Communication Technology Backwash toward Interpersonal Communication Behavior

Agustinus Rustanta
College of Communication and Secretary Tarakanita Jakarta, Indonesia
email: agustinusrustanta@yahoo.com

ABSTRACT
The development of information and communication technology gives impact to the users. It gives positive impacts and negative ones as well. There are harmful effects of communication technology toward the change of communication behavior such as the decline of the quality of face to face interpersonal communications, the destruction of family to the loss of power and authority, the increase of crimes among youngsters that will lead them to sexual harassment. The problem of this research is formulated as is there a positive and significant effect between the development of communication technology to the change of communication behavior. The objective of this research is to find out and analyze those effects. Incidental sampling is implemented to collect data for this research. There were 623 valid questionnaires which will be analyzed in this research. These will be presented through descriptive statistic and statistical analysis. This research is a quantitative method research with linear simple regression by means of SPSS 20. The result of the research showed that 29% variance of the change of communication behavior can be explained by the change of score in communication technology variable whereas 71% is caused by other factors. Correlations (R 0.539) with degree of significance 0.000<0.05 became the proof to reject H0. It means that the hypothesis there is an effect between the development of communication technology towards the change of communication behavior cannot be rejected. The findings of this research are the change of communication such as openness, instance, practicality, self-confidence, innovation, inclusion, and technological literacy. On the other hand, there are negative communication behaviors such as extravagance, deficiency of privacy, individualism, procrastination, anxiety, indolence, insensibility, decline of reading habit, and emotional.

Keywords: Communication Technology, Interpersonal Communication Behavior, Backwash

Introduction
The technology of information and communication specifically interpersonal communication technology is growing instantly. One of portable communication technologies is handphone. It is a very practical and functional wireless communication device. Today, it has developed into smart handphone which is familiar with the name of smartphone. It is not only a matter of developing the technology but also the increase of quantity. There are a lot of smartphone brands. It means, consumers have been given a lot of choices depend on the needs, fund, functions, as well as the fanaticism of certain brands. The development of smartphone is unstoppable when Barack Obama, now the President of the United States of America, used one of smartphones. He used Blackberry to develop social networks to help his political campaign in 1997. It was introduced in Indonesia in 2004 by Wimar Witular and Blackberry is still the first choice of smartphones in Indonesia with 33.4% market share. It assumed that three out of ten buyers must buy Blackberry.

The development of smartphone spreads out all over the world. Communication between friends, relatives, and anyone else who lives in distance can be done easily with such a simple device. The invention of smartphone breaks down time and space difference. Everyone can be connected to anyone else in this globe. It seems that everyone in this world is very close one to another. They can interact with one another whenever and wherever.

In the era of smartphone, there are problems which drive this research. First, the decline of face to face interpersonal communication quality and quantity. The advance of technology makes wider gabs between individuals. They prefer communicating on the phone by
means of cell phone and internet to communicating face to face. Meeting or talking between friends, colleagues, fellow workers, families, and neighborhood is now gradually fading. Old traditions such as visiting relatives or friends are fading too. This takes place not only in big cities but also in remote areas. Small talks and visits are replaced by Facebook, Twitter, and other social networks. Face to face communication is replaced by telephone conversation. It is because conversation on the phone, truly, is easier and cheaper compared to talking face to face especially when the speakers live in distance.

Secondly, disintegrated family and love affair is increasing. It is caused by the advance of communication technology. Users can communicate with one another easily without worrying being witnessed by his wife or her husband or someone else. Deterioration marriages happen because of this chance. It is easy for everyone now to get in touch with people and to get new friends. Even, they can reach their old girl or boyfriends by means of Facebook and other social networks. They look happier speaking to other people on Facebook rather than talking face to face.

Thirdly, the advance of communication technology increases crimes. This development triggers kidnapping young girls or disappearing of young women. Almost every day we see on newspaper or on TV that Facebook has just got victims. This crime happens when they meet on social media. Day by day, their relationship is getting more intimate. Communication intensity makes them less control and their curiosity is getting higher. Lack of social control and self-control make them do bad things and lose their dignity and good names.

Fourthly, consumerism. Using advance technology means money. Users should spend more money for telephone bill. Online shopping is also very popular nowadays. Practicality and accessibility are the main reasons for online shopping. It is easier, economical, practical, easier, faster, and cheaper because they don’t have to go to shopping places or shopping malls in heavy traffic. We don’t have to be tired since the goods we want will be delivered soon. It takes one day downtown or two days out of the city. This behavior opens new opportunities for doing business. Online shopping offers many kinds of goods and services. Term of payment is also easy. It is cash on delivery or they can pay by credit card or by bank transfer. This new behavior is supported by a research done by Andrew Stephen, a professor from Pittsburgh University and Keith Wilcox a professor from Columbia University. It was reported that people tend to be difficult to manage their money so that they tend to be wasteful.

Those problems are very potential to be analyzed. This research is done to see the impact of communication technology smartphone towards the change of interpersonal communication behavior. We hope that this research will be useful to give a description that communication technology smartphone gives impact for users. In the end of the research, it will be reported the research findings.

Research method
This research is a quantitative research and questionnaire is applied to collect data. The samples are determined by purposive incidental sampling method. The respondents are higher school students and employees in Jakarta. The questionnaire is distributed to anybody personally or via email. There are 623 respondents fill out the questioners. Then, the data are analyzed by using SPSS 20 for Windows to see the effect of the use of smartphone to the change of interpersonal communication behavior. The hypothesis of the research is: ‘there is a positive and significant effect of the development of ICT towards the change of communication behavior’.

Communication and life
As social creatures, we cannot avoid communicating with other human beings. People always involve in any communication activities started from early in the morning to the time to sleep, from born to the time to die. Early in the morning a father or a mother will awake his/her son or daughter, ask him/her to take a bath, to have breakfast, say goodbye when he/she goes to school. A driver is instructed to check the car to make sure that it is just find. Then, he will receive an instruction to take the employer to the office. Arriving in the office, he/she will read a report from his/her employees and then he/she will meet any kinds of clients or guests. In short,
people will always deal with many kinds of communication activities. They communicate to manage the environment or to fulfill their needs or objectives. Communication is used to develop and maintain harmony in life (Suranto, 2011:20).

Interpersonal communication according to Kathleen S Verderber in Budyatna (2011:14) explained that interpersonal communication is seen as a process of communication which depends on meaning it develops to manage the environment. Additionally, interpersonal communication does not always take place because of certain objectives. People communicate something by coincidence and what they are doing is giving symbol to others. Have you ever met a person whose body is full of tattoo? What are you doing? You might, without any instruction, keep away from him. You will think that he is not a nice guy.

The function of interpersonal communication is to control the environment to get certain rewards; they are pysical, economical, or social rewards (Budyatna, 2011:27. How can it happen? It is illustrated on a communication between a boss and his subordinates. When the employees are diligent, productive, and dicipline, actually they are communicating themselves to the boss. They want to know that they are commited good employees. The boss might increase their salary or he might give them relevant rewards. The boss might also receive rewards from what he is doing, i.e. the employees will be satisfied. As a result, both the boss and the subordinates will be motivated to improve their working performance. They will be motivated to do better. This idea is supported by Suranto (2011:79) that the function of interpersonal communication is to construct and to develop good relationship among individuals, to convey message, to change the behaviour, to solve problems, and to develop self image.

Communication and means of Communication development

Interpersonal communication will be effective if it happens in dialogues. The communicator and interlocuter decode and incode messages (Soyomukti, 2010:143). Due to the fact that two communicators are close one to another, they can see their facial expression, eye contact, and body language. They, therefore, may set up empathy. According to Suranto (2011:15), the characteristic of interpersonal communication is that the communicators are very close, physically and psychologically. It is because communication should take place face to face.

Is face to face communication still relevant? Today, everyone has cell phone, even school children. It did not happen ten years ago where communication technology was not handphone. At least they had to go to public phone to communicate on the phone or they used home phone to communicate. This situation forced anyone to meet in order to share messages.

Do you happen to observe a couple of young girl and boy eating in a restaurant? First, they order some food to eat. While waiting for the food served, they don’t talk to each other. They tend to see his and her handphone. They are both very active operating their handphone. When the order is ready, they eat together and they are sometimes still busy with their handphone. To whom do they communicate? Do they need a handphone to communicate with someone in front of her/him? They might have communicated with someone else somewhere.

Have you ever had an experience of talking to your husband or wife or your child but he/she is busy receiving phone calls? Extremely he/she has to leave you for a while to concentrate talking with someone on the phone. He/she doesn’t want you to listen their conversation. You are not as conspicuous as the one on the phone. What do you do if you are teaching but your students are very busy playing their handphones? They don’t listen to you. What are you doing seeing such an experience? It seems that there is a change of communication behavior. Technology does make these changes.

Before handphone appeared, communication was done by writing. Letter was a popular means of communication. Besides, people employed season greeting cards. They wrote a note on Christmas, Lebaran, and other memorable events. But the world is changing. Letter is replaced by short messages which are sent via hand phone. Sending messages via hand phone becomes very fashionable because the message can be sent easily, cheaply, quickly, simply, and accurately. The message can be received quickly and can be replied as
Almost every information can be reached by a handphone or smartphone. Why is it called smartphone? It is a handphone but it has more facilities. It is smart since it can be used to access information, news, entertainment, and so on. Internet connection is an advantage. Not only gives information but this device will give entertainment such as games, video, music, TV, radio. As such, communication is very affordable, easy, and fast. The message can be distributed quickly.

Effectiveness of interpersonal communication

Interpersonal communication is a process of delivering ideas or information from one person to another by means of certain channel (in general it is dyadic) so that the counterpart will understand what is said (Suranto, 2011:71). Interpersonal communication gives huge impact since it is almost no distance (face to face) and they do not use any device. The sense of communication will be divergent if they implement communication device. Effectiveness of communication does not take place by technology they use but it depends on the message they deliver because face to face communication has emotional relationship. Communication quality depends on two major factors, personal centered perspective and situation centered perspective. The first refers to the basic characteristic of human being that is biological creature. The biological factor refers to the nature of human being which is the same as animals. Human beings likewise feel hungry, thirsty, and sometimes furious. In such situations, he cannot focus and concentrate on the interlocutor. Psychological factor refers to human being who has psychological power such as cognitive, affective, and conative (psycmotoric).

Interpersonal communication is effective if (Suranto, 2011:77) communication has given three criteria (1) the message can be received and understood by the receiver as what is expected to be by the communicator, (2) message is followed up with volunteer relevant action, (3) communication develops the quality of relationship among persons. The three characteristics will support harmony relationship (Soyomukti, 2010:155). This can happen if the interpersonal relationship has equality, balance, trust, and clear objective and common value from both sides. The second part is situational centered perspective. Communication is seen from situational perspective. It is influenced by the characteristic of media and the characteristic of social culture.

Effectiveness of interpersonal communication can be seen from the perspective of five principles of communication effectiveness (Suranto, 2011:80); respect, empathy, audible, clarity, and humble. Firstly, it is respect. Reward or respect is awarding every receiver of the message someone delivers. As communicators, we have to develop respect among communicators and to respect them. Adjudication can be given such as good eye contact, smile, attention, response, and so on. What do you do when you are talking to someone while she/he does not look at your eyes? He/she looks at something or someone else? You might think that she/he is not interested in talking with us or he/she neglects us. Every communicator should give reward to the counterpart to avoid offending other people.

Second, empathy. Empathy is the ability to put ourselves on someone’s shoes. It is the ability to put ourselves on someone’s condition. Empathy communication is done by understanding and listening someone else. The communicators should develop openness and trust in order to be able to cooperate or to keep our synergy to others. Empathy will develop our capability to deliver messages in such a way so that the receiver will easily receive the messages without psychological constrain and rejection from the receiver. When developing a conversation, every communicator should set up a condition in which both sides show interest of willingness to listen to one another. In some cases, a communicator tends to dominate the others.

Third is audible. Audible means can be listened and comprehended easily. Empathy means we have to listen first and receive the feedback whereas audible means that the message we deliver can be encoded by the receiver. To do so, we have to see the route of utterance of the other communicator. The bad thing is that we are too busy thinking of what we are going to say instead of listening to what he/she is saying to us.

Fourth is clarity. It is not only a matter of understanding messages but rather the clarity of the message itself to avoid misunderstanding or misinterpretation. Clarity means also
openness or transparence. Developing transparence and openness should be employed in every interpersonal communication. This will effect on personal trust of the receiver.

Fifth is humble. Humble is still related to the first principle. It is about respecting others. When communication refers to the five principles, everyone can be an extraordinary communicator. Interpersonal communication is not a debate so that we need to interrupt. Interpersonal communication is a non-formal setting so that communicators need relax situation, no pressing or dominating upon others. Interruption might create miserable moment. Without attention to the other communicator, it will result on one way and arrogant conversation.

Ethic and communication etiquette

We are so familiar with ethic. A son or a daughter does not have ethic when he does not respect his parents. The word ‘ethic’ is also common in business. Ethic is sometimes related to code of conduct for doctors, journalist, teachers, and mention some. In some universities, ethic becomes a subject; business ethic, and professional ethic. Ethic and etiquette mix one to another. Bertens (2011:6) said that there are three meanings of ethic. Ethic is used for calling values and norms for a group of people or society. People see ethic as a set of principles people hold and believe. Ethic is a system. Yosephus (2010:33) in his book titled ‘Business Ethic’ said that ethic directs people to a philosophy why they are alive and why they should live in harmony and should live side by side with other people. Ethic as value system should be held by us whenever and wherever and ethic is seen as science about what is good and what is bad as well.

Ethic is different from etiquette. Ethic is morality whereas etiquette is why to behave in such a way that we are accepted in the society; which is polite and which one is not polite, which one is allowed to do which one is prohibited. Etiquette will work when there is human being in a certain situation or a particular culture. For example, we are not allowed to eat while talking in Central Java. He/she has to use “kromo inggil” to speak to older people. In a company, someone gets hold of etiquette when she/he is discipline, firm, neat in dressing, is willing to work hard, is willing to speak politely to anyone around her/him. She/he smiles to anyone to indicate that she/he is so friendly. She/he can be more than just polite.

What do you think about corruptors, mafia, and other public figures who are trapped in dirty play? They are neatly dressing. They are polite to anybody. They are so friendly. This kind of person occupies ethic but she/he does not own etiquette in life. When doing business, for example, he/she is not fair. She/he likes manipulating financial reports, he/she corrupts the company money, nepotism, etc. It is easy to tell a lie before the court. When Angelina Sondakh responded the question before the court about her Blackberry, “Do you use blackberry in 2010”? She said ‘no sir’. “I didn’t have any blackberry at that time”. Is it true? She said, “yes sir”. Her behavior does not show etiquette though she holds ethic very much. Breaking this rule does not make the people immoral. Breaking the rule is a matter of ethic. Ethic is the effort of human being in order to live in harmony in the society.

When is communication effective?

The success of interpersonal communication depends on how far the participants involve in the conversation. There are three important factors; respect, totality, priority. Communicator should respect the other communicator as each communicator is important. The communicator should give reward to the communicant and so does the communicant. Both parties should show the willingness to get involved in the communication. The cost they give should be in balance with the reward both sides will receive. Reward is not financial sense but it can be just attention, smile, response, feedback, laugh, and so on. Can you imagine when a father is talking to his son but his son does not pay attention to him? He might be angry because there is no attention, no reward. What will you do when you are talking to your brother but there is not response, no eye contact, no attention? What are you doing when you are teaching in the class while the students are very noisy or they just chat to other students? I think you might feel upset. When there is no reward, the communication will not take place successfully. Secondly, it is totality. Two speakers on the interpersonal communication are
equal. They are supposed to be active in sending message through eye contact, body language or facial expression. Both parties are willing to exchange messages to get meaning. Bad eye contact, body language, facial expression or even good response will create unhappy moment. He/she might think that he/she is not interested in the topic or the person. A teacher will be very enthusiastic when the students are very active asking and responding or giving opinion. The teacher will be very angry or very disappointed when the students are not totally in the class, physically, emotionally, and psychologically.

Thirdly, it is priority. In some cases we have many things to do. They are about the deadline. You have to meet clients from overseas. At the same time you have to interview a new employee. We can’t of course do two different things at the same time. The ability to choose will be very important. The interview should be done first since it is scheduled first. Devito (2011:292) said that developing a good relationship needs to consider two things. First, self confident or feeling good. Communicator will feel happy if he is with someone who is happy, too. When both parties are in a good condition, they might set up a conducive communication. Second, immediacy. Immediacy refers to togetherness between the communicator and the communicant. Attention, willingness to be a good listener, and willingness to be involved in communication will support good interpersonal communication. Besides, good eye contact and body language will lead to a successful interpersonal communication. When both parties give and take reward, they will be happy.

Communication behavior

There are many kinds of communication behavior we find every time. One day, we see our friend keeps silent. We know that silent is communication means many things. Silent is meaningful. As friends, we will questions ourselves. What’s going on with her? The change of behavior becomes a problem because it gives effect to the others. What do we do in such a situation? We might try to find information about her or we will try to guess. We will think that she might be sick? She might have serious problems? The information we have just collected is used to see her behavior is called effect and perception as well. Psychological condition will effect on this cause and effect perception. An individual will give meaning of what she/he sees. Heider called it as attribution style. Any condition will cause interpretation depend on attribution style. For example, when someone has positive attitude and optimism towards working performance, for example, he/she will work as good as possible to reach the company objective. According to Jallaludin (2009:20), human behavior is a result of study to the environment. Behavior is a result of experience and it is driven by the needs to make more enjoyable life and to lessen the burden of life. It indicates that human being is easy to change and is easy to be changed by the environment. Aside from the environment, behavioral change is caused by personal driven such as the needs to persuade. He/she has the ability and wants, efforts, feeling of liking something, task he/she has to complete, and because he/she is introduced to do something.

Edward E Sampson in Syam (2011:42) said that communication behavior is caused by personal factors. He said that personal factors such as motive, instinct, personality, and cognitive system are more dominant than environmental factors. Besides, behavior is determined by socio-genetic factor such as the needs to explore new experience, needs to get responses, self-esteem, security, self-identity, and needs to develop his quality of life. Communication behavior can also be seen from the point of view of Social Exchange Theory by John Thibaut and Harold Kelley. It is explained that relationship between individuals is seen from economy context. This kind of relationship is seen as economical principle. Individuals develop relationship based on reward and cost. Communication takes place because individuals are giving and taking something. The reward and cost must be in balance. When the reward is smaller than the cost, communication might be inefficient. When the reward is more than the cost, communication might be good. The relationship might last longer and individuals will try to keep the relationship.

Reward and cost in communication is different from that in economy. Reward in communication can be a smile, response, eye contact, etc. Cost can be bad attitude, no eye contact, no interest, no attention, etc. Look at this example. When a teacher is going to teach, he should make any cost. He has the willingness to share knowledge with students. He has to
prepare the lesson before class. He has to spend an hour or so to get to school. He has to go to school by public transportation or private transportation. It means he has to give cost such as power, time, etc. What should a teacher receive as reward? He hopes the students pay attention to his teaching. They listen to him. They give positive attitude. They get good scores. They pass the test. He might receive reward from his colleague such as greeting, smile, care, attention, spirit, etc. Reward is not always financial one. The non-financial reward will be more precious than money. Inner satisfaction will be more meaningful than just physical satisfaction.

Social exchange theory can be explained by interpersonal deception theory by David Buller and Judee Burgoon. Cost in communication is not always good job and good appreciation. Cost can be negative effort such as deception, since deception is not always bad. Deception can safe life. It can safe relationship. It can safe people from robbery or other crimes. When you are at home alone, your parents are out of town, and you receive a call from unknown caller asking your parents, you might not tell the truth. You might tell a lie to the caller. You might say that your father has just gone out for a moment. You might not tell him that you are alone at home. You might not say that you parents are out of town because it will be dangerous for you.

This interpersonal deception supports the social exchange theory where communicator should do ‘cost’ to develop a relationship. It is explained that interpersonal deception is a communication behavior shown from one person to another. Deception is purposive information manipulation, behavior, and personal image in order to have wrong perception (Morissan, 2010:143). This behavior makes information untrue, incomplete, and vague. Deceptive person will manipulate message as if the message is true and valid for certain purposes.

The following is the reason why deception is acceptable in communication. Individuals tend to tell a lie because they don’t want to be in a conflict. Conflict means an action of against something, misconception misperception, dispute, etc. For example, a student who is late because he woke up late he will find any idea in such a way that his idea seems reasonable and he is allowed to come in the class. The second reason is selecting a lot of incoming information. It is too difficult to select information; which one is true and which one is not true. To make it fast, individuals tend to deceive someone else. Third, deception is done to avoid offending other person. When your friend is asking your opinion about her new dress “Am I beautiful with this shirt?” you will say “OK” though you know that she looks a bit ugly with the new shirt. Fourth, people deceive someone else to show his authority or power. People are interested to put one or more academic title to show that he is an intellectual person though he might not have the right to hold it. The last reason, people deceive someone else to cut or to keep a relationship. To break a relationship between a husband and wife, both sides will fight to that she/she is true. He/she will create a story as if his wife or her husband is doing something wrong.

Communication technology

In this part, it will be discussed communication technology and its effect to the communication behavior. The word ‘technology’ is from ‘techne’ means the way and ‘logos’ means knowledge. In short, it is about the way of knowledge. It is the way how to do something to reach human goals by means of tools and knowledge. Indonesian Dictionary (2011:1422) defined technology as 1) scientific method of achieving practical objectives in applied science, 2) a tool to provide goods needed for human lives. In brief, technology means tools used by human being to reach the objectives. Technology is a process of a person, or a group of persons, or persons in organization who are connected one to another. The need of technology in communication is very high since technology can help develop a good relationship between individuals. The advance of technology makes communication easier, more flexible, and more affordable. As a result, all elements; the old, the young, students, employees either in big cities or in the suburbs are able to enjoy better communication technology.

Here you are the development of information and communication technology. Men firstly communicate with others by writing. It was followed by the finding of printing machine by Guttenberg. This machine helps human beings to communicate. Then, men found a technology which helped them communicate much easier such as telegram, radio transmission, and the
most sophisticated technology is computer. Men can communicate faster. There is no space and time constrain anymore. Technology makes everyone to communicate with those who live in distance.

Communication technology is developing. First, it is called telephone. It is a means of communication to deliver voice. Communication on the phone is just the same as that in real conversation. This device is generally placed at home or in offices. Therefore, it is famous as home phone. Second, the next technology is handphone (HP). It is much more flexible since this device is much smaller and it can be put in the pocket and the user can bring it anywhere. Communication is getting easier by using hand phone. It is not only for conversation but it is also able to send short messages (sms). Its feature is more complex and flexible. The price is also getting more reasonable. The third, it is smartphone. Smartphone is the high technology of hand phone. The connection to internet makes this device more sophisticated for communication. It is not only for talking and sending messages but the user can also send photographs, pictures, even video via internet. Communication is various, too; chatting, email, face book, etc.

Smartphone is different from the conventional hand phone. A smartphone is a multimedia hand phone as a whole set of devices and technologies which can be operated anywhere and anytime since it is small, as small as conventional hand phone and it can be kept in a pocket. People use it for taking pictures and share them to others. They can also deliver text messages, audio files, short videos, and they can also watch TV. This mobile multimedia can be used for self-entertainment and to entertain other people. The other difference is the connection to internet. Communication is not only sending message but also sending email, photographs, pictures, videos, etc. This device changes the communication behavior. They know what chatting is, they know facebook, twitter, etc. They are familiar with mobblog. This new device drives users to access information and to develop social network via internet (Ilpo, 2008:246). Then, there is citizen journalism. The ability to take pictures and video makes user share information completed with pictures and video via smartphone. They can set up news for local and international consumption via mobile multimedia. Because of these features, Ilpo Koskinen (2008:242) said that smart phone can develop the intimacy and sensation between communicators.

The development of technology is high-priority in this modern world. Every innovation is invented to give greatest benefits for human being. Technology should be able to support human beings to communicate perfectly. Now people have experienced to get the benefits of the advanced of communication technology though they have to know that the advanced of technology will also present harmful effect in terms of economy, communication, education, politic, etc. The destructive effect of technology includes the decline of the quality of life itself. Technology does not guarantee that confidential message can be delivered perfectly. So far, the advance of technology is developing hand in hand with the development of damaging technologies.

Research Analysis and Findings

In this part, it will be presented the result of the research to find out the effect of the development of communication and information technology to the change of communication behavior of interpersonal communication.

Descriptive statistic

Table 1. The distribution of respondents

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee</td>
<td>148</td>
<td>23.8</td>
</tr>
<tr>
<td>Student</td>
<td>475</td>
<td>76.2</td>
</tr>
<tr>
<td>Total</td>
<td>623</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 1 indicates that there 623 respondents who are successfully involved in this research. The respondents are divided into two categories; employee 23.8% and students 76.2%. Looking at the frequency, there are 148 employees and 475 students.

The brand of smartphone

<table>
<thead>
<tr>
<th>Brands</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackberry</td>
<td>386</td>
<td>62</td>
</tr>
<tr>
<td>Samsung</td>
<td>115</td>
<td>18.5</td>
</tr>
<tr>
<td>Apple</td>
<td>62</td>
<td>10</td>
</tr>
<tr>
<td>Nokia</td>
<td>21</td>
<td>3.4</td>
</tr>
<tr>
<td>Sony</td>
<td>20</td>
<td>3.2</td>
</tr>
<tr>
<td>Smartfren</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td>Motorola</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>HTC</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Not included</td>
<td>12</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>623</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2. The brand or smartphone

Table 2. indicates that respondents prefer to have Blackberry than other brands of smartphone. The 62% are users of blackberry. The second largest is Samsung with 115 user or 18.5%, 10% users prefer to use Apple brand, 3.4% Nokia, 3.2% are loyal to Sony, 0.3% use Smartfren, 0.2% prefer Motorola and HTC and 1.9% prefer to use other brands.

Table 3. The money spent a month for smartphone

<table>
<thead>
<tr>
<th>Amount</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ Rp100.000</td>
<td>292</td>
<td>46.9</td>
</tr>
<tr>
<td>Rp100.000 – Rp200.000</td>
<td>273</td>
<td>43.8</td>
</tr>
<tr>
<td>Rp200.000 – Rp300.000</td>
<td>35</td>
<td>5.6</td>
</tr>
<tr>
<td>≥ Rp300.000</td>
<td>23</td>
<td>3.7</td>
</tr>
<tr>
<td>Total</td>
<td>623</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3 is the degree of spending money for hand phone bill monthly. Users do not allocate much money for their communication facilities. There are only 46.9% users expending more or less Rp100.000 and 43.8% users give between Rp100.000 to Rp200.000 per month. Those who confer more than Rp300.000 is just 3.7% and users pay down between Rp200.000 to Rp300.000 are only 5.6%.

It is clearly seen that practicality and life style are small in portion. They are less than 40% among other dimensions (features, internet connection, practicality, function, life style, needs, and culture). Only 37.9% respondents agree that the motivation to use smartphone is their participation in some groups such as the one who is facilitated by yahoo groups. Some of them are indeed active in yahoo groups such as mailing list, any online forums, or blogs. The
second dimension is life style. It seems that the motivation of using smartphone is not merely life style. It only indicates life identity. It is only 26.6% respondents are motivated to have and to use smartphone to boost up life style.

The survey showed that the motivation to have smartphone is because of its features. Smartphone has different features from other conventional communication systems. It is all-in-one communication device. It is one for many kinds of usage as it is equipped with music, video, camera, game, internet, and data storage. Users of the prior technology have to possess many devices for certain activities. They have to utilize media player to listen to music. They have to buy CD/VCD/DVD player to enjoy videos. They have to make use of camera to take pictures. They have to bring to bear upon small device to play games and buy a storage device to save data. It is also difficult to connect to internet without having personal computer (PC) or laptop equipped with modem. Now, it is only one device and the users should only have to buy one device that is smartphone which is so small, simple, and flexible. 95% respondents agree that they are interested in smartphone because of the features.

The connection to internet becomes an interesting feature. 95.3% respondents are happy because of internet connection via their handphones. Users not only send short messages but they can develop communication in some ways. They can deliver text messages, pictures, photographs, or video because this device is equipped with a camera which can record any kinds of event either audio or visual. Due to internet connection, users are able to develop any kinds of on line communication such as chatting and establishing social network namely facebook, twitter and so on. New communication behavior is changing. Downloading and uploading any documents are very popular. By using smartphone, they are able to share any video or audio files quickly.

Respondents are happy to buy smartphone because it gives them more advantages. Users enjoy free facility to send messages. Blackberry has Blackberry Messengers (BBM) and Whatsapp is famous for android users. They don’t have to spend more money to send text messages. Lives are getting more vivid and colorful. This facility persuades users to produce more and more text messages and develop more and more friends with the same smartphone operating system. This free of charge facility cannot be done by using conventional hand phone. This boredom of out of date technology makes them so enthusiastic to move to the high technology hand phone.

Social networks such as facebook and twitter accelerate the change of communication behavior. Users are able to contact others anywhere and anytime. They are able to chat and share and talk freely without time and space constrains. Furthermore, the communication behavior now comes to school, meeting room, family, business meeting and anywhere else. Teachers are busy teaching while the students are eager to communicate with others out there. Meeting participants are difficult to concentrate on the meeting. The parliaments are caught by journalists camera when they are active accessing something via their hand phones. This new behavior is supported by 62% respondents. They said that they prefer being active looking at the hand phone to listening to the teacher, chair-person in a meeting, or other formal events. It seems there is nothing more important than the activities via hand phone.

Surfing through internet is very popular nowadays. 80.9% respondents agree that the ownership of smartphone is because of its ability to access internet. The smartphone users can do many activities via internet. They are connected to their colleagues, old friends, and new acquaintances. They are able to search information, news, events, entertainment, schedules, weather report, and many more. They may upload and download information quickly, and they might share files or documents. They are conjoined to social networks since 47.7% respondents have facebook account. For business men, getting connected to internet will help them do office work. They can still contact their clients or business partners. They might do business on line via email. For those who are not really busy, internet connection is an advantage. They can just see status of others through facebook. They can also enjoy music or even video as smartphone provides users entertainment.

Searching through Google search engine is also influential especially for people who want to know the world. 93.3% respondents said that they are happy connected to internet because everything is on their hands. Teachers may use this facility to empower their teaching activities. Students prefer to search information via internet. They do the homework via internet.
Online shopping is another trend today. 45.1% respondents agree to online shopping. When everything is on the hand, it becomes new opportunities for those who are smart instinctively. Goods or services can be marketed online. Buyers and sellers might not meet each other. Sellers do not need a mall or shopping places to display things. Buyers do not need to go to shopping malls to buy things. This online shopping will give advantageous for buyers and sellers. The sellers do not need to spend money to rent a place and hire shop attendants. The buyers do not need to conquer the heavy traffic to go to malls or shopping places. It is also more efficient of money and time and it’s practical.

**Analysis**

**Table 4. Correlation Table**

<table>
<thead>
<tr>
<th></th>
<th>Technology</th>
<th>Communication behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Communication Behavior</td>
<td>Sig (2-tailed)</td>
<td>0.539**</td>
</tr>
<tr>
<td>N</td>
<td>623</td>
<td>623</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.539**</td>
<td>1</td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).**

Table 4 is table for correlation between two variables; Information and Communication Technology and Communication behavior. The value of correlation 0.539 with degree of significance 0.000<0.05 indicates that there is a positive and significant relationship between the two variables. The Value 0.539 refers to moderate degree of effect.

**Table 5. Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>R Adjusted R Square</th>
<th>Std.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.539</td>
<td>.290</td>
<td>.289</td>
<td>5.607</td>
</tr>
</tbody>
</table>

Predictors: Constant, technology
Table 5 Model Summary shows that R (correlation is 0.539) and R square (R²) is 0.290 or 29% of variance of communication behavior can be explained by the change of ITC variable. The rest is influenced by other factors. It means that the development of information and communication technology especially smartphone technology, indeed gives backwash on the change of communication behaviour.

**Table 6. ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of</th>
<th>df</th>
<th>Mean</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repression</td>
<td>7974.657</td>
<td>1</td>
<td>7974.657</td>
<td>253.661</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Predictor: technology
Total 27497.785 622
Dependent variable: communication behavior

Table 6 is ANOVA table. It is an analysis result. To accept or to reject the H0 hypothesis, it is used F test. The hypothesis is that there is a positive and significant relationship between ICT and communication behavior. The criterion to reject H0 is that the degree of significance is less
than 0.05. The p-value for F is 253.661 with degree of significance 0.05 and less than 0.05 became the proof to reject H0. It means that there a positive and significance consequences between ICT and communication behavior.

Table 7. Coefficients

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>10.717</td>
<td>2.054</td>
<td>5.217</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>0.435</td>
<td>0.027</td>
<td>0.539</td>
<td>15.927</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 7 shows coefficients. T test is used to see if there is a positive and significant aftereffect between the development of communication technology and interpersonal communication behavior. The result is that t=15.927 with degree of significance n-2=623-2 = 621 and P-value = 0.000. It is less than 0.05 (0.000<0.05). It proofs than there is no reason to accept H0. It means that the development of communication technology gives a positive and significant effect towards interpersonal communication behavior. Yi=b0+b1X1. Then, it becomes Y=10.717 + 0.435 X1. The value of Y will change if the value of xi is modified.

Findings

The development of communication technology of smartphone gives positive and negative backwash to the communication behavior. The transformation of behavior is not limited on non-verbal but also verbal behavior (Budyatna, 2011:119). Here are the behavior changes:

Positive findings:

Openness. The advance of communication technology smartphone changes the behavior of users. They are more open in communication. They can communicate to family, society, and to anybody in this world without being worried of different in nature and culture. They voluntarily open themselves. They like sharing or telling themselves via social media. They attach photographs, short videos on their facebook or other social media. They like updating status when they experience new things in the day. They use social media to communicate themselves to others they know much or don’t know. Behavior of openness can be seen from the willingness to communicate with any kinds of people with different ethnic groups, races, religions and even nationalities

Instant. Communication technology changes users in dealing with information. Smartphone helps users to receive latest information about the world faster and more accurate. They do not need to watch TV or to access information via internet using personal computer at home or in the office. People may find any information to fulfill the needs of information as fast as possible. It is not only a matter of receiving information but people are also able to share or transfer messages quickly and cheaply. They can take pictures or videos by using handphone and share them to others by using hand phone, too. Furthermore, text messages, pictures, photographs, videos, and audios can be spread out as fast as possible by means of smartphone since it is connected to internet. It means that information flow is getting easier and faster.

Practical. Smartphone changes impractical life into very practical one. The device makes something simpler. The device can make most of business activities or private activities faster, easier and more accurate. The users can also make it for business transaction since there is SMS banking or electronic banking. Any payment can be done by mobile phone or electronic banking. Phone bill, electricity bill, insurance, online shopping, credit card bill, prepaid TV can be paid by electronic banking. It is because any transaction and promotion can be done 24 hours. Furthermore, people prefer working at home to going to the office to work. By using Blackberry or i-phone or android operating system, people can enjoy a lot of facilities. Moreover, this small device replaces many communication devices. It replaces camera, handycam, music player, PC or laptop. Everything is easy with one electronic device.
Self-confidence. The advance of communication technology raises self-confidence. Users are eager to show off themselves to public. The change of this behavior happens because they can publish themselves in any social media. The more social network they join, the more friends they will have. The more they have friends, they will be very confident. They can be contacted anytime they want. Togetherness in any groups makes them feel free.

Innovation. Communication technology changes users' behavior to look for new innovations and new strategies to learn. Communication technology facilitates teachers to develop teaching aids. Teaching is not boring. It is full of innovation and creativity. The teacher can combine teaching aids such as words, pictures, and audio visual. Teaching is interesting so that students are easy learning new things presented by their teachers. It can also help students to do their studies such as doing their homework or doing other school tasks. Learning is just a matter of pushing keypad because anything they need is provided in internet. Now, students may not buy books. There are electronic books. This phenomenon triggers another behavior. They do not like reading books but they tend to read electronic books by using electronic readers.

Inclusion. According to William Schutz (1995:67), there is a need of inclusion; needs receive and to be received, want and to be wanted, need to be part of organization or part of human relations. The ownership of smartphone with its facilities make people part of other people. Technology drives them to join any social groups. They may have groups of people with the same hobbies, habits, life style, and so on. Their existence and acceptance make them feel safe.

Technological literacy. Since technology makes better quality of life and makes lives easier, users might depend on it. They will be committed be loyal to technology. When there is a new device, they fight to get it and leave the old one. As a result, they will be the victim of technology itself. They will spend more money for the needs of technology.

**Negative findings**

First of all, extravagant. Consumers today are facilitated by technology. Credit card facilitates them to buy something when they do not have money in cash. They can pay the goods or services by installment monthly. Furthermore, they do not need to go to shopping places. They do not need to waste time to drive in a heavy traffic. They can buy many things online. They just open internet by using their hand phone and type the things they want to buy. Just in a few second, the smartphone will show them many choices. They can choose the goods or services they want to buy. The payment can be done by credit card. If they have money in cash, they can pay on delivery. It is very simple and easy. It is also very economical. This behavior stimulates them to be impulsive buyers.

Secondly, unfavorable attitude. By using communication technology, users may have any information quickly and easily. They can communicate with anyone anytime and anywhere. They have freedom to develop friendship with anyone. As a result, some of them break the freedom. They are out of control. Some girls, recently, were found lost. They were reported that they left the house and have been disappeared together with their new boy-friends. After several days they were back and witnessed that they were kidnapped by a man they knew from facebook. Some of them had done sexual intercourse with someone they haven't really known well. Some of them have got sexual harassment. This situation has given them traumatism and has blackened their future. It is because they are not wise enough using communication technology. Aside from that, users are free to access pornographic websites. They are also free to upload pornographic video or photos easily. This new behavior is due to the fact that users are not able to use technology for positive purposes.

Thirdly, deficiency of privacy. Social networks such as facebook and twitter give negative and positive impact as well. These social networks may link one person to people around the world. Users are free to explore other people's information and they are also unrestricted to explore themselves. Then, they use social network for hitting others. They develop dispute, anger, and bad image of others via facebook. Facebook users do not realize that the message written on it will become public consumption. Anybody may see it. It seems that there is no private room.
Fourth, individualism. The development of communication technology displaces individualism. The prior culture such as ‘talking to other people, kongkow-kongkow, or just wishy-washy is now fading. It is no longer changing. It is replaced by chatting through Facebook and Twitter. Meeting one to another is no longer popular anymore. Technology has replaced it. In general, he/she has many friends on Facebook. He/she prefers to have friends here in social network. He/she has thousands of friends and acquaintances. He/she does so since it is easier. He/she just makes it through his/her smartphone. Technology forces users not too smart to develop real friendship. Then, technology makes them indifferent and no care to the environment.

Fifth, procrastination. It is the behavior of wasting time. Smartphone makes users addicted. They prefer to waste the time to play with their smartphone. They are too busy operating their smartphone. The handphone continuously gives signs that there are incoming calls, email, short messages, and so on. They are too busy to reply any messages or to update Facebook status. No wonder if they are addicted and are dependent to it. They check it right after they wake up in the morning, after work, during lunch or dinner, in the classroom, in the meeting room and many more. This device poisons children, students, politicians, parents, and many more. When in the classroom, for example, students are physically in but emotionally they are somewhere else. When in the parliament room the legislators are busy connecting themselves to someone out there. Children don’t pay attention to their parents when they talk to them. They are busy playing games on the phone. It seems it is contra-productive in interpersonal communication. There is no personal touch. There is no eye contact and personal attention. It means that the speakers have broken the norm, rules, and culture especially in face to face communication.

Sixth, high anxiety. The new communication behavior caused by communication technology is high anxiety. There are three main points of anxiety. First, it is because the users are worried that they are not able to be in line with the development of communication technology. They are worried that technology will make them out of date or people who are not sensible to technology. Second, anxiety is getting higher when they are worried because of the fund. They are distressed that they are not able to provide funds to buy the new communication technology. One generation to another is so short. Third, they are worried about the effect of communication technology to users. Parents, for example, are worried that their children might use smartphone for improper purposes. Parents cannot control the uses of smartphone. They might access information or whatever that they are not allowed to do so. Husbands will not be happy if their wives have love affairs with other men. The wives are worried if their husbands are looking for ‘other entertainment’. Both husband and wife are also worried that they lose attention. It also happens for goods and service providers. They are afraid that the consumers will not be satisfied with the products of services. The consumers will make a complaint improperly through mass media or through their hand phone since sharing new information is very easy and fast.

Seventh, indolence. Communication technology makes people lazy in some cases. Teachers or lecturers are reluctant to improve their teaching quality. They just use the same power point and save it in a flash disc. Students are not better than their teachers or lecturers. They are lazy to take notes. They just bring a flash disc to copy the teacher’s teaching materials. If they need it they will save it in smartphone and they can access it anytime. The other phenomenon caused by the development of communication technology is being lazy to read. Reading books, journals, magazines, are replaced by searching through internet. Searching information by ‘google’ is prominent among students than reading printed media.

Eighth, insensible. The apathetic behavior is irritating. Hand phone is used to fleet or to bear off attention. When the teacher is busy teaching, the students are busy operating hand phone. When the parents are talking to their children, they don’t pay attention to what is spoken by the parents. They are playing games or contacting others by hand phone. The participants of any meetings are not active listening to what is discussed in the meeting. They, however, are busy operating hand phone, sending messages, or surfing on internet. Attention and honoring someone else are so expensive. Chatting about someone else’s weaknesses, shortcoming, negative points are so popular. Sending gossip, deception news, destroying others through social network is also very famous among people. Breaking relationship or even marriage is done merely by short messages.
Ninth, the decrease of reading habit. Reading habits for people is changing. They don’t like reading books, magazines, newspaper, and other printed media. Reading habit is replaced by searching internet. They don’t like searching by reading books since searching through internet it is easier, faster, more practical, more enjoyable, and simpler. This behavior is changing the behavior of people visiting libraries. They do not need to go to the library. They do not need to bring some thick books to get some information. Plagiarism is growing like mushroom in this modern era. It seems that students don’t like to work hard for their study. When writing a thesis they can consult ‘google’. When they have any homework, they can get it from internet.

The last, emotional. It is easy to see someone who smiles by her/himself. We can find people who are so happy. In some cases, we can find someone who is angry, anxious, worried, frightened, or tense. Why? It is because they are connected to someone else. They may deal with angry customer. They are angry to their subordinates, boss, fellow workers, and so on. They might communicate with others either about good things or bad things. When it is about good things, they will be very happy. When it is about bad news, they will show bad mood.

Conclusion
The advance of information and communication technology will give effects to the users. For wise men, the development of communication technology is blessing. On the other hand, when technology comes into the wrong person, it will give negative backwash or even disaster. Ideally, the development of technology will facilitate human beings to communicate better. Technology will set up good relationships with other human beings as they are social creatures. Technology will develop human welfare in communication. Now and ever, communication technology such as smartphone is just a device. Users cannot blame it as it does not have brain and feeling as human beings. How high the technology is, it still depends on the users. This device will do whatever is instructed. In this case, the users must be more advance and wiser than the device they create so that they may use it for positive objectives than the negative ones. This devise can do harmful and good things because it cannot choose between the bad and the good one. It depends on the instructions. So, the users should be smart in using this communication technology to develop better communication quality. It is only a means to reach the communication objectives not to ruin the substance of communication itself. It should help users to develop better communication not to break relationship between users.

References


Othera: