

This thesis is intended as a methodological experiment which follows up to contemporary extractions of social networks using flow of email communication. It tries to combine previous technical approaches and further develop them. As an essential discipline is identified, social network analysis (SNA) and its historical development is briefly described. SNA is not understood as an independent science and its incompatibility to other scientific disciplines (sociology, sociometry) is pointed out. The introduction of SNA is completed by description of data file organization, which quite differs from conventional organization of sociological data file, as well as description of basic computing methods. The thesis focuses on SNA in organizations where it serves to map informal structure and its comparison to formal structure. Concept of informal structure introduces the term of community of practice, which is considered as an ideal condition for innovation. Individual aspects allowing or obstructing the development of community of practice can be defined through models of communication networks. Apart from SNA in organizations, diploma theses take in consideration authors who worked on analysis of email networks. Summary of previous studies offers different ways of SNA of email communication but most of cases do not combine SNA in organization with SNA of email communication. Author's approach does not link extraction of network using SMTP together with sociology of artefacts or with secondary analysis. It is classified as a special area of sociological data mining, which is in this case demonstrated on concrete data set including its technical specifications and data processing. Several different ways of analysis are used during email flow analysis and it always indicates other possible interpretations.