A Motive Analysis as a First Step in Designing Technology for the use of Intuition in Criminal Investigation

Ingerid Rødseth, University of Bergen, Norway

ABSTRACT

Investigators occasionally rely on intuitive feelings during crime solving, but have no technological tool targeting directly on mediating this investigation factor. Technology that encourages the sharing and alerting of hunches therefore seemed to be needed. A motive analysis of interviews with criminal investigators was performed as part of an investigation aiming at adding hunches to the criminal investigators’ visualization tools (the project management system to keep track of the investigation). Purpose of the study was to explore how a motive analysis (by revealing the criminal investigators’ motives and attitudes) could contribute in the first phase of the design. The assumption that designing for intuition could be useful, was confirmed by all of the informants. The study gave valuable input to how motive analysis could be used to identify suitable requirements, by resulting in a proposed technological concept supporting the use of intuitive feelings in criminal investigation.

Keywords: Criminal Investigation; Intuition; Motive Analysis; Requirements; Technology

INTRODUCTION

It is claimed that criminal investigators occasionally experience sudden intuitive feelings – so called hunches (Thune et al. (1993). They get strong feelings of rightness or wrongness without being consciously aware of why. Sometimes hunches have no importance for solving a crime case. Other hunches may lead to important evidence findings. The former head of the department for tactical investigation in the Norwegian police fought for the investigators’ acceptance of using intuition in the investigation process. He believed that the investigation process was being directed by too many rules and regulations, on the cost of the investigator’s own creativity (Brügger Bjånesøy (2005). An important part of the investigation process is lost, he claimed, if every step in the criminal investigators’ move is regulated. Therefore he arranged a course in intuition that investigators should attend. His goal was that criminal investigators should start developing and using their intuition as a tool during the investigation.
process, a topic that for periods has been a controversy in Norwegian press. Technological tools supporting this potentially important use of intuition in criminal investigation, seems to be non-existing. It therefore seemed to be a need for designing for intuition, aiming at offering computerized functionality which encourages the sharing and alerting of hunches.

In other professions, intuition seems to play a role as a diagnostic tool, for instance in business, medicine, software debugging, teaching etc. Diagnosing includes both the ability to notice trouble and to take the proper action (Mesman, 2007). Henden examined how 105 Norwegian top leaders relate to intuition (Henden (2004). His study indicates that in strategic thinking, more emphasis is put on intuition than on analysis, particularly on areas that relate to exploring new terrain and technology.

Facilitating the use of intuition through technology is of interest for criminal investigators individually and the police as a whole. A better understanding of the investigators’ relationship to intuition and hunches can contribute to a deeper knowledge of the criminal investigation process. It could help in designing for technological artifacts that could capture and formalize these private feelings (and reasons for certain actions). Design of such artifacts could contribute to that the investigators’ sudden intuitive feelings become part of the organization’s publicly available, shareable knowledge base for taking a certain line of investigation.

To study the use of intuition in criminal investigation, this apparently important, but officially overlooked aspect of the criminal investigators’ work, it was of highest importance to identify the correct requirements. Many large system development projects have failed, and a vast amount of money has been spent because of unsuitable requirements (Dix et. al. 2004, Rogers et. al. 2007, the author’s previous experience). Regular methods for requirement gathering (for instance task analysis, questionnaires etc.) seemed to be too superficial when studying user’s relation to intuition. There was a need to go ‘deeper under the investigators’ skin’, in order to uncover their underlying motives related to intuition. We were interested in investigating if a motive analysis could contribute in the first phase of designing technology for intuition, because it presumably would go deep into the users’ (investigators’) understanding of their own practices. It was therefore conducted a motive analysis with input from eight criminal investigators’ reflections upon the use of hunches and intuitive feelings in criminal investigation. The hypothesis was that revealing the criminal investigators’ motives, and thereby attitudes, while studying ways of speaking in their statements about intuition, would give a valuable contribution in designing technology for intuition.

Through the motive analysis of the investigators’ statements about intuition, several implications for a new computerized system was suggested, for instance the demand for mobility and suddenly. Based on these suggestions, a technological concept for using intuition in criminal investigation is proposed. The proposed technological concept visualizes the main features a new ‘intuition system’ should have in order to reflect the requirements that emerged from this study. Different technological realizations of the concept are introduced; from mobile equipment for entering and alerting about intuitive feelings, to placing intuition markers in an augmented reality system.

A SUDDEN INTUITIVE FEELING

This study was inspired from some of the theories of what intuition or hunch is as a cognitive phenomenon. A brief introduction to some of these theories is given in this section.

Intuition in Psychology

Intuition is within psychology described and treated as an unconscious and automatic process that can be classified as one of the members of the family of ‘fringe consciousness’ (FC) experiences. Mangan (2003) puts it this way:
Determinants of the Risk-Taking Attitude among Small Equity Investors
www.igi-global.com/article/determinants-of-the-risk-taking-attitude-among-small-equity-investors/164881?camid=4v1a