executive briefing

aim research

Advanced Institute of Management Research

Making sense of workplace performance

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AIM – the UK's research initiative on management

The Advanced Institute of Management Research (AIM) develops UK-based world-class management research. AIM seeks to identify ways to enhance the competitiveness of the UK economy and its infrastructure through research into management and organisational performance in both the private and public sectors.

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- Undertaking a wide range of collaborative research projects on management…
- Disseminating ideas and shared learning through publications, reports, workshops and events…
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- To enhance UK competitiveness and productivity.

AIM's Objectives

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- Conduct research that will identify actions to enhance the UK's international competitiveness
- Raise the quality and international standing of UK research on management
- Expand the size and capacity of the active UK research base on management
- Engage with practitioners and other users of research within and beyond the UK as co-producers of knowledge about management

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AIM research themes

Current AIM research projects focus on:

UK productivity and performance for the 21st century.

How can UK policymakers evaluate and address concerns surrounding the UK's performance in relation to other countries?

National productivity has been the concern of economists, government policymakers, and corporate decision-makers for some time. Further research by scholars from a range of disciplines is bringing new voices to the debates about how the productivity gap can be measured, and what the UK can do to improve the effectiveness of UK industry and its supporting public services.

Sustaining innovation to achieve competitive advantage and high quality public services.

How can UK managers capture the benefits of innovation while meeting other demands of a competitive and social environment?

Innovation is a key source of competitive advantage and public value through new strategies, products, services and organisational processes. The UK has outstanding exemplars of innovative private and public sector organisations and is investing significantly in its science and skills base to underpin future innovative capacity.

Adapting promising practices to enhance performance across varied organisational contexts.

How can UK managers disseminate their experience whilst learning from others?

Improved management practices are identified as important for enhancing productivity and performance. The main focus is on how evidence behind good or promising practices can be systematically assessed, creatively adapted, successfully implemented and knowledge diffused to other organisations that will benefit.

executive review

We live in a world that moves at a bewildering speed. At work we are bombarded by information. There is written information in the form of reports, team working documents, schedules, regulations, emails and much more. Not to forget all the information provided verbally in meetings and other face to face encounters. Plus all the visual information, designs, videos, posters, pictures. And all the other stimuli encountered in the workplace.

Faced with all this information, individuals are unable to make rational decisions at every point a decision is required. Instead, to help make sense of their working environment, employees – like their managers – construct simplified mental models of their world. They then use these models to inform their actions. Once such mental models are formed they can be extremely difficult to change; regardless of changes in the external environment. And they can have a significant impact on employee well-being and performance.

Once such mental models are formed they can be extremely difficult to change; regardless of changes in the external environment.

For an organisation to implement policies that improve employee morale, that motivate and engage the workforce, it first needs to understand how its employees construe their working environment. What shapes the way they view the world? What mental models have they formed? Clearly, it is not possible to open a person's head to reveal these mental models. However, it is important that the essence of the individual's underlying understanding regarding their working environment is captured, i.e. what is important and how these issues interrelate. Our research shows that one way to reveal these dynamics is a technique called causal cognitive mapping.

Causal cognitive mapping was used to reveal the way in which 200 call centre employees made sense of their working environment. Using this mapping method, our findings suggested that call centres are far from the 'sweatshop' environments that they are portrayed as in the media. It also revealed the futility of using a one size fits all performance measurement system, when the cause maps revealed such marked differentiation, not only between employees in different companies, but also among employees in very similar situations in the same organisation.

This study may have focused on call centre employees, but causal cognitive mapping is an invaluable tool for assessing the drivers behind the individual actions of employees in other work environments. Causal cognitive maps reveal information in such a way that facilitates the development of explicit policies to ensure employees are more engaged, and therefore benefit the organisation a whole as well as the individual.

introduction: understanding the call centre industry

The call centre industry employs a large number of the United Kingdom and global workforce. In the UK alone, nearly 900,000 people work in the industry, and the number is increasing steadily.

Teleservices are concentrated in call centres to achieve cost savings. Call centres, however, have received a lot of negative coverage in the media, coverage that suggests that the industry is characterised by substantial expense, high employee turnover, and low performance.

As a result, call centre operations have attracted considerable attention from trade unions, academics and, more recently, policymakers.

Indeed, from a practitioner perspective, the message being communicated is that the industry is essentially a high turnover 'sweatshop', established in areas of high unemployment, employing people with low skills, and offering little in the way of training and advancement.

As a result, call centre operations have attracted considerable attention from trade unions, academics and, more recently, policymakers. The key concerns expressed by these diverse stakeholders are that the jobs in call centres are poorly designed from an occupational health perspective, and that performance levels in UK call centres are, allegedly, falling behind those of other countries.

In the short and medium term at least, UK call centres are predicted to expand. However, in some sectors of the industry (finance and telecommunications are two examples in recent months), jobs are being lost, often with the work relocated outside the UK to places like India. When this happens the events are inevitably well-publicised in the popular press, TV and radio.

The typical call centre has a very flat organisational structure, and consequently the majority of people working in the call centre industry are working as front-line telephone operatives. Labour costs represent around 60 percent of total call centre expenditure. These front-line telephone operatives work at the customer-company interface. They are in direct contact with, and representing the company to, the customer. In fact such employees are often the only contact that the majority of customers have with a call centre organisation.

In most companies measuring performance is a key to improving performance. Therefore it is important to understand what drives performance. Indeed, in a people based business like call centres, with so many of the workforce in direct contact with the customer, and with customer service at the core of the call centre's function, the ability to understand what drives performance across the call centre workforce is essential.

It has been said in the past that the study of work performance has suffered from a 'silence of employee voices'. At this point in the evolution of the call centre industry it is vital to understand what drives the performance of the individual front line operative. Is it, for example, workforce wide factors that affect performance, or is it dependent upon each individual, or a mix? Without first understanding how these front line employees view their employment situation, how can it be possible to better manage performance and raise morale in the industry? And this is no less true in many other types of business.

That is why we suggest a distinct approach for gaining insight into the complex process of employee motivation and performance. It is an approach based on recent developments in the emergent field of managerial and organisational cognition, focusing on the concept of sensemaking.

In this briefing we explain and discuss the sensemaking concept, and in particular the role of causal cognitive mapping for gaining insight into how employees make sense of their working world. We illustrate our approach with two examples of participant cause maps, and conclude by detailing key implications of our findings for understanding and managing employee and organisational performance.

decision making on the front line

For a long time it was assumed that decision making processes in organisations were inherently rational. Employees – like managers – were seen to define problems, and generate, consider and evaluate alternative solutions, making what would objectively be considered the 'best' decision in the circumstances. If this was the case then organisations could introduce policies designed to achieve a certain end and confidently predict their effect across the organisation.

Today this view is generally accepted to be unrealistic. Many employees work in an environment where information overload and ambiguity are commonplace. In order to understand such a world, individuals will simplify their environments in a way that allows them to understand them better.[1]

1 Information processing

Researchers have, over the last few decades been increasingly interested in cognition: – the way people process and make meaning or sense of information and knowledge – in management and organisations.

This approach to the analysis of work-related behaviour has already benefited organisations through the development of various ways to enhance employee productivity and well-being.

Sensemaking and enactment

When seeking to interpret and understand the thought processes of employees related to their decision making, the issue of whether their view of the world or decision choices are 'correct' or rational is meaningless. This is because the correctness of a decision depends on the point of view that is being used to evaluate it and what is perceived as real is seen as being real in its consequences.

Through what are termed 'enactment' processes, employees 'create' environments in order to make sense of their worlds. Once created these worlds act back upon them as if they are true, objective entities; and in doing so impose constraints on what is considered possible.[2]

The way that employees process information and knowledge, in other words the way that they make sense of their working world, can have a significant impact upon the health and well being of individuals and organisations – which is why it is so important to analyse and understand these processes.

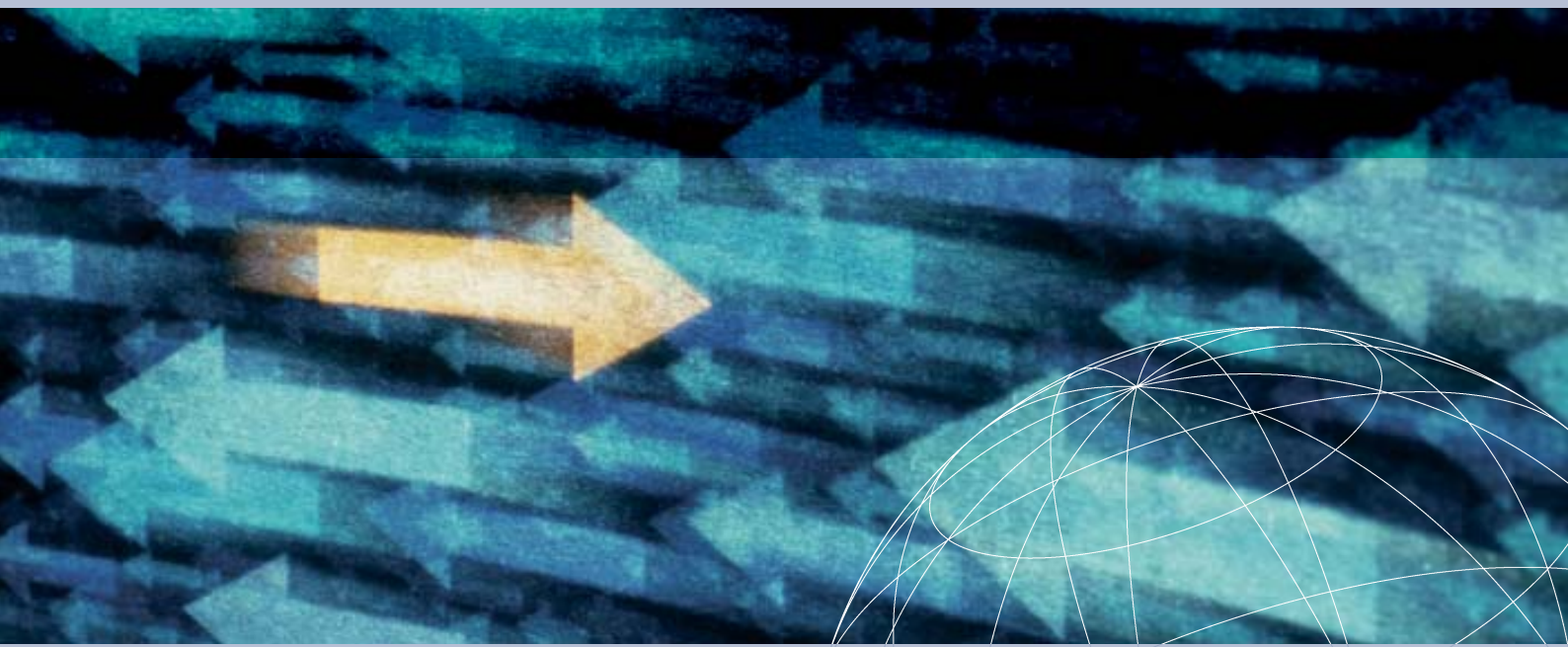
In one study researchers discovered that the anticipation of losing their job affected the health of employees well before any formal change of their actual employment status.[3] If an organisation has an atmosphere of job insecurity, and the employees feel that their jobs are at risk, the organisation may suffer financially from the associated costs of increased absenteeism and sickness resulting from the decrease in employee well-being.

2 Understanding mental models

Researchers attempting to understand the risks of stress on employees approached the subject by looking at the thought processes of employees. They discovered that simplified representations of reality that employees construct – known as mental models – influenced their subsequent performance, psychological well-being, and physical symptoms.[4]

One of the most urgent problems facing managers today is how to engage employees in employment relationships that will enhance both individual and organisational performance. One challenge is that any actions management may take can be interpreted in different ways, depending on each individual's views and motivations. So a manager can implement what appear to be appropriate strategies to improve employee effectiveness and well-being; however, those actions can be perceived quite differently from the employee's perspective.

If an organisation is able to find an effective way to determine and understand the mental models that its employees form of their jobs, then it will be able to better understand the dynamics of work motivation and performance, and use this understanding to its advantage, to increase employee engagement in the workplace.



In this briefing we explain how it is possible to investigate the mental models of employees – in this case call centre employees. Our research has contributed to this goal by extending the investigation of sensemaking processes beyond management, and focusing on the call centre front line worker. In doing so we investigated the subjective perceptions of operatives and team leaders, regarding what they considered to be the most important features of their work and organisations, and in particular their views concerning the drivers of personal and organisational performance and well-being.

causal cognitive mapping: how it works

Causal cognitive mapping reveals the way that individuals think, feel and make sense of their world. It can be used to show how the individual interlinks various decision making factors depicted as a series of arrows and boxes. It is useful, not only because it reveals how individuals perceive their world, but also because it does so in a way which allows an organisation to know which actions it could take in order to have a beneficial result – for the individual and the organisation.

1 A middle ground approach

There are two main approaches to causal cognitive mapping – ideographic and nomothetic. There is no consensus among researchers as to which is the most appropriate one to use in order to find out about people's belief systems.

An ideographic approach is a very detailed look at a select number of examples. So in order to find out what an individual believes causes changes in x, requires a very thorough examination of all the circumstances surrounding x. The problem with this approach is that it may not be possible to generalise the findings with confidence to a broader population.

A nomothetic approach gathers a lot of examples and then looks for common patterns. It makes it easier to compare results across a wider population; however, the findings of this approach lack richness compared to those obtained using the ideographic approach.

Causal cognitive mapping reveals the way that individuals think, feel and make sense of their world.

An ideographic approach involves the participants using their own words to express their thoughts. The nomothetic approach, in contrast, involves a large number of variables, usually in the form of a structured questionnaire.

The approach we used to study frontline employees in call centres comprised a mixture of the two. It involved taking a large number of variables that might be expected to be found in the situation under investigation, and allowing the participants to select a restricted number of these to include in their causal cognitive maps. In this way it ensured that the maps were both meaningful to the individual and comparable with each other.[5]

In this study 55 constructs were used that were expected to feature to varying extents in the way front line employees thought about their work environment. These included things like 'pay levels', 'my physical health', 'noise levels' and 'training levels'. These were spread evenly across 11 categories including 'Physical environment and equipment', 'Management and employee relations' and 'Job design and work characteristics'. These constructs were presented on a random basis to avoid influencing the participants by the order of occurance. Once the call centre employees had selected the constructs, they then linked them by pairs showing the perceived causal relationship between them. For example, they might posit a link between pay levels and job satisfaction, with current pay levels leading to an increase in job satisfaction; or, alternatively, having an adverse effect on it.

The research sample

The sample comprised two hundred participants working in five organisations. Their ages ranged from 18 – 64 years (mean 35.82), and length of service in the employing call centre ranged from 0.02 – 23.25 years (mean 5.17). The organisations spanned a range of sectors namely financial services, distribution and supplies, emergency services, and a mainstream branch of public services. The fifth offered generic call centre services on an outsourced basis to a variety of client organisations.

2 Making sense of the call centre environment

The results of the causal mapping exercise showed that none of the 11 categories stood out, relative to the others, to a significant degree. 'Management and employee relations' was the most cited category (16.1 percent of the total constructs chosen fell into this category), followed by 'Performance and satisfaction' (15.6 percent). Each of the 55 individual constructs was chosen by at least one participant and only three were cited by at least 50 percent of participants, namely: 'my job satisfaction' (cited by 63.5 percent of participants); 'customer satisfaction' (58 percent); and 'level of support from team leaders and supervisors' (56 percent).

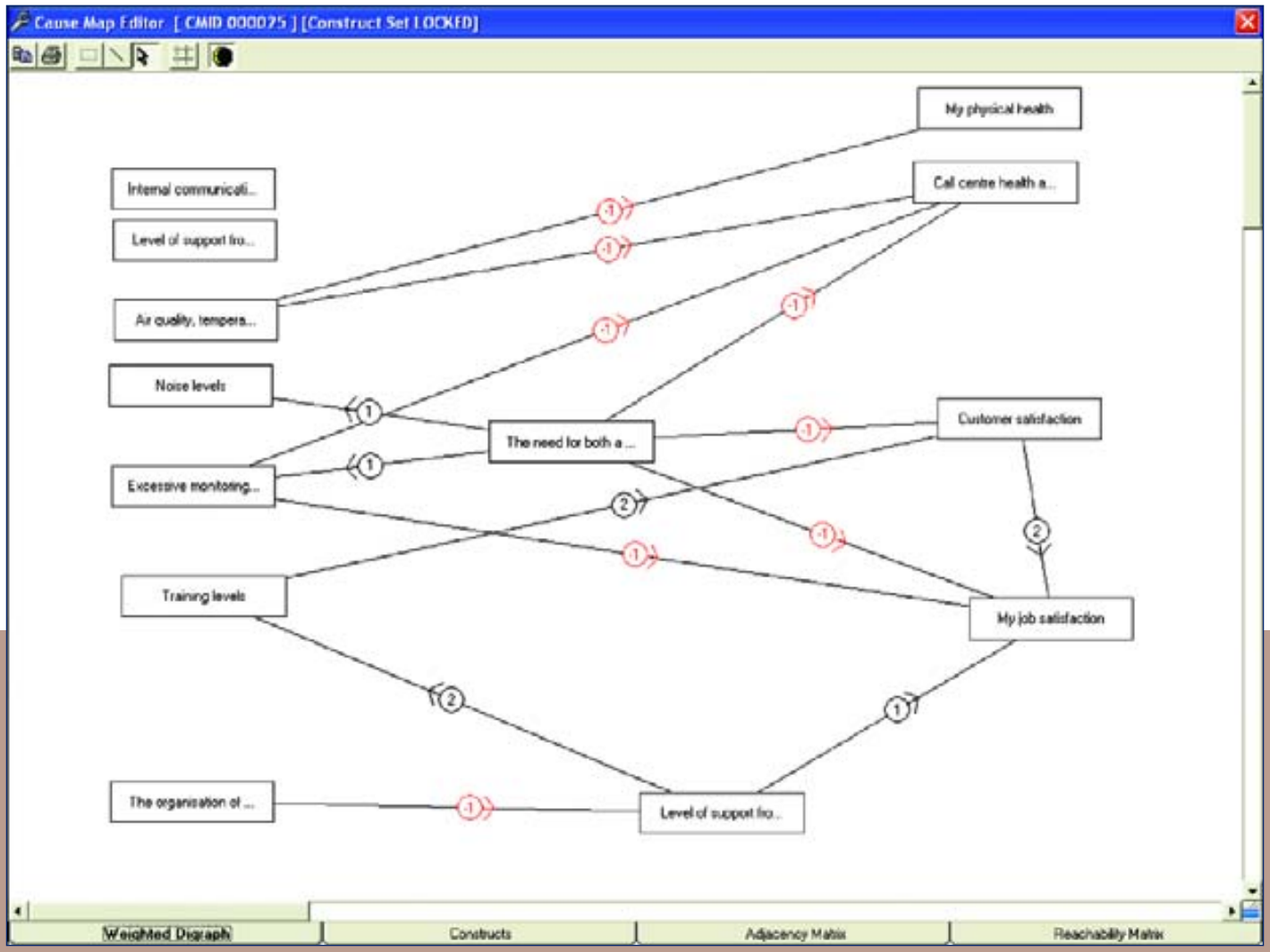
There was a statistically significant difference across seven of the 11 categories across the five organisations, namely 'Economic and political drivers', 'Physical environment and equipment', 'Organisational structure and design', 'Tasks and technology', 'Job design and work characteristics', 'Health and well-being', and 'Identity'. This shows that organisational context dramatically affects what individual employees attend to in making sense of their employment situation.

There was also a lot of difference within organisations. This is highlighted by Figures 1 and 2. These diagrams illustrate the cause maps of two front line employees who work in a call centre organisation supporting the emergency services.

It is clear from Figure 1 that the map for participant A is relatively short on detail with few interconnections between the various nodes depicted. The call centre employee who completed this causal cognitive map is concerned primarily with factors associated with the physical environment, such as air quality, temperature and lighting, and the level of work monitoring, which are seen to impact negatively on personal and organisational well-being, and job satisfaction.

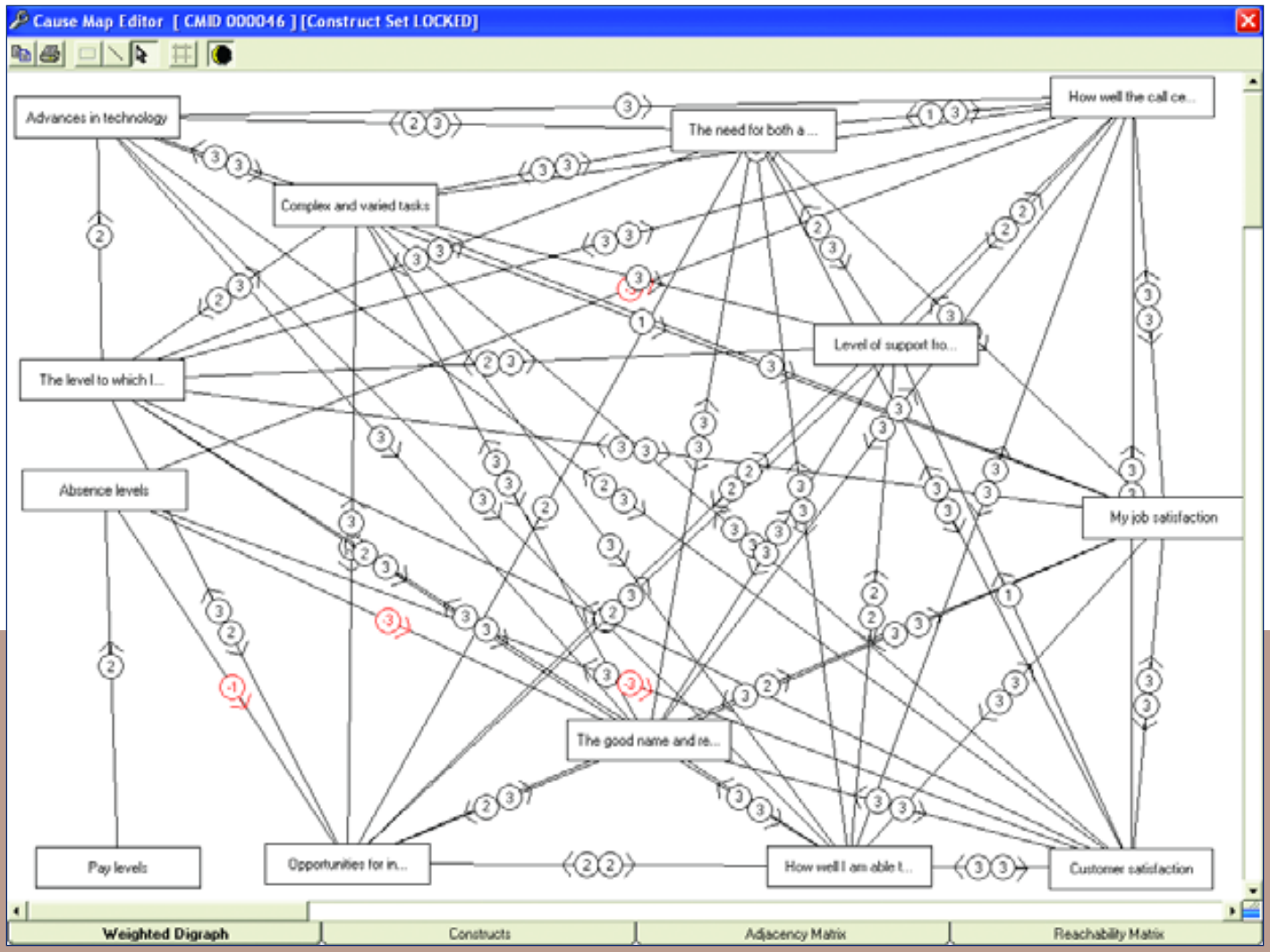
The second map, associated with participant B (Figure 2), is considerably richer in nature, with many more interrelationships. Task complexity and advances in technology are of greater importance to participant B than to participant A, as are the good name and reputation, and the performance levels of the call centre organisation.

Figure 1: An illustrative cause map (Participant A)



Note: 1. The magnitude of a given effect is defined as 1 = increase slight; 2 = increase moderate; 3 = increase strong; -1 = decrease slight; -2 = decrease moderate; -3 = decrease strong

Figure 2: An illustrative cause map (Participant B)



Note: As in Figure 1, the magnitude of a given effect is defined as 1 = increase slight; 2 = increase moderate; 3 = increase strong; -1 = decrease slight; -2 = decrease moderate; -3 = decrease strong

conclusion

Causal Cognitive Mapping: A route to employee engagement

A number of important findings arise from this study.

The importance of causal cognitive mapping techniques:

To begin with, it demonstrates how causal mapping is a useful device, not just at managerial levels, but also at lower levels of the organisation. In this case, we focused directly on 200 frontline call centre employees and their cause maps. While various large scale studies looking at call centre environments have been conducted, the use of cause maps allowed us to capture a richer, more insightful picture of how the employees view their work environment than is possible by other methods.

No sweatshop environment:

The exercise reveals that, at this point in the evolution of the call centre industry, there is not one consistent dominating viewpoint of the working environment among call centre employees. Indeed, there are a variety of differences in the way that call centre employees perceive their work environments, both across different organisations and within the same organisation.

The motivations of individual employees vary massively, as does their understanding of performance drivers.

Contrary to popular conception, the responses of the front line employees were not what would be expected from people working in a sweatshop or an excessively controlled environment. When choosing the constructs to be used in the causal cognitive maps, for example, there was not undue emphasis on the constructs relating to tasks and the level of control over them.

Throwing doubt on standardised performance metrics:

In particular, the results of this study have important implications for the understanding and management of employee performance and productivity. They suggest that the work setting can substantially change the underlying dynamics of the employee-organisation relationship.

Different systems and procedures are sensitive to the local organisational context. What use then are standardised metrics of performance, if such fundamental differences are to be found in job contexts?

Understanding employees' mental models is key:

The motivations of individual employees vary massively, as does their understanding of performance drivers. This is clear from looking at the examples of the cause maps for participant A and B (Figures 1 and 2). Both individuals are male and working on the front line in the same organisation, faced with the same 'objective' environment in terms of their job requirements – both work in the same team with the same team leader and management.

This just highlights the idiosyncratic nature of the employment relationship. Each individual forms a psychological contract – the implicit agreement between employer and employee concerning the expectations and obligations held by each party in the employment relationship. These expectations are then encoded in the form of a mental model – as evidenced by the cognitive causal maps. Once formed these mental models are difficult to change, giving rise to inertia and resistance to change.[6]

It is on the basis of their subjective perceptions, their mental models, that employees will make crucial decisions, such as: the decision to come to work in the morning; the decision to come to work on time; the decision as to what degree of effort and enthusiasm to invest; and ultimately the decision whether or not to leave the organisation. Each of these decisions will, to some degree, influence overall individual, team and organisational performance; and in this case, the health and productivity of the call centre industry.

This study has shown that causal cognitive mapping can be used to reveal the mental models of employees, the findings of which can then be used as a sophisticated basis upon which performance and reward management policies can be developed that take account of the particular needs and aspirations of the individual employee.

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