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Laura Cook SUNY Geneseo

Jack Cook Rochester Institute of Technology

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#### PERSONALITY, PRODUCTIVITY AND INSTANT MESSAGING

Laura Cook ◆ State University of New York at Geneseo ◆ Computing & Information Technology 1 College Circle ◆ Geneseo, NY ◆ 14454 ◆ CookL@geneseo.edu ◆ (585) 245-5012

Jack Cook, Ph.D., CFPIM ♦ Rochester Institute of Technology ♦ College of Business Max Lowenthal Building ♦ 107 Lomb Memorial Drive ♦ Rochester, NY 14623-5608 JackCook@hotmail.com ♦ (585) 475-7628

#### ABSTRACT

This paper explores the relationship between personality, productivity, and instant messaging. With the current and forecasted usage of IM software, business implications must be addressed. Managers should understand how to effectively manage this technology. Not understanding these implications could result in abuse and negatively impact productivity.

#### INTRODUCTION

Widespread use of instant messaging (IM) has become common in businesses across the United States. Within some companies, it is encouraged and used as a communication tool. For companies with great geographic distances between co-workers, it is an excellent tool for quick correspondence. In addition, many applications are free as compared to long distance charges. The four most popular IM systems available for *free* distribution are AOL Instant Messenger (AIM), Yahoo! Messenger, Microsoft Network Messenger, and ICQ ("I Seek You").

For countless companies, IM is being used without the consent or perhaps knowledge of those in charge. Many could argue that it is being used mostly for non-work related communication and is in many cases counterproductive. Michael Osterman, principal analyst for Black Diamond, says that "Right now, IM is present in about 90 percent of corporations." [7] Does IM increase productivity? The type of work, culture, and personalities of those communicating will influence the answer to this question. IM certainly is a socializing tool; however, does such a tool negatively or positively impact productivity? With increasing emphasis on cooperation and collaboration, does IM support this type of interactivity?

The New York Stock Exchange published a memo which deemed that instant messages must be archived like all other business communications [7]. Obviously, with this type of policy in place, managers and the IT staff must understand how to effectively handle and administer this technology. This paper explores the correspondence between personality, productivity, and instant messaging. This is an important issue. Teenagers in the United States all use IM as a major part of their socialization process. Therefore, in less than a decade, these individuals, who are much more accustomed to presence awareness technologies and the pervasiveness of computing, will be in our workforce.

### IM BASICS AND PRESENCE AWARENESS

Because many individuals are aware of and use instant messaging regularly, this section will be brief. Simply stated, IM is communication by means of mostly "interactive text". It blends both written and verbal communications. Instant messaging applications were once just text communication. However, this area has expanded to include verbal communications, video conferencing, white-boards, emoticons to express emotions when using non-verbal communication, and easy file transfer. Text messaging on cellular phones mimics this same type of interactive text communication. In any IM application, the buddy list gives the user presence awareness; that is, at the most fundamental level, users are able to tell who is online. IM presence awareness can be more sophisticated as well. For example, the IM window can notify users if another is willing to accept phone calls at a home or office number or has their mobile phone on [4]. There is also more basic presence awareness information such as if a person is out to lunch, not at their desk, or on the phone. "When the element of mobility is added to IM, it introduces a new level of presence awareness, letting others know where a user is based on where the user logs into the system or location information provided by the wireless network." [4]

## ORGANIZATIONAL BENEFITS OF IM

IM is a niche somewhere between verbal and written communication [6, p, 188]. E-mails and written letters will always have their place in the business. As IM usage increases, the need for traditional correspondence will decrease.

As individuals use this technology more in their personal lives, their desire to use it during work will increase. For example, many parents are now communicating with their teenagers who are home after school using IM. As mentioned above, teenagers are very familiar with and regularly use to this type of communication.

One benefit of IM in the workplace is that it combines both synchronous and asynchronous communication. This provides the flexibility of delayed communication (asynchronous) such as e-mail or memos, with the speed of real-time communication (synchronous) like a telephone. People prefer immediate feedback and IM offers instant feedback without having to be nearly as disruptive as a phone call. To have the flexibility to answer a message when the recipient is free will increase productivity. This is what a real-time communication tool such as IM brings to a company -- an immediate yet non-intrusive form of communication.

Another benefit of IM in the workplace is that it "... supports good communication by enabling users to hold intermittent conversations as well as manage their conversational progress" [6, p. 187]. Unlike phone conversations where the attention is demanded immediately, IM offers the flexibility of answering questions when it is convenient, without adding unnecessary interruptions. The user is still aware of the question, but can answer when it is conducive to them in their work schedule. Thus, users of IM can easily multitask, attending to more than one activity or conversation at a time.

Collaborating through IM creates a more interactive, context sensitive conversation. It is used with clarification, coordination, task delegation, asking and granting social favors, and finally tracking others schedules as well as arranging social meetings [2]. IM effectively provides middle ground to allow a more rapid exchange of data than what is possible with e-mail, still without the overhead of a full-blown face to face conversation [2]. It is very interesting to think that no more than just a simple text box can give you the context needed to make social exchanges vivid, pleasurable, humorous, and full of emotion [2].

IM is a tool that is becoming standard on many mobile devices. Text messaging is becoming increasingly popular over cell phones and traveling employees are taking advantage of this technology. Since the lines of personal and professional lives are becoming more blurred with the use of technology 24/7, instant messaging is just another extension of this evolution. However, utilizing IM to talk with family members may actually be more productive than restricting its use and requiring employees to use the phone or write out an email which could essentially consume more productive time.

From a purely financial standpoint, IM can be much cheaper than and just as effective as other forms of communication. This synchronous communication is a very effective way to establish meeting times and coordinate and communicate many work functions without the time associated with face-to-face or phone conversations.

IM may also be the next best thing for customer service and supplier relations. At the Rochester Institute of Technology (RIT), librarians have online chat hours where students can get real-time help. This is a perfect solution since much of the library work can be done online as well now, so the need to be face-to-face with a librarian is not needed or desired in many cases. With this technology, employees can also speak with multiple customers at once.

# ORGANIZATIONAL DRAWBACKS OF IM

Although IM has many inherent benefits, some drawbacks do exist. The socializing aspect of IM seems to be a common concern among managers. However, many enterprises are moving to systems that store the IM conversations which will cut down on socializing and gossip greatly. In addition, in some respects IM is less distractive than phone conversations. However, it still can be a large distraction if not managed properly by each individual. The hypothesis is that certain types of personalities will better manage the distractions that IM can cause. Since IM can be used synchronously, some workers will be distracted constantly while logged in. However, this is not a problem with the software, but rather the individual. Users can easily avoid this by utilizing the tools provided with virtually every IM software package to show that they are unavailable and will ultimately cease the intrusion of pop-up IM windows.

# STUDY OF PERSONALITY TYPES AND USE OF IM

Keirsey and Bates wrote a book called "Please Understand Me." [5] This book studies temperaments and has similarities to the well known Myers-Briggs test. Keirsey and Bates categorize people into sixteen different temperaments. Table 1 and Table 2 show these temperaments and how they relate to one another. The survey results reported in Table 1 under

the columns labeled "Under 1000 employees" and "Over 1000 employees" denote the percent of CIOs who knew and were willing to provide their Meyers-Briggs profile type. These results were reported in "The CIO Insight Research Study: Are Budget Pressures Overwhelming You?" [3]. Table 1 also states celebrities that fall into these styles to give some frame of reference to the reader.

Keirsey Temperaments	Under 1000	Over 1000
Kensey Temperaments	employees	employees
	(n=79)	(n=62)
The Guardians (SJ)		
ISTJ – Inspectors (Harry Truman, Elizabeth II)	10.1%	11.3%
ISFJ – Protectors (Jimmy Stewart, Mother Teresa)	0.0%	0.0%
ESFJ – Providers (George Washington)	3.8%	1.6%
ESTJ – Supervisors (Colin Powell, Elizabeth I)	7.6%	4.8%
The Artisans (SP)		
ISTP – Crafters (Clint Eastwood, Amelia Earhart)	5.1%	4.8%
ISFP – Composers (Johnny Carson, B. Streisand)	1.3%	1.6%
ESFP – Performers (Elvis Presley, Liz Taylor)	1.3%	0.0%
ESTP – Promoters (Franklin Roosevelt, Madonna)	2.5%	3.2%
The Idealists (NF)		
INFJ – Counselor (Ghandhi, Eleanor Roosevelt)	0.0%	1.6%
INFP – Healer (Albert Schweitzer)	1.3%	3.2%
ENFP – Champions (Carl Rogers, Molly Brown)	5.1%	9.7%
ENFJ – Teachers (Mikhael Gorbachev, Oprah)	0.0%	1.6%
The Rationals (NT)		
INTJ – Mastermind (Dwight D. Eisenhower)	15.2%	11.3%
INTP – Architect (Albert Einstein, Marie Curie)	10.1%	6.5%
ENTP – Inventor (Walt Disney, Catherine II)	17.7%	12.9%
ENTJ – Fieldmarshal (Bill Gates, M. Thatcher)	19.0%	25.8%

Table 1 – Keirsev	Temperament Style	es & Percent of CIOs	s in the Categories
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The four letters associated with the temperaments mean the following:

- Extroversion vs. Introversion (E/I): A person who chooses people as a source of energy probably prefers extraversion, while a person who prefers solitude to recover energy may tend toward introversion.
- **Intuition vs. Sensation (N/S)**: The person who has a natural preference for sensation probably describes himself/herself as practical, while the person who had a natural preference for intuition probably chooses to describe himself/herself as innovative.
- **Thinking vs. Feeling (T/F)**: Persons who choose the impersonal basis of choice are called thinking types and those who choose the personal basis are called the feeling types. It is a

matter of comfort. Some people are more comfortable with personal judgments. Others are more comfortable with value judgments and less with being objective and logical.

• **Judging vs. Perceiving (J/P)**: Persons who choose closure over open options are likely to be the judging types. Persons preferring to keep things open and fluid are probably the perceiving types.

		5		
	Sensing		Intuitive	
Introvert	ISTJ	ISTP	INFJ	INTJ
	ISFJ	ISFP	INFP	INTP
Extrovert	ESFJ	ESFP	ENFP	ENTP
	ESTJ	ESTP	ENFJ	ENTJ
	SJ	SP	NF	NT
	The Guardians	The Artisans	The Idealists	The Rationals

Table 2. The Keirsey Temperaments

# The Hypotheses

The following hypotheses are being analyzed:

- H1: Intuitive types will use IM more than sensing types.
- H2: Feeling types will use IM more than thinking types.
- H3: Extroverts will use IM more than introverts.
- H4: Personality traits are a major determinant on whether a person perceives value in IM usage.
- H5: Different personality types will prefer to accomplish different tasks using IM.

# **Preliminary Study**

In our preliminary study, college students were administered the Keirsey temperament survey. The results of this personality test are being correlated with survey results given about IM, its use and impact on productivity. Data has been gathered in this pilot study and hypotheses are being tested. The results of this pilot study will be used to modify the original survey instrument which will be subsequently given to business professionals in the Northeast.

# **IMPLEMENTING IM**

An important consideration to make with respect to IM business implementation lies within the concept of a term coined "critical mass," which is essentially a group of people who are highly interested and motivated in a given technology and have the ability to demonstrate to others in the company the usefulness of that technology and can influence others to begin using it [1]. There are three characteristics of critical mass that are essential for successfully employing IM: size, depth, and the level of influential power. Size is related to the number of people that use IM (e.g., business team, department, or organization). If critical mass is not reached, then time, money, and resources are wasted. Depth refers to the variety of skills found within the critical mass. It is important to have diversity with respect to personalities within organizations. Individuals within the target population may rely on or be comfortable with other communication technologies. To sway influential individuals to adopt a specific IM package, members within the critical mass must explain the positive implications of IM use over alternative communication methods. It is critical that everyone in the population adopt IM or its overall productive capabilities will be compromised.

### CONCLUSION

IM can be can extremely productive if implemented and managed properly. Its use and desire in the workplace may also be dependent on the type of employee (their temperament) and the type of work environment and job. IM allows geographically dispersed individuals to communicate easily and cost effectively. IM's possible implications in the customer service arena are endless and if utilized properly can increase customer service. Conversely there are some inherent drawbacks. If managers leave IM usage in the hands of employees, they may not effectively utilize what can undoubtedly be a productive communication tool. This technology is not productive in itself. It must be managed. Rather than ignore and restrict this type of technology, policies and guidelines should be developed and enforced. Policies detailing employee conduct and communication styles should be in place to keep IM communication productive.

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