How well you know the person who just sent you an email determines how long it takes you to reply.

That's the conclusion a study conducted by two researchers from Northwestern University's Kellogg School of Management.

Brian Uzzi and Stefan Wuchty were given access to a company's complete email records covering a six-month period — almost 1.5 million messages in all — and found a correlation between the familiarity and response time.

As part of the study, the company's 1,052 employees were asked to detail social and personal relationships.

The findings were clear: the longer it took a person to reply to an email, the less likely the correspondents had a close relationship.

Replies to close friends came on average within about seven hours, known business contacts received replies within 11 hours and relative strangers had to wait about 50 hours to get an answer, the study found.

“We didn’t need to read the messages or anything like that. Just looking at the speed of the reply was more than enough,” Uzzi said in a recent interview.

The authors of the study say looking at email response times determined whether someone was a friend, acquaintance or virtual stranger several percentage points better than existing methods.

Possibly reassuring to employers everywhere, the study found that about 80 per cent of the emails tracked were related to work while the remaining 20 per cent were related to social ties.

The study also concluded that, while email has dramatically expanded the scope of mass communications, people still interact with friends and professional contacts the same way they always have.

“Contemporary e-communication has not yet drastically changed fundamental patterns of human interaction,” the study found.