# Increasing Employee Productivity and Work Well-Being by Employing Affective Decision Support and a Knowledge-Based System

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This employee productivity and work well-being affective system aims to maximise the work performance of personnel and boost well-being in offices. Affective computing, decision support and knowledge-based systems were used in our research. The basis of this affective system is our European Patent application (No: EP 4 020 134 A1) and two Lithuanian patents (LT 6841, LT 6866). Our study examines ways to support efficient employee productivity and well-being by employing mass-customised, personalised office environment. Efficient employee performance and well-being are managed by changing mass-customised office environment factors such as air pollution levels, humidity, temperature, data, information, knowledge, activities, lighting colours and intensity, scents, media, games, videos, music, and vibrations. These aspects of management generate a customised, adaptive environment for users taking into account their e*m*otional, *a*ffective and *p*hysiological (MAP) states measured and fed into the system. This research aims to develop an innovative method and system which would analyse, customise and manage a personalised office environment according to a specific user's MAP states in a cohesive manner. Various values of work spaces (e.g. employee utilitarian, hedonic, perceived values) are also established throughout this process, based on the measurements that describe MAP states and other aspects related to office environment. The main contribution of our research is the development of a real-time mass-customised office environment to boost employee performance and well-being.

**Keywords**: Affective Decision Support and a Knowledge-Based System, Human Resource Management, Employee Productivity and Work Well-Being, Affective Computing.