500 respondents to get results that are close to the truth in actual circumstances. The results of the survey concluded that GO-JEK succeeded in reducing unemployment for the people in Indonesia

The success of GO-JEK in reducing unemployment can be seen from the demographics of the driver's partners. (Institute of Demography of the Faculty of Economics and Business, University of Indonesia, 2017) shows the results of a survey of the educational level of GO-JEK partners that 75% are high school graduates, 15% are college graduates, while 10% are uneducated, elementary school graduates, and junior high school graduates. While from the age level, 77% of partners aged 20-39 years 23% aged under 20 years or above 39 years. Of working hour status, 65% of partners work full time and 35% work part time. Then, from 78% of partners have dependents of 2 or more people, 22% have not yet dependents to have 1 dependent The survey results also show that GO-JEK has succeeded in increasing the welfare of the people in Indonesia who are its partners.

The success of GO-JEK does not only affect its partners but also the country. In 2016 and 2017 GO-JEK contributed to the state of 8.2 trillion rupiahs while from partners contributed to the state of 682.5 billion rupiahs per month (Demographic Institute of the Faculty of Economics and Business, University of Indonesia, 2017). With these successes GO-JEK expanded its business to foreign countries such as Vietnam and Thailand (Wikipedia, 2019).

The very rapid development of GO-CAR itself is one of the results of the benefits provided by GO-JEK to partners and consumers, partners get financial compensation or large income and consumers get cheap prices. Financial compensation or a large income is the main attraction for prospective new drivers who want to be a GO-CAR service driver from GO-JEK or become a GO-CAR partner. In the pre-study it was found that not only from individuals, even conventional taxi companies themselves wanted to join. Damar in CNN Indonesia (Thursday, 10/082017) said that conventional taxi companies work together with applicators to support public services to get cheap public transportation services and support the company's existence. We have to admit that online taxi technology erodes conventional taxis, rather than being eroded it is better to choose the online system at Grab. The goal is to save the company and the driver. Said one of the directors of a conventional taxi company in Semarang, on CNN Indonesia (Thursday, 10/082017).

Working together with conventional taxis is a solution to save companies and drivers from the harshness of technology. In the company that will be examined this time, the company is working with the applicator, Go-Jek. Go-Jek issued an application called Driver Go-Car, which is a kind of application to connect from the driver to the consumer with the price set by the applicator. The adoption of an online taxi application into a conventional taxi company is already underway in this study. In the pre-research results, researchers found information that the company did not force the driver to use the application, only changing the manual system for storan and point system for drivers who use the application within the company. Researchers want to know the process of adopting innovation from drivers who usually only use conventional methods, this time they are adapting to a new culture in the form of technology from the Go-Car driver application to pick up passengers.

Adoption is a positive reaction from newly applied innovations. The results of interactions produce reactions, both positive and negative, to improving the quality of life from the application of new technologies that occur verbally or nonverbally (Mardikanto, 2010). A positive reaction to innovation will result in an adoption in the final decision process, in the process of innovation diffusion.

Rogers said that contact can occur spontaneously or unintentionally, or it can also be caused by outside planning. Change agents usually expect their effects to be functional and immediate, although

with results that are not always positive (Littlejohn, Foss and Oetzel, 2017). Rogers as the originator of the theory of innovation diffusion states that the ultimate goal of research is to find solutions to shorten slowness and some innovations have never been successful in its application, but there are also other innovations that spread rapidly (Littlejohn, Foss and Oetzel, 2017). Before the adoption process occurs there will be a process of diffusion of innovation that occurs from contact between opinion leaders (early adopters) and individuals.

(Littlejohn, Foss and Oetzel, 2017) Rogers said there are four key elements in the theory of innovation diffusion that explain how to increase the rate and effectiveness of the spread and ion of an innovation: (1) time; (2) innovation itself; (3) communication channels; and (4) social systems. These elements will be key in the process of the process of innovation diffusion. In the key elements of the communication channel there is a process of interaction and information exchange in reaching an innovation adoption decision, namely through a direct and indirect communication. Hovland said, communication is a process in which an individual or so-called communicator provides stimulants both with verbal and non-verbal language symbols with the aim of rewarding the behavior of other individuals (Suprapto, 2011).

Research on the adoption of this innovation will be conducted in the city of Semarang as the capital of Central Java Province and at the same time the fifth largest metropolitan city in Indonesia which researchers consider to represent cities in Indonesia that can already be served by GO-CAR and become one of the cities where the survey was conducted by Demographic Institute, Faculty of Economics and Business, University of Indonesia. For the company studied, the researchers chose one of the conventional taxi companies in the city of Semarang in accordance with the criteria of the researcher. From the background description, the researchers formulated the problem formulation, namely how is the diffusion process of the Go-Car Driver application innovation in conventional taxi companies and is the new technological innovation in the form of the Go-Car Driver application acceptable to drivers at conventional taxi companies in Semarang City?

# **B.** Research Methods

This type of research is qualitative research. The research method used in this research is descriptive research method. With this descriptive method the researcher hopes to be able to clearly illustrate the results of the study using words understood by the reader. Qualitative research is research that examines the status of a group, individual, an object, a condition, a system, or an event that observations are made in a natural setting with a view to obtaining actual results (Nazir, 2014). In this study the subject used in the study, namely GO-CAR partners from GO-JEK Indonesia who are still active as partners. Cracked data used in this study, which includes: Primary Data, is data obtained directly when researchers are in the field or research location. This can take the form of GO-CAR partners' daily activities while working, and the results of interviews with predetermined informants. Secondary Data, is supporting data from data obtained from research sites or library research data, such as journals, theses, books and documents. Secondary data in this study can also be obtained through the official website of GO-JEK.

Data collection techniques used in research, namely interviews Denzin and Lincoln (2011) suggested that in qualitative research there is a technique called interview technique, which is a conversation, the art of question and answer, and listening. From the results of the interview will produce an understanding that will be used in research. Interview techniques are also influenced by gender, interviewer characteristics, race, class, and ethnicity. In the process, there are two parties who have a central role, the first is the questioner or the so-called interviewer, while the interlocutor is called an interviewee. A good interviewer is able to use the paraphrase technique - restate the answer content in other words, and can do probing - stimulation or encouragement to explore further information.

Therefore, true interviews are designed by the interviewer, the results are influenced by the personal characteristics of the interviewer.

Seeing the purpose of the author's research, in-depth interviews are felt to be the appropriate type of interview. In-depth interview techniques use open-ended questions. The author is also more inclined in the interview intended to obtain information about the personal, stand, and outlook on life. In its implementation, researchers conducted face-to-face interviews with GO-CAR partners from GO-JEK Indonesia who are still active as partners, the authorities of GO-CAR from GO-JEK Indonesia were also targeted by researchers, intended so that relevant parties could provide Supporting answers from key informants. Guba and Lincoln (1981) say that the documentation method is one of the data collection methods used to search historical data and documents are any written or film material, other than records that are not prepared because of a request from an investigator (Moleong, 2013). In this study, researchers used documents as past data from the research object in order to obtain information about the state of the object before the GO-CAR from GO-JEK Indonesia in Semarang City.

Purposive Sampling Techniques that researchers consider appropriate are used in this study. This technique is a technique for selecting informants in accordance with relevant criteria in research problems (Bungin, 2005). In determining the researcher's informants, they have specific criteria or characteristics for the informants of the researchers, namely registered as GO-CAR partners in the city of Semarang and have been partners for more than six months.

In this study, in addition to GO-CAR partners in the city of Semarang, several parties were also selected as informants who were considered to understand and have credible credibility to be used as data sources, namely related parties from the GO-CAR application provider in the city of Semarang. The informant was chosen based on the suitability of the management's role and was considered to be aware of information dissemination activities and innovation adaptation as a new GO-CAR partner. Data were analyzed using several steps according to Miles theory, Huberman and Saldana (2014) are analyzing data in three steps: data condensation (data condensation), presenting data (data display), and drawing conclusions or verification (conclusion drawing and verification). Data condensation refers to the process of selecting, focusing, simplifying, abstracting and transforming data. In more detail, the steps are according to the theory of Miles, Huberman and Salda (2014). From the data obtained, researchers can draw conclusions and verify. Conclusions are drawn by interpreting the data obtained by researchers. The validity technique with the source triangulation technique is the validity technique used in this study. The same strategies and methods are used in collecting data with different sources to determine the degree of trust. This technique can be done by comparing the results of interviews with other sources or can compare the data obtained with documents owned by the source.

# C. Research Results and Discussion

#### Diffusion of Go-Car Driver Application Innovations

Based on the research results of the diffusion process of Go-Car driver innovation applications on conventional taxi drivers, obtained several results that significantly affect the culture that already exists in the company, namely;

- 1. The quality of innovation in the form of the Go-Car Driver Application does not occur modification of innovation or rediscovery in innovation.
- 2. Interpersonal communication channels are more effective with heterophile communication that occurs in conventional taxi drivers in disseminating information
- 3. The role and commitment of the leadership, as well as the role of agents of change in the change in mindset and driver behavior.

- 4. In some informants there was a difference in the concept of innovation sequence, namely the decision to overtake persuasion.
- 5. In the time element the rate of adoption is in accordance with the S curve proposed by Rogers (2003).

NO	Elements of Innovation Diffusion	Input	Description	Implementation
1	Innovation	Go-Car Driver Application	The Go-Car Driver application is an innovation from the head of a conventional taxi company in the city of Semarang as an innovator assisted by several selected drivers who act as Early Adopters	
2	Communication Channels	1. Socialization	To increase company and driver income, socialization is conducted so that all drivers are aware of an innovation that will be provided	<ol> <li>Socialization is only temporary, carried out only at the beginning of an innovation entry plan</li> <li>Innovation socialization is felt still lacking</li> <li>Socialization is merely giving information</li> </ol>
		2. Interpersonal Channels	1. To provide education about innovation and how to use it is done directly by face to face with an Early Adopter to prospective adopters with non-formal communication. Communication that occurs is heterophony communication even though between early adopter and prospective adopter are partners in one process, but heterophily happens is the time difference in adopting, considering that earky adopter is a designated agent	<ol> <li>Interpersonal communication channels carried out at the time after the socialization and after the early adopter appointed by successful innovators in testing the application of innovation</li> <li>Drivers more easily absorb innovation through interpersonal communication in the form of informal when relaxing or gathering.</li> </ol>
3	Time	Innovation Decision Process The Innovation	Step: 1. Knowledge 2. Persuasion 3. Decision 4. Implmentation 5. Confirmation	<ol> <li>The innovation decision process takes time for several informants. However, for informants who act as Early Adopters they go through the stages of persuasion and go directly to the decision stage.</li> <li>Some drivers still want evidence of successful innovations to convince themselves to adopt</li> <li>The driver is easy to learn the application because it is familiar with the application on the smartphone</li> </ol>
		Decision Period	process, namely: early adopters, early majority, late majority, and laggard innovators.	social system in a conventional taxi company
		Adoption rate	Visible results of the relative velocity in the adoption process from time to time produced by S-shaped curves	The curves produced in the adoption rate are in the form of the letter S in accordance with the cores found by Rogers (2003)

4	Social system	1. Social	1. The social structure in the diffusion	1. The social structure in
		Structure	process is seen in the position of the system	conventional taxi companies is
		2. System	members in the company	clearly visible, this makes the
		Norms	2. Norms that apply to conventional taxi	information heard is only information
		3. Role of the	companies are included in modern norms	from a system that has a more
		Leader	3. The role of the leader in the diffusion	superior position in this system.
		4. Change	process is very helpful	2. Conventional taxi drivers are able
		agent	4. The formation of change agents helps	to adopt modern norms, because they
			other drivers in adopting innovations.	are oriented to changing mindsets,
				behavior, technology
				3. The leader consistently provides
				information so that it becomes a
				driver's role model
				4. The change agent formed by the
				leader greatly helps other drivers to
				adopt innovations regarding the Go-
				Car Driver application.

# a) Innovation

The existence of the Go-Car driver application is an innovation for the people in the city of Semarang in the application of internet technology to connect between the driver and consumers or customers. Starting from the difficulty in getting additional income and the difficulty of employment is answered with the Online Driver application from Go-Car. Cinderella Dube Research, Victor Gumbo (2017) about the Diffusion of Innovation and the Technology Adoption Curve: Where Are We? The Zimbabwean Experience concludes that Zimbabwe's online technology is at a stage of their growth which is seen in the model adoption curve and is in the Moore Gorge curve on the technology adoption curve so that research from Dube (2017) is relevant to research conducted by researchers on drivers conventional taxis that must follow the development of the digital era so as not to lag behind the times.

Research from June Lu, James E. Yao and Chun-Sheng Yu (2005) entitled Personal innovativeness, social influences and adoption of wireless Internet services via mobile technology in their research explains that technology acceptance research tends to focus on instrumental beliefs such as the benefits of perception and ease use as an incentive to use innovation according to the results of research that shows the ease of use of applications also affects adopters. The results of the study are consistent with Rogers (2003) 's statement that the diffusion of innovation is a special type of communication relating to the dissemination of messages as new ideas. Communication plays a role in the process in which the actors create and exchange information to achieve mutual understanding.

Dissemination of information on the application of the Go-Car Driver makes the process of diffusion of innovation before finally this innovation can be accepted by conventional taxi drivers in the form of adoption as an additional system to increase income from conventional taxi divers in the city of Semarang. Research from Eun-Ju Lee, Jinkook Lee, David W. Schumann (2002). About The Influence of Communication Source and Mode on Consumer Adoption of Technological Innovations concluded that communication is a critical process in the diffusion stage of technological innovation. The results of this study indicate that communication can be a significant predictor of consumer adoption from technological innovation. In the diffusion of the Go-Car Driver application innovation, the main message delivered to conventional drivers is how this application is very beneficial by means of use that can be taught and not forgetting how to use it wisely to avoid sanctions from the central applicator.

Rogers in Mardikanto (2010) calcifies innovation into 5 (five) characteristics, namely (1) relative advantages, namely the existence of the Go-Car driver application provides many benefits, apart from the economy, there are also benefits of working hours gained, (2) compatibility From the interview results, it

is found that the innovation in the form of Go-Car driver application is in accordance with the needs of the community, especially conventional taxi drivers. Its use has changed the mindset of people from the knowledge they get about the benefits of this innovation, (3) complexity, namely the difficulties that occur are not on the use of the application, but on one's willingness to learn. Overall, the use of this application is easy and the easier the innovation is, the greater the chance for an innovation to be received. (4) it is likely to be tried, that is based on the results of interviews with informants, the researchers conclude that the application of Go-Car vendors on taxi drivers can be tested first by drivers who are trusted to carry out trials before they use it so on or in other words adopt it, (5) it is likely observed, that is Based on the results of the study found many aspects of the benefits of using this application. These aspects include social, cultural and economic relations. Informant 1 saw that the Go-Car application combined with conventional taxis would improve the economic aspects of the driver. Informant 1 said that when there was no vendor application, conventional taxi drivers had difficulty finding passengers. The technological speed of individual online taxis from the application defeats conventional taxi drivers who use the manual method of finding passengers. The advantage can be felt and seen directly by informant 4 who is a conventional taxi driver. With the use of the application in his company causing an increase in the level of income, no longer feel jealous by the presence of online taxis so that they feel more comfortable at work.

#### **b)** Communication Channels

Rogers (2003) said that there are two types of channels used in conveying messages from communicators to the communicant, namely (1) Interpersonal Channels, which through interpersonal communication will form the two individuals concerned to obtain information that is more and directly understood. Because they are partners in one profession, so the language used in the explanation of the communicator to the communicant will be easily understood by the language they use daily in their profession. The results showed that the grouping of information through word of mouth was also effective in implementing innovative Go-Car driver applications, (3) Mass Media Channels, according to Informant 1, it was actually kept secret to avoid business concerns. In this study the communicant has different levels in terms of knowledge and economics.

Research from Dewi Ariningrum Rusmiarti (2015) on the Analysis of the Diffusion of Innovation and Development of Work Culture in Bureaucratic Organizations found that what significantly influenced the internalization of work culture and work culture development at the central BKKBN was the quality and quantity of work culture and work culture development, communication channels non-formal, more trusted, and the role and commitment of leaders, and agents of change in mindset and behavior change. This research is in line with the results of research which is interpersonal communication which is more effective in the diffusion process than mass media channels.

# c) Time

The time element according to Rogers (1995: 20) innovation diffusion process includes 3 things, namely (1) Innovation decision process, (2) Innovativeness, (3) Innovation rate of adaptation. In this research, time period is an innovation decision process used. This process observes when a person first knows to decide to accept or reject the innovation. The indicator that researchers use is the time element of the innovation decision process, which is the decision stage. The results of the above study conclude that there are differences in the time required by the driver to understand the use of the application depends on how mastery of mobile technology itself, or can be interpreted as self competence that affects the time in understanding the application.

Innovation decision process is a positive and negative reaction issued by conventional taxi drivers in the company with the presence of the Go-Car driver application in the company. Seeing the results of the study, all drivers responded positively and liked the information provided by the company. Conventional taxi drivers are aware of the company's Go-Car driver application through the communication channel carried by the communicator. The knowledge phase also includes awareness of innovation in that environment.

Hearing the news about the Go-Car driver application circulating quickly and good understanding, the researchers concluded that conventional taxi drivers in this company passed the stage of knowledge marked by awareness about the existence of applications in the company. Even though beforehand they already knew about the application from the internet, if the application had already worked together with the company, it was done through an internal company socialization. This is what will bring them to the next stage of the process of adopting innovation, namely persuasion.

At the stage of persuasion, members of the social system form favorable or unfavorable attitudes towards innovation. The possibility of the lack of information obtained by the driver makes the formation of attitudes usually begins with the search for more information in a face-to-face situation. The drivers have passed the persuasion stage well, where the indicator in passing the persuasion stage is the willingness to find more information about the application and the formation of attitudes from the existence of the Go-Car driver application. From this it was a time when conventional taxi drivers in the company made a decision about the existence of the Go-Car driver application in their company.

This decision stage includes the results of considerations which are usually followed by experiments that can influence the choice of accepting or rejecting innovation. Drivers use a variety of applications on Playstore such as Google Map, YouTube, WhatApp, Tinder, and others are often done. This made them confident in the use of the Go-Car application and was appointed by the company leadership for the trial.

The first use at the implementation stage led to an assessment leading the adopter to determine whether to continue to use or reject the innovation. Rogers argues that although attitudes toward innovation but the level of uncertainty still exists in individuals when using innovation (Rogers, 1995: 174). The results of this stage will determine whether the adopter will determine to use the Go-Car application or work, as usual using the conventional method, even though at the previous stage the individual has decided to accept the innovation.

In the previous stage, some drivers decided to use the application because they had experienced the benefits themselves. Some previously worked as usual and then used the application, but the decisions made still tended to be based on considerations. Which led to an assessment leading the adopter to determine whether to continue to use or reject the innovation. Rogers argues that although attitudes toward innovation but the level of uncertainty still exists in individuals when using innovation (Rogers, 1995: 174). The results of this stage will determine whether the adopter will determine using the Go-Car application or work as usual using the conventional method, even though in the previous stage the individual has decided to accept the innovation. At this stage, the driver has confidence in the decision to adopt the Go-Car application.

In the previous stage, some drivers decided to use the application because they had experienced the benefits themselves. In contrast to informant 6 who previously worked as usual then used the application, but there were decision drivers who still tended to consider their own considerations.

At the confirmation stage the adopter looks for reinforcement for his innovation decision, but in the process there is no possibility of changing the innovation if the adopter gets conflicting messages. The results of the study, the researchers concluded that conventional taxi drivers adopted the Go-Car driver application offered by the company. Although in the process when they use the application there are constraints and problems caused by their own ability to absorb technology. All of that is reinforced by the economic conditions that cause them to have to use the Go-Car driver application to improve their economy whatever the difficulty. As an amplifier of innovation decision making they get from themselves. They do not involve other parties in convincing their decisions. So the time needed is relatively fast. This is consistent with Rogers's opinion, that decisions taken individually will not encounter serious problems.

Conventional taxi drivers can be concluded within the company that become informants have passed the confirmation stage. Easy-to-use innovations and immediate benefits are one of the reasons why taxi drivers in the company continue to adopt these innovations. The researcher concludes that conventional taxi drivers in this company have adopted the Go-Car driver application in accordance with the stages of Rogers.

Rogers in his book Diffusion of Innovations states that diffusion research prioritizes the occurrence of real behavioral changes that is accepting or rejecting new ideas. To produce real behavior as intended, diffusion stages are needed that affect the adoption of innovation. The results of adoption are effects that occur as a result of the diffusion process.

The importance of the diffusion process is that there is information that will later be accepted by the community. In the future information will be distributed through interpersonal communication channels, groups and mass media, but back again to the community's decision, what kind of audience becomes the communicant or what can influence his decision.

There are two factors that influence the adoption of innovation, namely individual factors and social factors. Individual factors, namely the perception of selection based on the mass media channels used in the delivery of information, this factor sees that individuals consciously look for media that can strengthen their beliefs.

The driver is looking for information about the Go-Car application through Google to get additional information. This additional information strengthens their beliefs and decisions about the many benefits they get from using the application in conventional taxi companies. It also helps increase knowledge, especially their role, namely as early adopters so that what they get can be distributed to other drivers. Of the total two taxi driver informants, only informants who reinforced their belief through the media. This is caused by interpersonal communication more influence than informants get additional information through the media.

The motivational factor of the decision to adopt innovation makes researchers want to know the motives or reasons why adolescents why teens use this innovation. As a result of research in the field, all informants explicitly expressed their motivation due to the economic need to improve the quality of income. Research from Yangil Park and Jengchung V. Chen (2007) entitled Acceptance and adoption of the innovative use of smartphones This study is to investigate human motivations that influence the adoption of decisions for smartphones among doctors and medical nurses. The results of the study indicate that motivation influences the decision to adopt an innovation.

Researchers conclude the motivation of conventional taxi drivers to use the Go-Car Driver application in their work, in terms of the benefits they get according to their adoption decisions, such as increased income, more consumers, reduced working hours, increased knowledge, and increased social life . From there they can deduce what is the reason they adopt the Go-Car application.

The trust factor in confidence that leads to benefits such as what is obtained from the use of something he believes in the form of adoption of the Go-Car Driver application. The average iforman has benefited from the Go-Car Driver application as previously explained. All informants in this study were very confident in adopting the Go-Car Driver application. Here are the benefits they get from using the Go-Car Driver application.

The three factors above have an effect on the ease and speed of the informants, namely conventional taxi drivers accept the existence of the Go-Car Driver application in their company. Individual factors that have been explained have a link that when individuals find out more information in the mass media, especially seeing previous innovations, their thinking becomes open reinforced with the benefits they get after trying and even using, this is the basis or their motivation to be able to continue to use the application the Go-Car dirver so far.

There are 3 (three) other factors that do not influence the decision to use innovation or adoption, namely:

(1) persuasion, (2) Selective Attention, and (3) Selective Retention

In Social Factors, social symptoms of individuals that influence effects according to Whtney and Black are age, sex, place of residence, religion, occupation, and income (Nurudin, 2003: 221). Carolina Lo "pez-Nicola" s, Francisco J. Molina-Castillo and Harry Bouwman (2008) with the research title An assessment of advanced mobile services acceptance: Contributions from TAM and diffusion theory models. Information & Management of the results of his research indicate Our results indicate that social factors have an important influence on people's decisions to adopt. The research shows that the importance of social factors in adoption decisions.

Conventional taxi drivers in this company have adopted the Go-Car driver application. There are two factors that influence the adoption of innovation, namely individual factors and social factors. The Individual Factor based on the mass media channels used in the delivery of information, this factor sees that the individual consciously looks for media that can strengthen his beliefs. Social factors are social symptoms of individuals that affect the effects are age, sex, place of residence, religion, occupation, and income.

From the foregoing, it can be concluded that:

1) innovation diffusion is a special type of communication related to the dissemination of messages as a new idea so that innovation diffusion occurs in conventional taxi drivers using the Go-Car Driver application in Semarang City.

2) conventional taxi drivers within the company have passed the confirmation stage. Easy-to-use innovations and immediate benefits are one reason why online taxi drivers in this company continue to continue to adopt these innovations so that communication plays a role in the process in which the actors create and exchange information to achieve mutual understanding.

3) there are two factors that influence the adoption of innovation, namely individual factors and social factors. The Individual Factor based on the mass media channels used in the delivery of information, this factor sees that the individual consciously looks for media that can strengthen his beliefs. Research by Walfried M. Lassar, Chris Manolis, and Sharon S. Lassar (2005), entitled The Relationship between Consumer Innovativeness, Personal Characteristics and Online Banking Adoption confirms that from the research results there is a positive relationship between innovativeness with the internet so that research results from Walfried M. Lassar, Chris Manolis, and Sharon S. Lassar (2005) relational to this research that reinforces the belief of drivers to keep using innovation is one of them through the internet media. Social factors are social symptoms of individuals that affect the effects are age, sex, place of residence, religion, occupation, and income.

Innovativeness is a relatively early stage for adopting innovations that appear to members of the social system so as to produce a category from the adoption process (Rogers, 2003: 237). Hanafi (1981: 30) defines the social system as a group of different units based on their functions, so as to have a cooperative bond to solve problems, in order to achieve common goals. The results showed that of the six informants all included in the adoption group and grouped into the adopter group as follows. Innovators,

Early Adopters, Early Majority, Late Majority, Laggards (Rogers, 2003: 237). The statement of informant 1 in accordance with the characteristics of innovators according to Rogers is a smart, high economic ability, mobile, and dare to take risks. the characteristics of early adopters are: exemplary, and respected in the social system. Based on the results of the study there are two informants included in the early adopter, namely informant 2 and informant 3. Each informant has the same role in spreading information about the use of the application. Early Majority is an early follower of innovation. Informant 4 and Informant 5 became the first group that had an interest in innovation offered by the opinion leaders, so that it could be said or made as the right hand of the opinion leaders to be a liaison to spread innovation into the social system. The characteristics that appear in the early majority are: having a high interaction and full of consideration in deciding.

Innovation rate of adaptation or the relative speed for members of social systems to adopt innovation (Rogers, 2003: 237). This speed is measured based on the length of time needed by members of the social system to adopt an innovation by members of the social system. The rate of adoption forms an S-shaped curve according to the diffusion process which initially only slightly then becomes large. After more and more adopters, the adoption rate decreases to form an S-shaped curve. The results of the study show that the S curve proposed by Rogers (2003) corresponds to the curve made by the researcher based on the results of the study.

# d) Social System

A social system is defined as a set of interrelated units involved in solving shared problems achieving common goals (Rogers, 2003: 48). Rogers (2003) also said that members or units of social systems can be individuals, informal groups, organizations, and subsystems. In research, researchers get complete information about the social system in this study. Because the structure of the social system also influences diffusion innovation in some way which is the boundary where an innovation diffuses. In this study the social structure is formed based on the results of the study. These results can get clear information between levels in the social structure of research informants. The norm system in this study was originally an issue with a conflict but, in connection with the role of the agent of change and time in the diffusion of the norm can accept the existence of Go-Car Driver Application innovation. The role of agents of change determines decisions in the adoption of innovation. Such a difference occurs from several informants with decisions on individual adoption and decisions on the adoption of authorities. In this study also found several consequences that occur that can be predicted by change agents.

#### D. Conclusions and Suggestions

Based on the results of research and discussion it can be concluded that there is diffusion of innovation in conventional taxi drivers using the Go-Car Driver application in Semarang City and the acceptance of a new culture of innovation in this conventional taxi company. There is a difference in the concept of the innovation adoption decision process from several informants of this research, namely the reversal of the persuasion process with the decision process of several informants due to the role of the authoritarian figure in the adoption decision process. In this study, interpersonal communication channels proved to be more effective than mass media channels in the diffusion process of the Go-Car Driver Application in conventional taxi drivers in the city of Semarang.

The research findings show that there is diffusion of innovation in conventional taxi drivers using the Go-Car Driver application. In this regard communication plays a role as a channel in the diffusion process of innovation in conventional taxi drivers using the Go-Car Driver application. The effective communication channel in the diffusion process in this study is the interpersonal communication channel. From the conclusions the researchers suggest (a) in terms of application use it should be simpler so that it is faster to be adopted, (b) in relation to conventional taxi organizations, it should further improve a more organized adaptation system, and for further research, research should not only be conducted in conventional taxi companies, but in informal (self-formed) Go-Car communities.

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