



# Knowledge Sharing Over Instant Messaging Apps: A Study among IT Professionals, Malappuram, Kerala.

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## ABSTRACT

Advances in information technology have resulted in the development of various computer-mediated communication tools of which the Instant messenger (IM) is one of the most prevalent. Instant messaging apps are widely used today for information sharing. The present study “Knowledge sharing over instant messaging apps: a study among Kinfra community, Malappuram” is based on the importance of instant messaging apps and the authenticity of the information sharing via those apps which helps the users to determine its reliability. The need to conduct a study based on trustworthiness of the information sharing is desirable and useful for the users. A structured questionnaire is used for collecting data which are personally distributed or sent through mail. The collected data are classified, analyzed. The investigator’s conclusion on whether or not instant messaging has negative effects on real-life social networks is, well, inconclusive. People have varying opinions on the topic, and there is evidence that can demonstrate both the pros and cons of using instant messaging. The safest thing to say is that the effect of online communication depends largely on the personality and habits of the user himself.

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## Introduction

The quick development of information and communication technology helped the mankind to achieve the fast access of knowledge. The innovation of computers, mobile phones and internet made a tremendous change in data collection, storing and sharing. During the first half of 21<sup>st</sup> century the arrival of online Medias, social Medias and social networking sites made a revolution in the field of communication, knowledge sharing and data transfer. Knowledge is the familiarity, awareness or understanding of someone or something such as fact, information, description or skills which is acquired through experience or education by perceiving, discovering or learning. Knowledge can be referring to as theoretical or practical understanding of a subject. Knowledge has always seen as one of the key strategic resources that can produce sustained long-term competitive advantage. Having knowledge supports to cope with daily routine works and it can also set up everyone to deal with new situations and utilize when needed (McGowan, 2012).

Knowledge sharing is an activity through which knowledge namely information skills, or expertise is exchanged among people, families, and organizations. However technology constitutes only one of the many factors that affect the sharing of knowledge in an organization such as organizational culture, trust, and incentives. Knowledge sharing activity involves at least two parties; knowledge owners and knowledge reconstructors. Knowledge owners are that who possess certain knowledge externalize it through communication media in order to share it with others. Knowledge reconstructors who receive new knowledge from

knowledge owners tend to reconstruct comprehend and interactive new knowledge using the knowledge they already have. Thus, Knowledge sharing is the process by which knowledge of individuals is converted into a form that can be understood and used by other individuals. Today, there are various ways for knowledge sharing.

The advent of web 2.0 concept, which gives emphasis on the intractiveness, has brought up sea changes in every field. Advances in information technology have resulted in the development of various computer-mediated communication tools of which the **Instant messenger (IM)** is one of the most prevalent. IM is suitable for all areas where quick, immediate contact among a known and manageable group of people is crucial. Instant messaging apps are widely used today for knowledge sharing and the frequency of its use also becomes large. Some of the famous and most commonly used instant messengers are **WhatsApp, Facebook messenger, IMO, Telegram, Wechat, Viber, Nimbuzz, Hike, Instagram, Google Hangouts, ChatON.**

Today, the concept knowledge sharing gains more significance as it exists in every fields like education, business, employment etc. The knowledge can be easily and quickly shared today by the advancement of Information technology. The instant messaging apps help in sharing the knowledge widely. A study among IT professionals based on the importance of instant messaging apps and the purpose of using those apps for information sharing helps the users to determine its importance, usefulness, reliability and difficulties. Thus, the need to conduct a study based on trustworthiness of the information sharing is desirable and useful to it continues users in this era.

Moreover, the study may help other investigators who are interested in such studies to do in other areas.

The study has reviewed a number of literatures published in national and international publications. Bhatt and Kumar (2014) conducted a study on the use of social networking tools and instant messaging apps by libraries in Jawaharlal Nehru University (JNU), New Delhi. It examined the use of social networking sites (SNS)/IM tools by library and their expectation from the library through SNS. The study explores that most of the students are in favour of using the SNS/IM tools by the libraries and they expect the services should be provided to them by libraries through SNS/tools as well. In another study Carol, X.J, and Yi, Liang (2015) in their study entitled "Empowering employees through instant messaging", aimed to develop a research model that explains how instant messaging (IM) technologies enable employees to be empowered. It used survey of 253 Chinese work professionals with respect to their use of IM tools at work. The findings showed that IM does empower work teams via shaping the social networks and facilitating knowledge sharing in the workplace, resulting in heightened team performance. Chu and Du (2015) conducted an exploratory study investigating the use of social networking tools and instant messaging apps in academic libraries, examining the extent of their use; library staffs perception of their usefulness and challenges, and factors influencing decisions to use or not to use such tools. Data were collected by sending invitations to participate in a web-based survey were sent to 140 university libraries from Asia, North America and Europe. Results shows that Whatsapp, Facebook and twitter were the most commonly adopted tools in university libraries. Most library staff had positive perceptions on the usefulness of social networking tools, but hesitancy among library staff and limited participation of users (i.e. students) were perceived to be hindrances. This study offers insights for academic librarians to make informed decisions in applying social networking tools.

The present study is attempted to view the knowledge sharing over instant messaging apps. Instant messaging apps are used today by wide user communities. Yet no serious studies are conducted in this field, so the investigator selected this topic for the study.

#### The Main Objectives Of The Study Are

- 1) To find out the widely used instant messaging apps.
- 2) To find out the purpose of the use of instant messaging apps.
- 3) To verify the frequency of the use of instant messaging apps.
- 4) To study and identify about the issues/problems that instant messaging gave rise to.
- 5) To verify the attitude of the people towards the instant messaging apps.

#### Research Design

To conduct a study based on the instant messaging apps and the knowledge sharing over it; IT professionals who are

closer to the technologies are taken. IT parks and IT professionals are large in number. So to conduct this study IT professionals of small scale companies working at Neo Space, KINFRA (Malappuram) are taken. There were about 32 companies working there at Neo Space with an approximate number of 500 IT professionals. The investigator selected a sample from the total population. Size of the sample contains 100 IT professionals. Structured questionnaires were used for data collection.

This population includes different age groups. The objectives of study can be attained only by analyzing the data using appropriate statistical techniques. Here analysis and interpretation of data collected through questionnaire. 100 questionnaires were distributed to the IT professionals out of whom 89 users responded to the questionnaire (89%).

#### Analysis and interpretations:

##### Awareness of Instant Messaging Apps (IM)

Instant messaging apps have become an important part of day-to-day life. It helps in sharing of the information faster and easier. The question was intended to know the awareness level of the Instant messaging apps among IT professionals of KINFRA-Neo Space community, Malappuram. The below table founds the awareness level of IT professionals of three different age groups, i.e. 20-30, 31-40 and above 41.

**Table 1. Awareness of Instant Messaging Apps (IM).**

Options	No. of respondents			Total	Percentage
	20-30	31-40	Above 41		
Yes	35 (100%)	28 (100%)	26 (100%)	89	100%
No					

It is evident from table 1 that 100% of the IT professionals who are taken for the study are aware of the Instant messaging apps. It concludes that instant messaging apps have become an unavoidable thing in everyone's day-to-day life.

##### Devices for accessing IM apps

This question was intended to know the device through which the Instant messaging apps are accessing. Responses are summarized in the table given below.

The above table reveals that majority (85.39 per cent) of the IT professionals use Smartphone to access the IM apps. And a good number (39.32 per cent) of the respondents use laptop for accessing the IM apps. A very few of the respondents use desktop (6.71 per cent) and tablet (5.61 per cent) as the accessing device. This analysis shows that mainly Smart phones are the device used by the IT professionals to access the IM apps. This reveals that IT professionals looked for the fastest way that would lead to satisfactory results when using the instant messaging apps. The portability and the availability of the internet in smart phones can be the reason for choosing this device more to access instant messaging apps. They can be accessed from anywhere at any time easily and quickly.

**Table 2. Devices for accessing IM apps.**

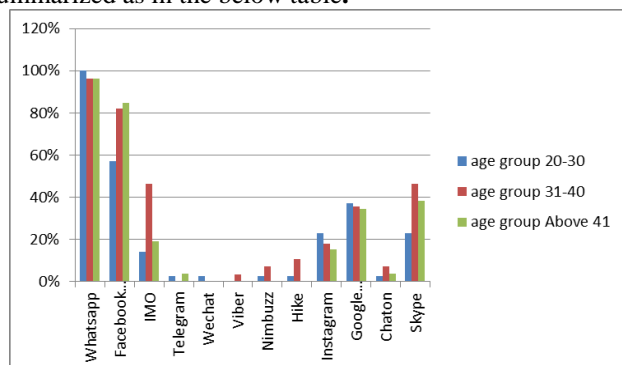
Devices	No. of respondents			Total	percentage
	20-30	31-40	Above 41		
Smartphone	27 (77.14%)	25 (89.28%)	24 (92.3%)	76	85.39
Laptop	10 (28.5%)	15 (53.57%)	10 (38.46%)	35	39.32
Tablet	3 (8.57%)	1 (3.57%)	1 (3.84%)	5	5.61
Desktop	4 (11.42%)	1 (3.57%)	1 (3.84%)	6	6.74

**Table 3. Commonly used Instant messaging apps.**

Instant messenger	No. of respondents			Total	Percentage
	20-30	31-40	Above 41		
Whatsapp	35 (100%)	27 (96.42%)	25 (96.15%)	87	97.75
Facebook Messenger	20 (57.14%)	23 (82.14%)	22 (84.61%)	65	73.03
IMO	5 (14.28%)	13 (46.42%)	5 (19.23%)	23	25.84
Telegram	1 (2.85%)		1 (3.84%)	2	2.24
Wechat	1 (2.85%)			1	1.12
Viber		1 (3.57%)		1	1.12
Nimbuzz	1 (2.85%)	2 (7.14%)		3	3.37
Hike	1 (2.85%)	3 (10.71%)		4	4.49
Instagram	8 (22.85%)	5 (17.85%)	4 (15.38%)	17	19.1
Google hangouts	13 (37.14%)	10 (35.71%)	9 (34.61%)	32	35.95
Chaton	1 (2.85%)	2 (7.14%)	1 (3.84%)	4	4.49
Skype	8 (22.85%)	13 (46.42%)	10 (38.46%)	31	34.83

### Commonly used Instant messaging apps

Instant messaging apps have become inevitable today to the user community. It helps in fast messaging, knowledge sharing and moreover to keep in touch with friends. There are various instant messaging apps available today. This question was intended to know the most commonly used instant messaging apps. The IT professionals were asked to indicate the most commonly used IM apps and their responses are summarized as in the below table.



Graphical representations of the commonly used Instant messaging apps are shown in the figure 1.

The overall analysis reveals that Whatsapp is the most commonly used instant messaging app among the IT professionals, then followed by the Facebook messenger. Google hangout, Skype and IMO are also some of the preferred ones by the respondents. Now the message itself can express emotions. This feature gives users a chance not only to send messages but also to convey the shade of mood. Extended capabilities of multimedia sharing are another feature which made these apps more popular. Chat app developers got the ability to release their appendices for the iMessenger (stickers, keyboards, animations, etc.) These instant messaging apps are the most popular among everyone because of the user friendliness. These apps are fast, inexpensive and easy to use and filter. They are environment friendly.

Only very few respondents use Wechat, Viber, Telegram, Nimbuzz and Chaton. It is mainly because these are not much popular and many are not aware about these apps.

### Purpose of use of Instant Messaging Apps

Purpose of using the instant messaging apps differs from one user to another. A lot of information and knowledge are receiving and sharing through the instant messaging. IT professionals are using the instant messaging apps for official use, chatting, keep in touch with friends, information sharing and entertainment. The IT professionals were asked to show their purpose of use of instant messaging apps and the responses are summarized in the table 4.

**Table 4. Purpose of use of Instant Messaging Apps.**

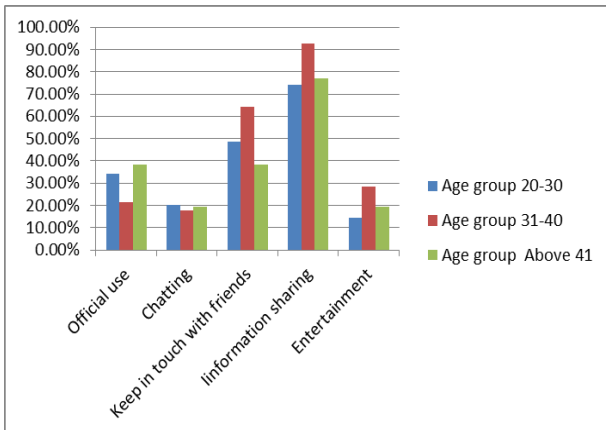
Purpose	No. of respondents			Total	Percentage
	20-30	31-40	Above 41		
Official use	12 (34.28%)	6 (21.42%)	10 (38.46%)	28	31.46
Chatting	7 (20%)	5 (17.85%)	5 (19.23%)	17	19.10
Keep in touch with friends	17 (48.57%)	18 (64.28%)	10 (38.46%)	45	50.56
Information sharing	26 (74.28%)	26 (92.85%)	20 (76.92%)	72	80.90
Entertainment	5 (14.28%)	8 (28.57%)	5 (19.23%)	18	20.22

It is evident from the table 4 that, majority (80.90 per cent) of the IT professionals use instant messaging apps for the purpose of information sharing and more than half (50.56 per cent) use instant messaging to keep in touch with friends. A good number of the respondents use IM for the official purpose, whereas a few opined that chatting and entertainment are the purposes of using the IM apps.

Graphical representations of the Purpose of use of Instant Messaging Apps are shown in the figure.

The overall analysis shows that the IT professionals use instant messaging apps for information sharing and mainly to keep in touch with friends. Today everyone is busy with their own works. Nowadays, these IM apps help each one to keep in touch with others easily because of the vastness and growth

of the technology. The features of these apps help in sharing of information and to keep in touch with others faster than before.



### Reasons to use Instant Messaging Apps

Instant messaging apps make it possible to connect people who share interests and activities across political, economic, and geographic borders. An instant messaging app is a platform to build social networks or social relations among people who, for example, share interests, activities, backgrounds, or real-life connections. IT professionals were asked to mention the reasons for the use of instant messaging apps and the responses are indicated in the Table 5.

**Table 5. Reasons to use Instant Messaging Apps.**

Reasons	No. of respondents			Total	Percentage
	20-30	31-40	Above 41		
Fast messaging	30 (85.71)	20 (71.42)	22 (84.61)	72	80.90
User friendly	11 (31.42)	14 (50)	4 (15.38)	29	32.58
Reliability	1 (2.85)	2 (7.14)	1 (3.84)	4	4.49
Free download	1 (2.85)	2 (7.14)	3 (11.53)	6	6.74

The overall analysis shows that the majority of the IT professionals use the instant messaging apps for the reason of its fast messaging feature. Instant messaging is intended to allow individuals to communicate online with others that they already know from real life. The speed of these apps in communicating things faster can be reason for the users to use IM more.

### Frequency of using the Instant messaging apps

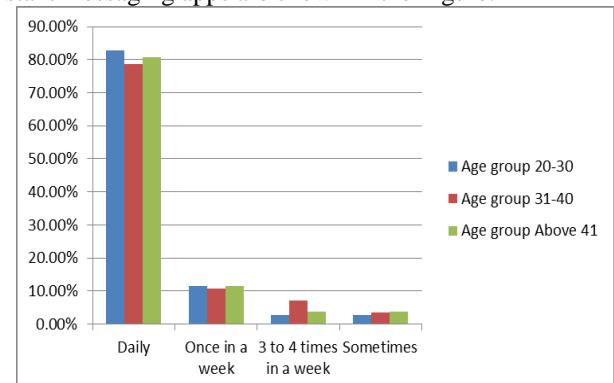
The frequency of the Instant messaging apps usage was put across the respondents with a question 'How often do you use instant messaging'. The question was framed with the options of time scale such as daily, once in a week, 3 to 4 times in a week and sometimes. The IT professionals were asked to show their frequency of use of IM apps and the responses are summarized as age group wise in the Table 6.

**Table 6. Frequency of using the Instant messaging apps.**

Frequency	No. of respondents			Total	Percentage
	20-30	31-40	Above 41		
Daily	29 (82.85%)	22 (78.57%)	21 (80.76%)	78	87.64
Once in a week	4 (11.42%)	3 (10.71%)	3 (11.53%)	9	10.11
3 to 4 times in a week	1 (2.85%)	2 (7.14%)	1 (3.84%)	3	3.37
Sometimes	1 (2.85%)	1 (3.57%)	1 (3.84%)	3	3.37

The above table 7 reveals that majority (87.64 per cent) of the IT professionals use IM apps daily. And a few numbers (10.11 per cent) of the respondents uses the IM apps once in a week. A very few (3.37) of the respondents use the IM apps sometimes.

Graphical representations of the frequency of using Instant messaging apps are shown in the Figure.



The overall analysis shows that majority of the IT professionals use instant messaging apps daily. The frequent uses of instant messaging depend on the fast messaging, user friendliness, reliability and free download options. It is also revealed at the time of the study that the availability of the IM apps are free, which helps them in knowledge sharing and which gives them the latest up-to-date information can be the main reason for daily use of the IM apps.

### Time spent on IM

The IT professionals were asked to indicate the time spent on the instant messaging apps and the responses are summarized in the table 7.

**Table 7. Time spent on IM.**

Hours	No. of respondents			Total	Percentage
	20-30	31-40	Above 41		
1-2 hours	29 (82.85%)	17 (60.71%)	24 (92.30%)	70	78.65
2-4 hours	4 (11.42%)	8 (28.57%)	2 (7.69%)	14	15.73
More than 4 hours	2 (5.71%)	3 (10.71%)		5	5.62

The table 7 shows that a total of majority (78.65 per cent) of the IT professionals use the IM one to two hours and few (15.73 per cent) use it two to four hours and then a total of a few (5.62) use more than four hours. The overall analysis reveals that a majority of the IT professionals spent one to two hours on the instant messaging. It shows that they spent a good time on instant messaging for knowledge sharing. They spent much time on instant messaging apps to be social and to get up-to-date with latest news and information.

### Attitude towards Instant Messaging Apps

This question was put forward to the IT professionals to know the opinion of them about the instant messaging apps. The IT professionals were asked to indicate their attitude towards IM and responses are summarized in the Table 8.

The analysis shows that a very large majority (96.63 per cent) of the IT professionals stated that IM helps in knowledge sharing and large majority (94.38 per cent) opined that it is easier and more convenient to communicate using IM. A very large majority (92.13 per cent) has an opinion that IM is a part of their day-to-day life. From this it is clear that instant messaging play an inevitable role in the knowledge sharing. A half of the (51.68 per cent) of the IT professionals opined that IM leads them to many problems and frustrations.

Table 8. Attitude towards Instant Messaging Apps.

Statements	No. of respondents												Grand Total	Percent age
	20-30				31-40				Above 41					
	Agree	Un decided	Dis agree	Total	Agree	Un decided	Dis-agree	Total	Agree	Un decided	Dis agree	Total		
IM is a part of my day-to-day life	30 (85.71%)	1 (2.85%)	2 (5.71%)	33	23 (82.14%)		2 (7.14%)	25	23 (88.4%6)	1 (3.84%)		24	82	92.13
I feel it is easier/ more convenient to communicate using IM	32 (91.42%)			32	25 (89.28%)	2 (7.14%)		27	24 (92.30%)	1 (3.84%)		25	84	94.38
I feel that IM is positively impacting my ability and attitude	27 (77.14%)		1 (2.85%)	28	24 (85.71%)	2 (7.14%)		26	20 (76.92%)	1 (3.84%)	1 (3.84%)	22	76	85.39
IM helps in attaining more information	30 (85.71%)	1 (2.85%)	1 (3.84%)	32	23 (82.14%)	2 (7.14%)		25	23 (88.46%)	2 (7.69%)		25	82	92.13
IM helps in knowledge sharing	34 (97.14%)			34	25 (89.28%)	1 (3.57%)		26	25 (96.15%)	1 (3.84%)		26	86	96.63
IM prevents me from productive work		3 (8.57%)	24 (68.57%)	27	2 (7.14%)		25 (89.28%)	27	1 (3.84%)	1 (3.84%)	20 (76.92%)	22	76	85.39
IM badly affects my physical and mental health	27 (77.14%)	3 (8.57%)		30	23 (82.14%)		1 (3.57%)	24	22 (84.61%)	1 (3.84%)	1 (3.84%)	24	78	87.64
IM kills my valuable time	6 (17.14%)	1 (2.85%)	20 (57.14%)	27	8 (28.57%)		15 (53.57%)	25	2 (7.69%)	3	17 (65.38%)	22	74	83.15
IM leads me to many problems and frustrations	15 (42.85%)	2 (5.71%)	1 (3.84%)	18	12 (42.85%)	3 (10.71%)		15	10 (38.46%)	2 (7.69%)	1 (3.84%)	13	46	51.68

The overall analysis shows that majority of the IT professionals have a positive attitude towards instant messaging apps. Today IM had influenced everyone with its tremendous features. It helps everyone to do their works faster and easier. The easiness in use and helps to keep abreast with latest information and sharing the information can be the reasons to have a positive attitude towards IM. And a half number of the IT professionals opined that it leads them to many problems/ frustrations. Continues use of IM without much care and knowledge can leads to many problems and frustrations.

#### Problems/ frustrations caused by Instant Messaging Apps

There are many problems/ frustrations facing while using Instant messaging apps because of its lack of authenticity. Some of them are information abundance, repetition of information, religious issues, political issues, family issues, health problems, mental problems, and time eating. The IT professionals were asked to indicate their frustrations in using instant messaging and the responses are summarized in the Table 9.

**Table 9. Problems/ frustrations caused by Instant Messaging Apps.**

Problems	No. of respondents			Total	Percent age
	20-30	31-40	Above 41		
Abundant information	3 (8.57%)	2 (7.14%)	9 (34.61%)	14	15.73
Redundant information	4 (11.42%)	10 (35.71%)	1 (3.84%)	15	16.85
Religious issues	5 (14.28%)	8 (28.57%)	15 (57.69%)	28	31.46
Political issues	7 (20%)	5 (17.85%)	4 (15.38%)	16	17.98
Family issues	25 (71.42%)	24 (85.71%)	23 (88.46%)	72	80.90
Health problems	6 (17.14%)	11 (39.28%)	8 (30.76%)	25	28.09
Mental problems	1 (2.85%)	2 (7.14%)	6 (23.07%)	9	10.11
Time eating	34 (97.14%)	26 (89.28%)	24 (92.30%)	84	94.38

The overall analysis reveals that time eating followed by the family issues are some of the problems that IM leads to. The reliability of the contents sharing via instant messaging apps is a matter of question. The lack of authenticity can give raise to many problems. Moreover family problems, religious problems, political problems etc can be faced because of the unauthenticated messages. The massive use of the IM can also leads to the health issues too.

#### Results and discussion:

All the IT professionals are aware of the online instant messaging apps. A large majority of the IT professionals use smart phones for accessing IM apps. Whatsapp is the most commonly used instant messaging app by a large majority of the IT professionals. Facebook Messenger is another commonly used instant messaging app. Only very few respondents use Wechat, Viber, Telegram, Nimbuzz and Chaton. Information sharing is the most preferred purpose of using instant messaging apps. A half of the majority opined the purpose of using IM is to keep in touch with friends. Fast messaging feature is the main reason of the use of instant messaging apps. Majority of the IT professionals use instant messaging apps daily. A majority of the IT professionals spent one to two hours on the instant messaging. Majority of the IT professional's attitude towards the instant messaging apps is positive. Half of the IT professionals opined that it leads them to many problems/ frustrations.

Time eating is one of the main problems that IM gave rise to. Religious, political and family issues are some of the main problem that IM gave rise to with the unauthentic messages.

#### Conclusion

The use of instant messaging to communicate online can lead to negative consequences. A lack of body language can lead to less exciting relationships and misinterpretations. Because online interactions readily allow people to avoid risk, IM conversations are less meaningful than face-to-face (F2F) ones. The fact that online chatting is not very personal leads to shallow friendships. Early studies have shown that using the Internet to communicate may lead to depression and less real-life interaction, and many people worry that social skills are worsened because of IM usage.

IM plays a role in strengthening existing relationships, by supplementing real-life interactions and helping to maintain long-distance friendships. There is less pressure online when compared to face-to-face (F2F) conversations, so some people may find it easier to expand their social networks through IM. The people investigator surveyed for this project agreed with my various instant messaging sources, and also added some interesting opinions of their own. They use Whatsapp and other instant messaging apps to maintain relationships that might otherwise be lost, and to chat with their real-life friends. Investigator's topic also mentioned that how they had extra time to think and respond. Respondents echoed the concerns that IM conversations weren't as colorful because of the lack of emotion and expression, and don't like how people can easily get confused and/or lie over the Internet. None of the respondents believe that instant messaging has truly replaced other forms of communication, and many prefer using the phone or talking to people in person. IM has triumphed in the past 2-3 years among personal internet users as well as within companies. It's difficult to imagine an Internet without Instant Messaging (IM), even though it hasn't been around for all that long. Instant messaging has become popular with young people because of its speed, ease of use and privacy.

There are many advantages of using instant messages. The very concept is to put people together when they aren't in the same city or even the same country. Now, with online gaming, friends and strangers can group together in order to take down an evil boss; businesses and companies can do business through the use of IMs from either the office or that of their phone.

Basically, investigator's conclusion on whether or not instant messaging has negative effects on real-life social networks is, well, inconclusive. People have varying opinions on the topic, and there is evidence that can demonstrate both the pros and cons of using instant messaging. The safest thing to say is that the effect of online communication depends largely on the personality and habits of the user himself. But here are a few things investigator can say for sure: The future will probably change the face of instant messaging. Perhaps webcams and voice chat will become more popular, and the richness of online conversations will improve. Meeting and talking to people online has become more mainstream. We can also look at the past to help predict the future. Many people feared that the advent of TV in the 1950s would kill the movie industry, but so far, it hasn't. Then again, with the introduction of e-mail, people are sending out fewer handwritten letters. Face-to-face interactions are a big part of the human experience, and the need for this type of

interaction will never go away. Any type of communication can help in building and maintaining relationships and social networks, so perhaps its best we keep an open mind about this technology.

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