

Determinants of emotions in a call centre

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ABSTRACT

To progress in user modeling with the specific aim of taking into account emotional aspects, two paradigms could be chosen. The first would be to develop “captors” aimed at evaluating the affective states of the user; the second would be to trace what influences the human emotions in the global context. The research presented here starts with this second perspective. The investigation takes place in a call centre where many factors could influence the affective state of the user. The question of emotions in workplaces is important, both for health issues and for satisfaction and well-being. A methodology based on a comparative approach leads to interesting results. The sources of negative emotions were contrasted and quite complex. This shows the interest for User Modeling to base its progress on a mix of the two paradigms mentioned above.

Keywords

Call centre, emotion, working situation, design, management style.

1. INTRODUCTION

This workshop shows an interest for identifying affective states in various interaction situations. The question of affective states is of particular interest for working situations, as it has now been clearly established that affective states have impacts on the worker's health. Thus, as many modern working situations require an extensive use of computer systems, and as these computer tools, in some cases, contribute [negatively] to the affective state of the user, it seems worthwhile to carry out research on this topic. From this perspective, control centres are good candidates to provide a frame of research, as they combine extensive daylong use of the same computer system and give the opportunity to observe long-terms effects of the computer system characteristics on the operator's moods.

This paper is therefore focused on the affective states of computer users in a working situation. A first way to handle the problem would be to take advantage of information issued by the workers. In this research paradigm, his or her emotional states are inferred from behavioural signs. Another possibility would be to trace interactional context, that is to say to investigate the global working situation (for instance, Lazarus, 1999). In the particular case of a call centre, this includes the worker and the computer system but also the management staff and the customer. The idea would be to build the link between

the context and the emotional state of the user, in order to suggest improvement based on the identification of contextual causes of negative and positive emotional states. That is the choice we made in the piece of research presented here.

This interactionist point of view is therefore based on the assumption that if we can trace the factors in the situation that influence the operator's mood, a user modeling approach could then be grounded on these factors to build assumption about his/her state of mind. We were focused on the identification of the emotional tenant of the worker' activity, with a view to proposing specific recommendations to develop adapted help systems and to improve working conditions. This kind of research should therefore be considered as “uphill” to the questions of user modeling.

2. THEORETICAL FRAMEWORK AND CASE STUDY CONTEXT

The interest for emotional reactions in the workplaces are linked to greater concerns to both mental health (stress) and physical health. For instance, Wager, Fieldman and Hussey (2003) have established that working under pressure could lead to a greater risk of cardiovascular diseases (CVD). These authors show that exposure to such working conditions can lead to deleterious health effects due to the appearance of chronic hypertension. As it has been established that CVD is the chief cause of premature death among adults, this has led some authors to consider work as a risk factor worthy of further investigation, not only for health at work but also on a public health perspective (Marmot, Bosma, Hemmingway and Stansfeld, 1997, Weibel, 2002). Negative emotions should therefore be considered as important in working situations.

Beside that, the neurophysiologist studies carried out for instance by Damasio (1994, 1999) have demonstrated that emotions play a role on global cognitive performance. Emotions are an essential element of the decision making process in complex situations. This second point of view suggests that not only negative but also positive emotions should be investigated in real work environments. However, only few research efforts have been invested on the topic of emotion and emotional factors in the workplace (Grosjean & Ribert-Van De Weerd, 2004). The vast majority involves laboratory experiments with poor links with real situations. The number of work situations where workers have to face high psycho-affective demands is increasing (service sector, public relations and assistance, etc.)

This ongoing research proposes characterizing the psycho-affective dimensions of highly demanding situations and relies on ergonomics interventions in the workplace.

The following case study is related to an investigation in a call centre, as it has been proven that emotional demands of the job are considerable in call centres, and could play a prominent role in the strenuousness of this sector (Zapf, 2002). The extensive use of computer tools in this sector, and the fact that these tools are also used to report the performance of the operators, lead to a special interest to this computer-human system. At the same time, it is now well documented that this sector is currently in front of a challenging turning point, where a greater implication of the workers and a high level of reactivity will be required. These two points justify trying to know more about the affective reality (its negative and positive aspects) that these employees are facing. It could also be valuable to adopt an interactionist point of view to consider this reality, in order for instance to suggest evolutions of the technical system that could give support to positive elements and reduce the negative ones, as far as possible in a reactive way.

3. METHODOLOGY

The intervention was carried out in two contrasted sectors of consumer credit company call centre. A comparative approach to these sectors, each with quite different tasks, was adopted. The comparison was facilitated by the fact that the two sectors share many similarities (same culture, same selection processes, same managerial practices, etc.). The intervention relied on ergonomics methods, adapted to the working situations (interviews, observations, video recording of worker's activity, verbal explanation after activity observation...) and on specific tools (emotional scale...) developed in order to collect emotional and cognitive data. The study of emotion in work situations implies a specific methodology, where it is certainly important to examine the subjective perspective of the operator. To simplify, we shall refer to the sales sector and the after-sales sector. Later, we shall present the types of tasks allocated to workers in the two sectors.

The first step of the analysis aimed at characterizing the work organisation and the workers' tasks contents in the two sectors, through interviews and observations at the workplace.

In order to gather data on the emotions felt and the activity, specific interviews were conducted: the worker was confronted to the record of a sequence of her/his activity, and asked to state the nature and intensity of her/his emotions related to each phase of the specific situation. By using this method, various contexts leading up to the negative, positive and neutral emotions could be identified, for each of the two sectors. This comparative approach allowed differences to be identified in the sources of emotions (especially negative), and our aim was to ascertain whether specific features of the tasks and of the modes of control on the operators could explain those differences. In concrete terms, the activities of 8 operators were recorded (4 operators in each sector). The duration of the sequences recorded varied between 30 and 50 minutes. A scale of emotional involvement was used to determine the intensity of emotions expressed. This scale contains 7 points: the first represents the negative emotion that the operator describes and the last the expressed positive emotion. The operators had to notch the intensity of emotions felt during the activity viewed through the video.

Finally, an other set of interviews was conducted to collect the workers' subjective appraisal concerning their tasks contents and their working conditions. The workers were also asked to

justify the strategies they used to accomplish their activities. The investigation of the coping strategies developed in order to deal with the emotional load provides information concerning the emotional effects of the work and could bring into question their long-term efficiency. This was aimed at trying to bridge the gap between: on the one hand, the day-to-day emotional effects of the working situation on the workers and on the other hand, the longer-term effects on motivation, performance and well-being.

4. MAIN RESULTS OF THE CASE STUDY

In the first sector, the workers have to deal with the incoming calls of potential customers, interested in the products of the company. The workload depends on the time of day, and the analysis showed that they receive calls during most of their time at work. Interactions with clients are short and fast, with very little variety. There is little autonomy for the operator as he/she only handles the introductory part of the commercial interaction. The rhythm imposed is very fast and scripts and rules strictly define their interactions. The work rapidly becomes boring.

In the other sector, the operators must contact customers who have not respected their financial commitments and try to persuade them (by various means) to restart their payments. As it is often difficult to contact customers, they must develop elaborate strategies to find them: contacting their neighbours, employers, banks, etc. This search often goes on for several days or even weeks. There are three phases in the job: finding, negotiating and convincing. The emotional register to be used is broad (threat, invocation of moral sense, etc.) and should be adapted to the social and moral situation of the customer. They spend less time on line and the duration of the calls is longer. The variety of the job and the need to be creative is clearly greater here, even if they frequently have to deal with difficult situations (aggressive customers, people with financial difficulties, etc.).

About emotions and well-being, the results show that the sources of satisfaction and the nature of the stressors in the two work situations are different. In the sales sector, negative emotions appear when workers encounter situations that delay the accomplishment of the task at hand and the achievement of goals might be hindered. For example, when they understand from the interaction that it will exceed the 'normal' duration (due, for instance, to a customer who speaks slowly or who asks for many detailed explanations), we observed negative emotions. In contrast, when they perceive indicators in the situation that the interaction will shortly reach a positive end, they express positive emotion.

In the after-sales sector (see graph 1), positive emotions were associated with a concrete result of exchange. On the contrary, negative emotions were related to the failure in dialogue and the presence of direct managerial control.

With regard to coping strategies, there are also sectorial differences. Interviews demonstrate that the coping strategies of the sales control centre were oriented towards rapid achievement of the required results. The operators explained that they aim to have 'moments off' after periods when they try to "run faster than the machine". This kind of behaviour has already been observed in industrial assembly lines. These strategies help to give a certain feeling of temporal control in an environment where the temporal constraints are high.

These coping strategies are not present in the after-sales control centre, where the main stressors are linked to the level of control and where the tasks are considered as richer.

In both situations, we observed the appearance of cynicism and denigration of the customers, even if this behaviour is officially banned within the company.

5. CONCLUSION

The method used here allowed us to identify the causes of positive and negative emotions. Consequently, the positive and negative parts of working conditions could be detected. A first important result in the perspective of user modeling is that negative emotions were not linked to what an external observer would have considered as the main “stressors” of the situation, namely the customers aggressiveness. This leads to the conclusion that a field study is worthwhile and that starting from an a priori reasoning could lead to erroneous choices. This conclusion is especially important in the perspective of user modeling, as far as an interactionist point of view is chosen.

A second important conclusion is that the comparative dimension of the methodology was especially valuable, as we have established that the factors causing [negative] emotions were not the same in the two sectors. It seems that the meaning of the working situation for the operators were important in the

emergence of negative emotions. There is a distinction between on the one hand highly implicated operators, dealing with a relatively rich and highly variable task and on the other hand operators dealing with a repetitive, relatively poor task. What they expect from the situation and what could disappoint them is different, so the sources of negative and positive emotions are different. A user modeling approach should take this into account.

A user modeling approach based on an interactionist model might then be based on different parameters in the two situations. In the first one, it should be connected to parameters linked to the customer-operator interaction and in the other one to parameters linked to management-operator interaction.

Therefore, first recommendations, in this particular case, should be especially directed towards organisational choices (more in tune with the nature of the tasks) and the development of work assistance in relation with the emotional work of workers.

If we are to take into account the complexity of the parameters linked to the operator's emotional reactions, it seems that the interactionist model could not be considered in isolation. A mix of an a priori model and an interactionist one seems to be the only way to progress in the direction of a user modeling approach dealing with the affective dimension.

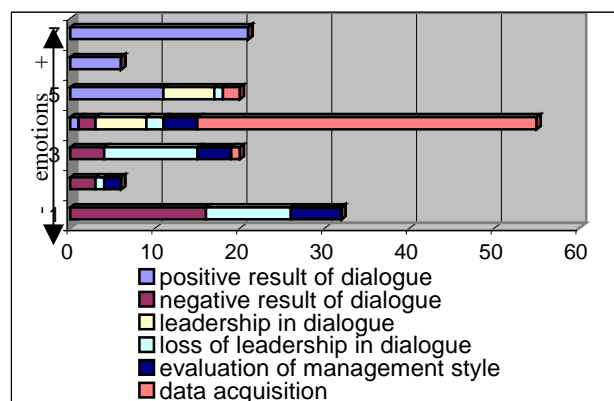


Figure 1. Negative and positive emotions on the emotional scale and their frequency of occurrence linked with activity.

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