Lean management, the restructuring of work in the public sector and implications for employee well-being

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The Coalition Government's programme of deep cuts to public spending, services and jobs has been accompanied by a discourse of 'fairness' centred on a concern to reduce expenditure whilst protecting service users and front line jobs. This seems somewhat incongruous in the light of recent developments in local government, education and health. However, it is not front line services and associated jobs that are the subject of this article but instead, the greatly neglected area of developments in the back office. The back offices of public administration in local authority and government departments have been a particular target for cuts over the past decade and large numbers of jobs have already been removed with many more signalled in George Osborne's latest Comprehensive Spending Review. This article focuses on the processes by which administrative services are maintained with significantly fewer staff and the consequences for employee well-being. The author's research with Bob Carter (de Montfort University), Debra Howcroft (Manchester), Helen Richardson (Salford), Andrew Smith (Bradford) and Phil Taylor (Strathclyde) analysed the imposition of lean management techniques (hereafter, referred to simply as `lean´) at six processing centres of one of the largest civil service departments in the country. The following account, which is a summary of a paper first presented at the International Labour Process Conference, Rutgers University, New Jersey, 2010 and subsequently published in *New Technology, Work and Employment* (2011, Vol.26, Issue 2), provides some insights on the true nature of lean in white collar environments and its impact upon employee autonomy, skills and health.

We adopted a methodology that accesses workers' perceptions and experiences from the front line of public sector reform. The research was conducted in 2008-9 with follow-up interviews in 2010. Six sites were selected as those central to processing work and subject to new lean procedures. Initial access to the research sites was facilitated by the UK's largest civil service trade union, PCS (Public and Commercial Services Union) and we began by interviewing branch representatives (across grades and functions) from each of the sites. This cross-section of staff primarily involved those working at the 'frontline' within processing. A number of line managers were also interviewed along with national PCS officials. A total of 36 interviews were conducted. Following this, an 11-page staff questionnaire was designed based on initial interview analysis. This was distributed to sample populations of staff in each of the six processing sites. A total of 840 (51%) were returned.

Lean comes to the Civil Service

Whilst the genesis of lean can be traced back to earlier attempts to introduce efficiency measures in the UK civil service during the 1980s and 1990s, the last New Labour Government's drive for improvements in efficiency and labour productivity in the public sector provided the more immediate catalyst for its introduction. The adoption in 1998 of Public Service Agreements monitored by Public Services Productivity Panels aimed at establishing three year plans and specific targets for improvements in services. Many of the panels were led by private sector managers. Amongst panel recommendations for the civil service department under study were the creation of regular and reliable measurement of work processes, validated in all cases by statistical analysis; more resources for the configuration of data to monitor performance against targets; and setting new staff targets aimed at improvements in customer service and accuracy and completeness of tax information. These ideas were subsequently developed by the publication of the Government-commissioned Gershon Report in 2004. In the context of a government announcement of over 80,000 job cuts in the civil service, Gershon proposed major organisational changes in the civil service aimed at creating more efficient work organisation, improving staff utilisation through active sickness absence management and using 'back office change agents' (management consultants) to facilitate reform.

Lean techniques constituted the core operations system for the Department's so-called 'PaceSetter Programme' which aimed to secure a 30 per cent increase in productivity. Consultants were paid to redesign work processes and support management in legitimising the change process on the basis that lean was supposed to enable fewer staff to complete constant volumes of work more efficiently. Lean advisors were also employed in some sites to implement so-called 'Value Stream Maps' for each work process and to design team configurations and management control architecture. The most significant development was the use of work study techniques of a type associated with untrammelled Taylorism. These had two objectives. The first was to appropriate workers' tacit knowledge and codify this into a set of tightly supervised standard operating procedures. The second was to use such data to generate sets of optimum work cycle times for the creation of individual and team performance targets. To effect this, staff were subject to detailed time and motion scrutiny by different lean advisers and line managers.

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Despite the PaceSetter programme's claim of a new, more open management style, our interviews highlighted an increasingly arrogant and aggressive managerial approach to worker consultation during this period, an approach that rendered any constructive criticism of lean as oppositionalist and something to be ignored. For example, one supervisor observed:

"*Any criticism no matter how constructive is always met with a shout of 'negative!' and staff are encouraged not to pass comment. It is as if everything is set in stone and there is no longer any flexibility*."

(Team supervisor, Site F)

Lean and management control

'Whole case working' characterises the work routines of many civil service staff employed on processing work. Typically, an item of work such as a benefit claim, tax return or pension application would be passed to an administrative officer who would then process the item, answer phone calls, deal with all correspondence, ensure compliance with regulations and standards and complete the job to its conclusion. Whilst targets for work output existed these operated as normative understandings of how much case work could be completed in a day, week or month. Most staff enjoyed sufficient autonomy and job discretion to manage their own workloads within such broad parameters. How did such a routine change under the lean regime? In the interests of work discipline and flow line efficiency whole case working gave way to so-called 'value streaming', a key process in the lean management toolkit (Womack and Jones, 2003). Each team worker took on the responsibility of a single fragmented task (strictly defined by standard operating procedures) whilst the job itself was expected to flow efficiently from worker to worker in Taylorised - or Toyotaised - assembly line fashion.

Our interview data and staff comments on questionnaires revealed widespread and profound criticism of the de-skilling and job degradation that resulted from these changes. The following worker comment was typical:

"I used to have great pride in the job. I was very good at it, very experienced and enjoyed helping trainees. I felt like I made a difference to people's lives (as in made sure that they paid the right tax). I dealt with the same individuals for years and I built up a rapport with them. Now I feel like a cog in a machine. The standard of work in the Department is now desperately poor. There is no taking responsibility any more. The job is so fragmented that no one cares about the whole picture, just their little bit."

(Administrative Officer, Site A)

Thus, the skill and employee discretion required for whole case working was effectively eliminated. Management control and workplace discipline was further enhanced by intrusive hourly supervisory monitoring of workers' output performance (the time of front line managers became almost entirely devoted to measuring the hourly output of their subordinates) augmented by the use of new disciplinary procedures for staff who failed to meet targets and by new sickness and absence procedures aimed at forcing sick staff into work.

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One administrator described the deleterious consequences of the internalisation of this control system:

"*Lean, by its very name, appears to imply the removal of excess staffing and maximising productivity. It is, therefore, very strange that there is a grade of employee who produce absolutely nothing and to all intents and purposes appear to be an overhead, required only to count the work of others. Those others are the workhorses who are driven, albeit subliminally, by the tyranny of the hourly count, to the extent that many of the workhorses almost deny sub-consciously basic needs such as going to the toilet and getting something to drink.*"

(Administrative Officer, Site B)

The staff survey attempted to measure more systematically the impact of lean on workers' job discretion and skill utilisation, features of the lean labour process that advocates such as Womack *et al*. (1990) emphasise in a positive light. Data of pre- and post-lean job discretion patterns along with workers' assessment of the impact of lean on job skills are shown in Tables 1 and 2. As Table 1 indicates, over three-quarters of staff felt that prior to lean they set their own pace of work, decided when to take a break and planned how they carried out their work either 'quite a lot' or 'a great deal'. The post-lean experience was a mirror image of this. Other indicators of job discretion also declined under lean. For instance, a substantial proportion of staff felt that their ability to control their working hours had declined since lean's introduction whilst the monotony of work increased and the capacity of staff to use their own personal judgement and initiative decreased significantly.

> Eight per cent of staff felt that lean had generated new skills…seventy per cent felt that lean had reduced the skill content of jobs.

Table 2 provides additional confirmation of a deskilling of the civil service labour process under lean. Only eight per cent of staff felt that lean had generated new skills whilst seventy per cent felt that lean had reduced the skill content of jobs. Moreover, nearly three quarters of staff indicated that rather than increase job skills, lean had resulted in task enlargement, a pattern that suggests an intensification of effort rates.

Table 1: Job discretion before and after lean

	Not at all (%)	Just a little (%)	A moderate amount (%)	Quite a lot (%)	A great deal (%)
To what extent did you set your own pace of work					
Pre-lean	2	3	18	52	26
Post-lean	55	29	11	4	1
To what extent did you decide when you take a break from work					
Pre-lean	2	3	17	45	33
Post-lean	19	37	24	15	5
To what extent did you plan how you carry out your work					
Pre-lean	2	2	14	42	41
Post-lean	56	29	11	4	1
To what extent did you control your working hours					
Pre-lean	2	1	8	40	50
Post-lean	10	18	31	25	17
To what extent did you repeat the same tasks over and over again					
Pre-lean	12	32	34	14	8
Post-lean	7	6	13	23	50
To what extent did you use your personal initiative and judgement					
Pre-lean	1	4	17	48	31
Post-lean	35	35	19	8	3

Table 2: Impact of lean on job skills

	Strongly agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)	Undecided (%)
Lean has given me new job skills	2	6	47	43	2
Lean has given me more tasks	23	50	16	6	5
Lean has reduced my job skills	34	36	21	4	6

Effort intensity and employee well-being

Our research generated consistent evidence of intensification through key informants' descriptions of material changes to work organization and the decomposition of labour processes. Many workers' comments on questionnaires articulated experiences of being driven to the limit, experiences of a system of staff deployment and management control that greatly reduced individuals' ability to control the pace and quantity of their work. As one respondent commented:

"The job now is very stressful and I have been near breaking point several times since working under lean. I never ever felt like this before. I used to love my job, now I feel at times like an empty shell. I am constantly sore from the repetitive nature and pressure to reach targets so don't take enough breaks."

(Administrative Officer, Site D)

The staff survey employed a number of questions to investigate this. When asked to compare the extent to which they felt pressurized as a result of work patterns before and after lean, just one per cent of respondents indicated 'very pressurized' prior to lean whereas 63 per cent felt 'very pressurized' after lean. Additional indicators of this are provided in Table 3. Over 80 per cent of staff felt that the volume, pace, intensity and pressure of work had all increased since the introduction of lean. Large proportions indicated that these had increased a lot. At the same time, individual control over work (which includes the ability to counter those factors that can contribute to work intensity) had decreased – 78 per cent of staff indicated that this had decreased a lot.

Table 3: Work intensity since the introduction of lean

	Increased a lot (%)	Increased a little (%)	Decreased a little (%)	Decreased a lot (%)	No change (%)
Volume of work	56	27	4	2	11
Pace of work	63	22	4	2	9
Intensity of work	65	24	3	2	6
Pressure of work	76	19	1	1	3
Personal control over work	2	2	13	78	5

The prime reasons for these patterns of effort intensification were those linked to the new system of lean work flow, which provided a more efficient consumption of labour power through 'technological' means, and the new management control regime which, with its systems of work measurement, targets and surveillance, offered a more complete disciplining of staff behaviour and performance.

This widespread experience of new work intensity had a markedly negative impact upon the health and well-being of staff, particularly with regard to stress-related health concerns and musculoskeletal disorders. National surveys have established the prevalence of these problems within overall patterns of work-related health cases (for example, HSE, 2010). However, whilst in-depth cases studies have established high levels of work intensity and stress on lean production lines in the automotive sector (see Danford, 1999; Stewart *et al*., 2009) there is a paucity of workplace-level evidence tracing the occupational health and safety consequences of work restructuring in office environments.

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Our survey showed that whilst only six per cent or less of staff experienced stress and a range of related symptoms either daily or several times per week prior to lean these proportions rose considerably after lean's introduction. For instance, 36 per cent of respondents reported suffering from stress daily or several times per week, as did 27 per cent with headaches, 49 per cent with mental fatigue and 49 per cent with physical tiredness. There was also a significant increase in the incidence of musculoskeletal problems: 38 per cent of respondents reported stiff neck symptoms daily or several times per week, as did 38 per cent with stiff shoulders and 30 per cent with backache.

Conclusion

At the different processing centres sampled, the re-organisation of work flow and work processes under lean involved the deployment of management techniques that were purely Tayloristic in form and which generated outcomes for front line workers that constituted a negation of humanistic concepts of work enrichment and empowerment. The fragmentation of work, systematic use of time and motion studies and constant surveillance of worker activity bore very close similarities to the cases of clerical labour rationalisation and degradation under the scientific management of the capitalist corporate office identified four decades ago by Braverman (1974).

This picture of a harsher reality for contemporary service sector workers is not in of itself new. The development of call centre work organisation in many customer service offices has embodied forms of management control that draw upon the same scientific management principles. Boreham *et al.* (2008: 72) note that a typical call centre technical control system 'not only paces and directs work, but assists management in its monitoring, thus information gathering, measurement and surveillance capacities are much greater.' The adoption of lean in the processing centres did not require the same level of technological sophistication in terms of ICT usage but the mechanics of lean along with an omnipresent supervisory surveillance provided management similar levels and forms of control over the labour process. Indeed, it is notable that in the so-called knowledge-based, post-bureaucratic era, some brownfield public sector workplaces in the UK are now becoming subject to systems of labour subordination and management control that would not have looked out of place in the mass production sites of the early Twentieth Century.

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