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Developing Behaviour-based Solutions that Last Examples from Industry

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Abstract

Organizational behaviour management (OBM) is an approach to enhancing the performance of organizations. Based originally on the theories of B. F. Skinner and other psychologists, OBM practitioners have developed tried and trusted solutions in the areas of behaviour-based safety, performance management and behavioural systems analysis. Core to an OBM approach is a focus on bringing about persistent and irreversible positive behaviour change. The current paper provides a brief conceptual background on OBM and details three examples of OBM-based solutions in a range of industries. Through these examples, we will demonstrate how organizational contexts inadvertently support and maintain substandard performance and how changing organizational contingencies and culture enables us to develop lasting behavioural solutions.

Introduction

Organizational behaviour management (OBM) is a scientific approach that grew out of the discipline of behaviour analysis. Based on the theories of B.F. Skinner and other psychologists, the applied sub disciplines of behaviour analysis focus on studying operant conditioning and respondent conditioning procedures that influence behaviour. The primary goal of applied researchers in this field is to predict and control socially important behaviours. Behaviour analysis typically uses an inductive approach to evaluate the impact of a planned change in the environment on behaviour over time. This means that the focus is on evaluating procedures rather than testing theories, resulting in empirically-based behaviour change intervention strategies.

The first applied behavioural interventions developed were related to programmed instruction and clinical applications, which were later followed by interventions in the workplace. OBM did not emerge as a subdiscipline of behaviour analysis until the 1960's and in 1977 a journal aimed at publishing OBM research, Journal of Organizational Behaviour

Management, was established. Since then, hundreds of OBM research studies have been published and a number of OBM consultancies have been established.

OBM researchers and practitioners primarily employ consequence-based interventions aimed at improving important work behaviours and results like productivity (e.g., Wilk & Redmon, 1999) and safety (e.g., Olson & Austin, 2001). Typically, behaviours and results are measured either through direct observation or their permanent products are evaluated after the event, rather than relying on indirect measures to assess performance (Daniels & Daniels, 2005). Some of the most common OBM interventions include training, feedback, recognition, and incentives (Nolan, Jarema, & Austin, 1999). An effort is made to permanently embed these procedures into the work environment, which often results in longer lasting improvements in performance (Sigurdsson & Austin, 2006). One of the most enduring OBM interventions published reported improved performance data across 11 years through an incentive-based intervention that improved safety of miners (Fox, Hopkins, & Anger, 1987)

In the current paper, we provide brief descriptions of three case studies that we have recently completed in a variety of contexts. The interventions we describe in each of these stem from theory and research in organizational behaviour management.

Case Study 1 – Coaching facilitated by data collection and feedback

Setting

In Case Study 1, a senior manager at a medium-sized organization request coaching. The manager requested assistance in reducing stress and managing workload. In conversation, the target of the coaching intervention was to increase the time that the manger spent on high value-added behaviours.

Data collection

Every 15 minutes, a small handheld device vibrated to prompt data entry. The client pressed a button to stop the vibration alarm, then entered data using a mobile phone application. The application presented a list of five activity categories. The client chose the activity category that she was currently engaged in, then pressed Send. Data was then sent via the mobile device to a remote database.

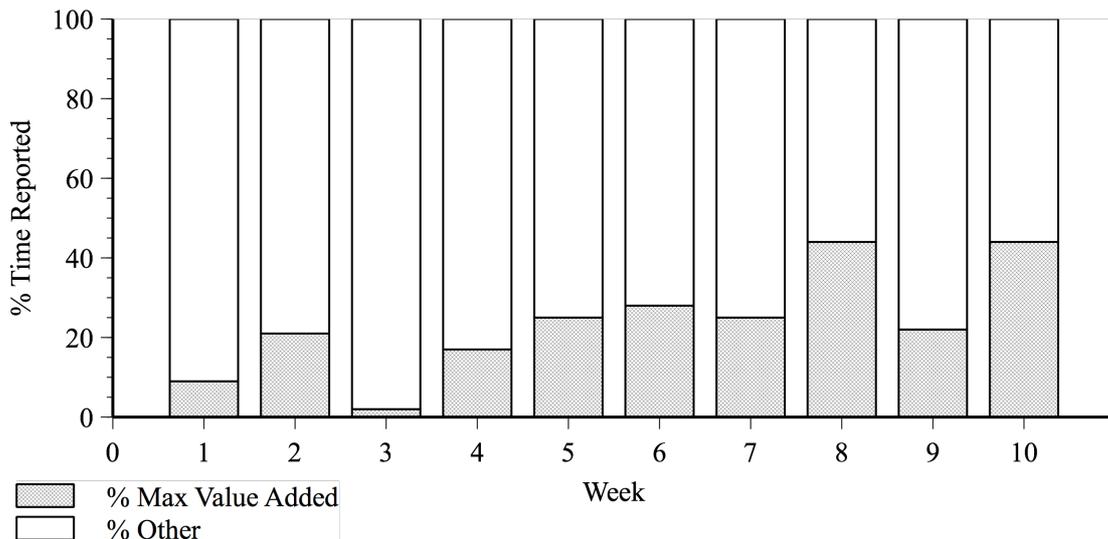


Figure 1. This figure depicts time spent on tasks categorised as Maximum Value-Added tasks as a percentage of time spent at work across the 10 weeks of the intervention

Results

In conversations with the client, certain categories were identified as High Value Added Activities (e.g., strategic planning). Figure 1 displays the client's data across the 10 weeks of data collection.

Case Study 2 – Public Posting of Employee Performance

Setting

A design manager at a small computer-focused enterprise requested assistance in reducing the time taken by employees to close out queries.

Data collection

Data were collected weekly.

Intervention

It was suggested that the design manager that post performance data and goals publicly. Such public posting works best in a supportive feedback-rich environment and the client organisation satisfied these criteria.

Results

Employee response rates increased rapidly (see Figure 2) when public posting was implemented. In addition to an increased speed of response to queries, a number of simple obstacles were found during the intervention period. By quickly removing these obstacles, the design manager facilitated more effective work practices, which helped to reinforce higher rates employee performance.

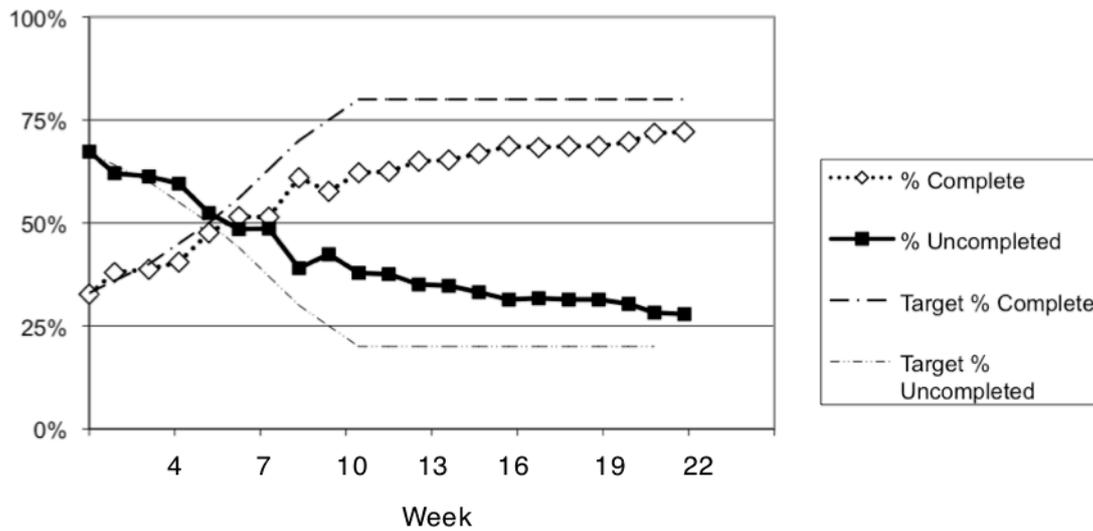


Figure 2. Online Response Target Performance across 22 weeks.

Case Study 3 – Employee-designed behaviour improvement plans

The foregoing case studies addressed relatively specific problems. In Case Study 1, the problem was self-identified and in Case Study 2, senior management recognized the problem. However, many companies operate sub-optimally, but senior management are unaware of specific problems that need to be solved. Senior management may wish to decrease injuries, decrease costs or increase profitability, but they may not have identified a specific issue or problem to be addressed. Box (1991) suggests that the vast majority of problems that occur in an organization can be solved relatively easily by those closest to the problem, specifically front-line employees.

Many OBM interventions focus on training front-line employees in the skills of observing, recording and analyzing behaviour in order to enhance employees' abilities both to identify problems on the ground and to solve them. Case Study 3 briefly summarises a training package that we provided and the results of that intervention.

Setting

Case Study 3 was conducted in a local authority in the United Kingdom. There was no explicit target behaviour that the client wished to change. In order to assess value to the client, the primary metrics were cost, quality (right first time), time spent, and reducing lost time.

Improvement intervention

231 employees at a range of grades in the organization were trained on an OBM course. The course consisted of half-day modules run every fortnight for around 3 months, with background reading, online coursework and ongoing assistance from a dedicated tutor. The product of the course was the implementation of an individual improvement project by each candidate in their local work environment. These projects were designed to produce savings and streamline processes at different levels of the organisation in order to meet the current challenges faced by the Council. Examples of these projects are outlined below.

Low Usage Vehicles

A Task Force Manager identified £450k of annual savings due to low or unused vehicles that were being leased by the Council. He established which managers were responsible for the leasing process and agreed new expectations with them about acceptable usage levels, and vehicles to be off-hired. Data was fed back and discussed at a monthly meeting where the managers accounted for their leased vehicles. After 3 months £150k had been saved.

Incorrectly Completed Energy Assessments

A Senior Quantity Surveyor was responsible for a team of surveyors who visited Council properties to undertake energy assessments. He found that many of the assessments the team submitted were missing information, so he filled them in himself; when he collected data, he found this accounted for 1 day of his working week. He set new expectations that the team would be re-visiting jobs to collect missing information, and reinforced progress by delivering the data on improvements. Within 2 weeks errors had fallen by 95%, saving £15k every quarter.

Repeat Domestic Bins Requests

A team manager identified a high level of repeat domestic bins requests from customers. He gathered data and found that there was a time-consuming 11-stage process for a new bin to be ordered; sometimes the customer would make a duplicate request if they hadn't received a

replacement bin. The team manager found that neither the call centre nor the refuse supervisors were checking for duplicate orders in the system. He reset expectations to all and delivered weekly feedback on progress. Within 4 weeks duplicate requests had reduced to zero, saving £10k.

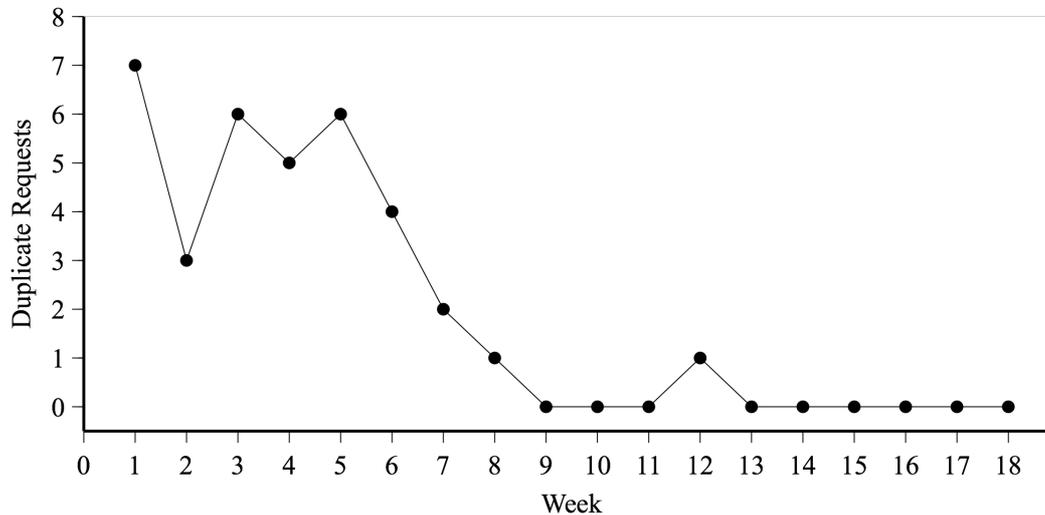


Figure 3. This figure shows the number of duplicate bin requests recorded across 18 weeks of the intervention

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References

- Box, G. E. P. 2006, *Improving almost anything: Ideas and essays*. Wiley-Interscience.
- Daniels, A., and Daniels, J. 2005, *Performance management: Changing behavior that drives organizational effectiveness*. (4th ed.) Atlanta, GA: Performance Management Publications, a division of Aubrey Daniels International, Inc.
- Fox, D. K., Hopkins, B. L., and Anger, W. K. 1987, The long-term effects of a token economy on safety performance in open-pit mining. *Journal of Applied Behavior Analysis*, **20(3)**, 215-224.
- Nolan, T. V., Jarema, K. A., and Austin, J. 1999, An objective review of the Journal of Organizational Behavior Management: 1987-1999. *Journal of Organizational Behavior Management*, **19(3)**, 83-114.
- Olson, R., and Austin, J. 2001, Behavior-based safety and working alone: The effects of a self-monitoring package on the safe performance of bus operators. *Journal of Organizational Behavior Management*, **21(3)**, 5-43.
- Sigurdsson, O. S., and Austin, J. 2006, Institutionalization and response maintenance in organizational behavior management. *Journal of Organizational Behavior Management*, **26(4)**, 41-77.
- Wilk, L. A., and Redmon, W. K. 1997, The effects of feedback and goal setting on the productivity and satisfaction of university admissions staff. *Journal of Organizational*

Behavior Management, **18(1)**, 45-68.