High-tech firms thrive on new and innovative ideas; they are the source for new innovations. Engineers are the ones to come up with these new ideas. This thesis looked at the social processes behind new ideas. This is relevant because if we understand what makes engineers creative in their daily work, we can help them to become even more innovative.

The aim of this study was to examine idea generation, and shed light on factors that explain why idea generation fluctuates from day to day. To investigate this, a diary study was conducted among 31 employees of a Dutch university of applied sciences over a period of two weeks. Results showed that idea generation results from the identification of problems that require new ideas to solve them. This relationship was found to be moderated by an individual’s number of social interactions and the level of redundancy of these social interactions. The level of an individual’s vigor did not predict idea generation, but results suggest that vigor is needed for interacting with others.

These findings contribute to the understanding of the creativity process. The study presents evidence showing that social interaction helps people to produce new ideas. It shows that a person is more likely to come up with new ideas when he or she communicates with others who have novel information and insights. Furthermore, this thesis uses an innovative approach to look at the effects of social interactions by relating them to an overall structure of a social network.