This company case study’s goal is to analyze a national bank’s agency in Brasilia, Brazil and to suggest improvements in the field of human factors. This essay was requested by our ergonomics teacher, in order to make us develop our knowledge in this subject. The agency is located downtown in the capital of Brazil, in the treasury department (Ministério da Fazenda). Its obligations to the community include opening new accounts, issuing credit and debit cards, making deposits and withdrawals, making investments, and other banks related activities. Currently, that bank has 19 employees, of which 6 are outsourced and the remaining are exclusive of the bank. Bank agencies usually have a lot of ergonomics problems, especially in the physical work environment and cognitive demands.

The study was conducted since September to November of 2014. The beginning of the analysis was based on the Ergonomics Analysis of Work – EAW and since this was a graduation study, students had to ask and search for data to analyze as opposed to receiving it, as would a company specialized in EAW. The EAW proposes a consistent method of approach that was incorporated to this study. The steps of the EAW used were: to observe client’s demands towards the branch’s products and services, study their work conditions and focus on the activities such as: employee behavior, obtaining data and creating assumptions to each step. After the EAW was considered, the project started with the development of three questionnaires based on the likert scale, which measured the level of pain, stress, satisfaction and work conditions. Furthermore, two scripts based on the physical and cognitive human factors were also developed for a more detailed research. From the second visit on, interviews were made with each worker, asking him/her about their duties at the agency, suggestions of improvement to the corporate environment, average length to accomplish certain tasks, and, with that, have a casual conversation with the employee. After the data was collected, a demonstration about distribution of the mental workload and a flowchart were built to provide a better analysis of the process.

The main Human Factor topics covered were the physical, cognitive, design methods and organizational problems. Among them, the one that required most attention was the physical ergonomics. In the questionnaires applied, all of the workers had something to complain about some kind of pain throughout the body, especially at the thighs. Other parts of the body that were also mentioned were the back and the ears. The majority of complaints and issues observed were related to the height of the table and the chair, where objects were too low, not allowing an ideal accommodation for the worker; the short number of pauses between job-rotation shifts; the inexistence of a back support for some chairs that are high for some employees; and the bad posture of the employee in his/hers work station. Besides, some employees have to talk on the phone all day long and there is no support provided for the phone. Therefore, they are forced to press the phone into their ears, causing discomfort and damage.

For those problems, some of the simple solutions suggested were to put a cushioning pad at the chairs to elevate the person; pause every 8 minutes per hour; switch high chairs with no cushion to ones with back cushion feet support; make the worker aware of the importance of not supporting his/her arms in only one armrest, besides inclining his/her body a little bit to the back and spinning the chair to reach objects at the sides and not turn his/her body to do it. Furthermore, it’s important to switch positions each hour to accommodate the workers body. It is also necessary awareness of the use of the headphones to relieve the pressure from the ears. It was also detected headaches, neck pain, and arm soreness. For each of these problems, there were solutions proposed. In the cognitive field the major problem was the software, where a new intuitive one could be the solution. The physical design of the agency brought up security and privacy issues to the clients, where the development of new security measures were suggested and, at least, in the organizational ergonomics the problem was the feeling of not being acknowledged at the work, which can be managed by implementing an individual feedback and a monthly process of “Kaizen”.

Therefore, the lessons learned at this company’s case study were that the employees are the ones that can mostly contribute at the process of the analyses, because they live every problem each day, and
they know what has to be improved. Furthermore, simple problems can affect the health and the welfare of a person, and with Human Factors approach, they can be found and solved.

References
