

SMILING THROUGH: MOTIVATION AT THE USER INTERFACE

Nicola Millard*, Linda Hole# and Simon Crowle#
*BT Laboratories and #Bournemouth University

1 Introduction

The concept of a 'Call Centre' is regarded as fundamental to enhancing relationships, improving the quality of contact, and maximizing the possibility of conducting business with customers. This is achieved by combining innovative technologies with skilled staff into a closely managed and controlled specialist call handling function, which supports the core area of a company's business activities. The call centre is a true socio-technical system. The agent must contend with the customer interface, maintaining a coherent conversation with the person on the other end of the phone line, whilst also interfacing with the various customer handling tools that they have to help them. The customer should be unaware of the technology whilst talking to the human agent. Enquiries can be resolved on-line, and although the volume of calls is generally very high, typically the nature of the calls is predictable and uniform. The call distribution technology automatically forces the agents to answer a call as soon as their lines are free. It tracks all agent activity, all the time, making call centres the most highly supervised and monitored environments in business today. Commonly, incentive schemes for customer service people are driven by measurements designed to assess how efficient and productive they are. However, incentives based upon quantitative measures such as call throughput, talk time and volumes reflect little on the quality of service provided to the customers.

In reality, a call centre is only as good as its people; motivating and retaining good customer service agents can be the single biggest challenge in running a call centre. This research examined how customer service agents in an inbound customer service centre could be motivated to 'smile through adversity' by incorporating motivators into their system interface, which might enhance their levels of motivation throughout the working day.

2 Studying the agents' motivation

The research team worked closely with the agents to discover what did motivate them and what could be incorporated into the interface. The study used four methods: a ranking exercise; paper-based emotion elicitation; a questionnaire; protocol analysis of the agents' conversations.

A group ranking exercise with four groups of five customer service agents investigated what the agents felt motivated them. Each team was asked to rank, in order of importance to themselves, a set of key phrases pertaining to four different views of their work. They considered what the customer wants from the company, what the company wants from its agents, the best aspects of the agents' job, and feedback they receive about the job. Once the teams had completed the ranking exercise, individuals were asked to complete a structured, open-ended questionnaire, designed to elicit individual agents' emotions. They were asked how they felt about selling, about the customers, about other team members, about themselves, and about their work sessions.

A second, structured questionnaire, using both attitude scales and bipolar scales, elicited responses from a random sample of agents. This was designed to validate the ranking exercise; there was a 54% response rate from 100 administered questionnaires. Finally, a sample of 41 agents' interactions with customers was collected, and their content examined. This was classified as either 'background activity' (handshake; general conversation; agent-system activity; customer data), or 'business activity' (service enquiry; customer problem; marketing). More than 50% of each call was found to focus on the background, 'service with a smile' activity.

3 Motivation in the Call Centre

The agents gained satisfaction from contact with both their team, and the customers, i.e. *intrinsic* motivators. However, the *extrinsic* company motivators focused on minimizing the customer contact time, so the agents did acknowledge that this was in direct opposition to the company's view. They felt that their company wants them to be efficient 'problem-solvers', providing the customers with both service and product data. They needed to use good interaction skills to maintain the customer relationship, as they felt that the customers want a pleasant and positive response to their calls, and that they prefer to obtain all the information they need within one phone-call.

They found the workload tiring, and at times, system demands caused them to break their conversation with the customer to concentrate. Although they did their best, they felt that they could improve performance. Customers' reactions

affected the agents' spirits throughout their shift, but teamwork was an important factor, since fellow team members could help them in their work.

4 Having fun with technology

A stream of research has investigated whether users can enjoy their workplace interactions with computer technology. Factors for the adoption of computer technology have been identified as perceived usefulness, perceived ease of use, perceived enjoyment (Davis, Bagozzi & Warshaw, 1992), along with perceived fun (Igarria, Schiffman, & Wieckowski, 1994). Fun is an example of intrinsic motivation, where the person performs an activity for no apparent reinforcement other than the process of performing the activity *per se*. Increased ease of use of a system motivates the user to explore the system functionality, which may in turn increase intrinsic motivation, and result in greater enjoyment of the activity. Enjoyment of an activity may also be partially determined by the individual's perception of how much fun he or she is having in doing the activity (Davis et al., 1992; Atkinson, & Kydd, 1997). Kendall & Webster (1997) believe that "Fun and computers go hand in hand".

The call centre agents had no choice but to engage with the technology, so the research team attempted to improve the ease of use of the call handling interface (Millard, Hole & Crowle, 1997). Activities observed during the agents' task performance were represented in the design of performance-relevant objects featured in a Personal Office Workspace (POW). Weller & Hartson (1992) noted that, as an illusion, a user interface is itself a world in which the user can act, and by suspending a certain amount of disbelief, the user can directly engage in the world of objects. The POW user interface design offered the users such a world, and had been received enthusiastically. The rationale for the Motivational User Interface (MUI) design was to further develop the interface to continue to provide support for their task performance, but also to provide a fun, motivating environment for the agents to use (Hole, Crowle, & Millard, 1998).

The MUI environment was developed to offer a more aesthetic view to the user. The agents were offered views of the *Outside world*, (a tropical beach or an Italian city) which gave them a more relaxing backdrop to focus on. The work artifacts were reproduced upon a work surface, which could be taken into any context. The POW workbooks became amalgamated into one simple *Customer book*, occupying less screen space and providing room to incorporate other items for the agents to tailor their personal workspace (e.g. clocks, pictures, etc). The peel-off notes were complemented by a *Customer capsule*, which acted as a database key, calling up relevant customer information, and maintaining the simplicity for database querying. *Clouds* in the sky represented the queued calls waiting to be taken, whilst a *window blind* provided a screen which brought the

agents news of their individual or teams' successes, or company news. Such news reflected the extrinsic, company motivators, measured quantitatively.

The MUI design also sought to address the qualitative nature of the agents' work, which generated their intrinsic motivation. It provided a *Communication cube*, offering the functionality to send email or voice messages to other team members or the team leader, depending on which of the *six faces* is accessed. This would enable the agents to communicate their needs or emotions (such as customer-induced anger or frustration) to their co-workers via the interface, whilst they continue to handle customer calls. Kim and Moon (1998) observed that prior usability research has focused on the *cognitive* usability of the system. However, there is also the *emotional* usability of the system: the feelings of users as they interact with the computer system. They argue that the interface may elicit a variety of emotions ranging from the basic affective feelings such as joy or fear, to non-basic feelings such as trustworthiness or sophistication. The MUI display offered transportation objects (hot air balloon or jet) so that the agents could 'move to' a different interface environment if they became depressed or tired during their shift.

Webster & Martocchio (1992) addressed the notion of microcomputer playfulness, which relates positively to mood, involvement and satisfaction. Play has been found to be positively associated with mood satisfaction, learning, performance, and intrinsic motivation (Perry & Ballou, 1997). The monotony of the call handling work was addressed by enhancing mundane aspects such as product scripts by presenting them in the form of *script bubbles* which could be 'popped' when read. The *world face* of the *communication cube* also offered intranet access: the source of the product information.

The most frustrating aspect of the agents' work was found to be the tension that existed between limiting their call handling time and spending enough time talking to the customers to deal with their queries or concerns. The quality of their interactions with customers could not be collected via the technology, so the interface generated animated figures, or *moodies*, to provide customer images whose colours could be changed to indicate what sort of mood they had been in. The *moodies* would enable the agents to produce instant images of the types of callers they had dealt with during their shift.

5 Agent reactions

The provision of an interesting environment at the interface was very well received, as the agents liked the idea of 'looking out' at something, rather than 'looking in' on a desktop. Agents of all ages responded positively, and suggested their preferences for their own personal workspace. The agents felt that the animated figures on the interface would reduce the tension for them.

Laughter, and ideas about how much fun the agents might have during their working day, punctuated the feedback sessions. It remains to be seen whether daily use of this type of interface will truly motivate the call centre agents to enjoy achieving the company targets. The next step will involve 'proof of concept' trials in the call centre environment.

6 References

- Atkinson, M., & Kydd, C. (1997) Individual Characteristics Associated with World Wide Web Use: An Empirical Study of Playfulness and Motivation, *The DATABASE for Advances in Information Systems*, 28, 2, 53-62
- Davis, F., Bagozzi, R. & Warshaw, P. (1992) Extrinsic and Intrinsic Motivation to Use Computers in the Workplace, *Journal of Applied Social Psychology*, 22,14,1111-1132
- Hole, L., Crowle, S. & Millard, N. (1998) The Motivational User Interface, in J. May, J. Siddiqi & J. Wilkinson, (eds.) *HCI'98 Conference Companion*, BCS
- Igbaria, M., Schiffman, S. & Wieckowski, T (1994) The respective roles of perceived usefulness and perceived fun in the acceptance of microcomputer technology, *Behaviour & Information Technology*, 13, 6, 349-361
- Kendall, J. & Webster, J. (1997) Computers and Playfulness: Humorous, Cognitive, and Social Playfulness in Real and Virtual Workplaces, *The DATABASE for Advances in Information Systems*, 28, 2, 40-42
- Kim, J. & Moon, J. (1998) Designing towards emotional usability in customer interfaces - trustworthiness of cyber-banking system interfaces, *Interacting with Computers*, 10, 1-29
- Millard, N., Hole, L. & Crowle, S. (1997) From Command to Control: interface design for future customer handling systems, in S. Howard, J. Hammond & G. Lindgaard (eds.), *Human-computer Interaction INTERACT '97*, London: Chapman & Hall, 1997, pp. 294-300
- Perry, E. & Ballou, D. (1997) The Role of Work, Play and Fun in Microcomputer Software Training, *The DATABASE for Advances in Information Systems*, 28, 2, 93-112
- Webster, J. & Martocchio, J. (1992) Microcomputer Playfulness: Development of a Measure With Workplace Implications, *MIS Quarterly* June, 201-226
- Weller, H. & Hartson, H. (1992) Metaphors for the Nature of Human-Computer Interaction in an Empowering Environment: Interaction Style Influences the Manner of Human Accomplishment, *Computers in Human Behaviour*, 8, 313-333