

In the Moodie: Using ‘Affective Widgets’ to Help Contact Centre Advisors Fight Stress.

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Designed as part of an innovative prototype interface to be used by contact centre advisors (Millard et al, 1997, 1999; Hole et al, 1998), the ‘moodie’ was created as a reaction to a difficult customer where advisors are experiencing moments of emotional dissonance (Wharton, 1993; Abraham, 1998; Hochschild, 1983; Morris and Feldman, 1996) after completion of a call. After initial discussions, the design team and the advisors settled on expressing frustration by using the mouse to physically throw the call (represented by a spherical customer capsule) into the on screen waste bin. This action released a ‘moodie’, an animated stick figure that struts up and down the screen apparently exuding frustration (see Figure 1) and personality (Reeves and Nass, 1996).

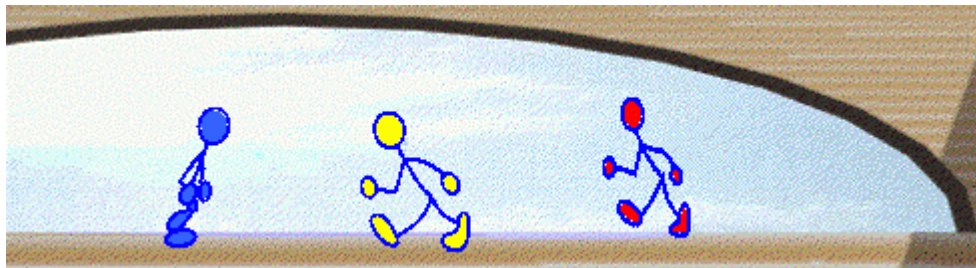


Figure 1: ‘Moodies’.

Advisors may be feeling ‘undesired’ emotions that they cannot express to the customer (Sturdy and Fineman, 2001). Frustration and anger can be a vicious circle because advisors have to deal with both the source of their frustration (usually either the customer or feelings of helplessness relating to company process and policy), but also the emotional reaction itself. This is an aversive state that people tend to try and avoid or escape and is positively linked with emotional exhaustion and job dissatisfaction (Abraham, 1998; Ashforth and Humphrey, 1993; Morris and Feldman, 1996).

Klein et al (2002) found that allowing systems to actively acknowledge and support user frustration and anger helped the user’s ability to manage and recover from negative emotional states. This could be a kind of symbolic game (Freud, 1950) allowing a kind of belated emotional mastery over the event. Reynolds and Picard (2001) suggest that “user interface widgets”, e.g. a ‘frustrometer’ or thumbs up/down, can be used to actively express user frustration through direct user manipulation. The computer then needs to respond in a socially appropriate manner (Picard and Klein, 2001; Reeves and Nass, 1996).

The moodie is an example of an ‘affective widget’ that can be unleashed by the physical action of throwing the customer capsule into the waste bin. This physical expression of emotion is akin to the kind of reaction that may have occurred in the physical world (i.e. throwing paper in a bin). It seeks to emulate the essence of that physical experience in a virtual space (e.g. Dix, 2003) whilst tying it to the task (i.e. the call) via the customer capsule. Users have described this as “throwing the customer in the bin” and describe a visceral, feeling of “naughtiness mixed with triumph”.

Wensveen et al (2000) have supported the use of physical action to express emotion rather than the more common use of physiological data (Picard, 2000). Since people express and communicate their emotions through behaviour, this behaviour is a source of direct information about the emotions. It also does not require any direct physical intervention or expensive hardware as with physiological data capture techniques. The disadvantages are that it cannot communicate the severity of the incident (Reynolds and Picard, 2001) and it does require the user to actively apply effort (Reynolds and Picard, 2001)

The resulting moodie can be used as non-linguistic, visual indication of state of mind as well as a humorous and slightly subversive outlet to relieve stress (Taylor and Bain, 2003; Noon and Blyton, 1997).

Moodies can also be used to paint a picture of an advisor's day. Macdonald and Sirianni (1996) point out that the advisor's daily work experience is "often one of a series of minor complaints assuming major proportions for the customer". Suppression of these feelings can then cause stress problems for the advisor (Hochschild, 1983; Frenkel et al, 1998; Wharton, 1993). If the advisor has had a tough day, they can choose to send moodies to their buddies or to their manager. This is a similar device to the 'affective awareness GUI widgets' that have been used by Garcia et al (1999) to support emotional awareness in computer supported collaborative work.

Self-disclosure and privacy could also be an issue here (Howard et al, 2004). This is especially since stress at work is still somewhat stigmatised. To facilitate this, the advisor is in control of who sees the moodie. They can choose to reveal their emotional state to their buddies or to their manager. This allows users to control what sort of emotional data is collected on them rather than invading their privacy (Reynolds and Picard, 2001) and prevents emotional data from becoming another element of call centre monitoring. They are also only likely to use this as a channel of communication where they perceive there to be a benefit to them (Picard and Klein, 2001). Earley (1988) found that the extent that the employee has control over the type of performance data collected and presented, the greater the impact on employee motivation and performance.

In terms of this form of emotional self-report, there is an argument that self-rating of stress is too subjective to be of use and that self-ratings can be over inflated and inaccurate, particularly via electronic communication (Weisband and Atwater, 1999). This is why the data needs to be interpreted by a team manager who knows the individual and can use the emotional information in constructive ways. Rather than just using call handling statistics that may not paint a true picture of the advisors' day, this provides an "information enriched environment" (Amick and Smith, 1992) allowing the use of job and social resources to manage job demands and reduce stress.

Fundamental to this is the assumption that the management culture of the call centre is not one of fear since, as Pfeffer and Sutton (1999) say, "fear causes people to cheat, conceal the truth, focus on the short term and focus on the individual". This would not be conducive to moodie usage.

The 'moodie' concept was taken forward into another prototype, in the form of a 'splatty' - a pump action 'splat gun'. However, users seemed to find this less of an emotional release than the moodie. One explanation for this was that users found it easier to anthropomorphise the moodie and empathise with it (Nowak and Biocca, 2003).

References:

- Abraham, R. (1998), Emotional Dissonance in Organisations: Antecedents, Consequences and Moderators, *Genetic, Social and General Psychology Monographs*, 124, 229-246.
- Amick, B.C. and Smith, M.J. (1992), Stress, Computer Based Work Monitoring and Measurement Systems: A Conceptual Overview, *Applied Ergonomics*, 23, 6-16.
- Ashforth, B. and Humphrey, R. H. (1993), Emotional Labour in Service Roles: The Influence of Identity, *Academy of Management Review*, 18, 88-115.
- Dix, A. (2003), Deconstructing Experience - Pulling Crackers Apart, in Blythe, M., Overbeeke, K., Monk, A. and Wright, P. (eds), *Funology: From Usability to Enjoyment*, Dordrecht, Netherlands: Kluwer, 165-178.
- Earley, P.C. (1988), Computer Generated Performance Feedback in the Magazine Subscription Industry, *Organisational Behaviour and Human Decision Processes*, 41, 50-64.

- Frenkel, S., Korczynski, M., Shire, K. and Tam, M. (1998), Beyond Bureaucracy? Work Organisation and Call Centres, *International Journal of Human Resource Management*, 9:6, 957-979.
- Freud, S. (1950), *Beyond the Pleasure Principle*, New York: Liveright.
- Garcia, O., Favela, J., Licea, G., Machorro, R. (1999), *Extending a Collaborative Architecture to Support Emotional Awareness*, CICESE, Mexico.
- Hochschild, A. (1983), *The Managed Heart*, University of California, Berkeley.
- Hole, L., Crowle, S and Millard, N (1998) The Motivational User Interface, in May, J., Siddiqi, J. and Wilkinson, J. (eds), *HCI'98 Conference Companion*, British Computer Society.
- Howard, S., Vetere, F., Gibbs, M., Kjeldskov, J., Pedell, S., Mecoles, K., Bunyan, M. and Murphy, J. (2004), Mediating Intimacy: Digital Kisses and Cut and Paste Hugs, *Proceedings of HCI 2004: Design for Life, 2*, Leeds: British Computer Society.
- Klein and Picard (2001)
- Klein, J., Moon, Y. and Picard, R.W. (2002), This Computer Responds to User Frustration, *Interacting with Computers*, 14, 119-140.
- Macdonald, C.L. and Sirianni, C. (1996), *Working in the Service Society*, Philadelphia: Temple University Press.
- Millard, N., Hole, L. and Crowle, S. (1997), From Command to Control: Interface Design for Customer Handling Systems, in Howard, S. et al (eds), *Proceedings of the IFIP TC13 International Conference on Human-Computer Interaction*, Chapman & Hall/ IFIP, 294 – 300.
- Millard, N., Hole, L. and Crowle, S. (1999), Smiling Through: Motivation At The User Interface, *Proceedings of the 8th International Conference on Human-Computer Interaction (HCI International '99)*, Munich, Germany, 1, 824-828.
- Morris, J and Feldman, D. (1996), The Dimensions, Antecedents and Consequences of Emotional Labour, *The Academy of Management Review*, 21, 4.
- Noon, M. and Blyton, P. (1997), *The Realities of Work*, Basingstoke: Macmillan, 159-160.
- Nowak, K.L. and Biocca, F. (2003), The Effect of the Agency and Anthropomorphism on Users' Sense of Telepresence and Social Presence in Virtual Environments, *Presence: Teleoperators and Virtual Environments*, 12:5.
- Pfeffer, J. and Sutton, R. (1999), *The Knowing-Doing Gap*, Harvard Business School Press, November.
- Picard, R.W. and Klein, J. (2001), *Computers that Recognise and Respond to User Emotion: Theoretical and Practical Implications*, MIT Media Lab Tech Report No 538.
- Picard, R.W. (2000), *Affective Computing*, MIT Press.
- Reeves, B. and Nass, C.I. (1996), *The Media Equation: How People Treat Computers, Television and New Media Like Real People and Places*, Cambridge: Cambridge University Press.
- Reynolds, C. and Picard, R.W. (2001), *Designing for Affective Interactions*, MIT Media Lab.
- Sturdy, A. and Fineman, S. (2001), Struggles for Control of Affect – Resistance as Politics and Emotion, in Sturdy, A., Gruglis, I. and Willmott, H. (eds), *Customer Service: Empowerment and Entrapment*, Houndmills: New York, 135-156.
- Taylor, P. and Bain, P. (2003), Subterranean Worksick Blues: Humour as Subversion in Two Call Centres, *Organization Studies*, November.
- Weisband, S. and Atwater, L. (1999), Evaluating Self and Others in Electronic and Face-to-face Groups, *Journal of Applied Psychology*, 84, 632-639.
- Wensveen, S., Overbeeke, K., Djajadiningrat, T. (2000), *Touch Me, Hit Me and I Know How You Feel: A Design Approach to Emotionally Rich Interaction*, ID Studio Lab, Delft University of Technology, Netherlands.
- Wharton A. (1993), The Affective Consequences of Service Work, *Work and Occupations*, 20, 205-232.