Quality at any cost? – Examining the hard reality of job reductions while promoting the quality agenda.

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1. Introduction

In hard times where difficult decisions have to be made, how can we detach personal/ethical considerations from purely evidence based decision making? Numerical data regarding resource requirements clearly identify potential savings and reductions. Can these be translated into hard cash without regard to human feelings and while still encouraging quality data processing and workforce loyalty?

This paper sets out to put into context, the dilemmas faced by operational managers operating in the real world and juxtaposes quality and cuts. It describes how one branch within the Business Data Division (BDD) of the Office for National Statistics (ONS), dealt with the conflicting demands of reducing staff numbers to meet efficiency targets, at the same time as promoting its Quality agenda

2. Background

The BDD is responsible for the collection and validation of unit level data, from businesses across the UK. It deals with approximately 80 annual, quarterly and monthly business surveys and over 1.7 million survey questionnaires are despatched to approximately 320,000 businesses each year.

The business survey data collected by BDD feeds into the production of the key economic indicators produced by ONS, used for economic policy making by the UK government. They are also used by a wide range of users, including academics, industry and the public. The data collected by BDD also enables ONS to meet a range of EU regulations.

The BDD has followed a programme of change covering a number of years and realised considerable benefits and savings.

In 2008, following several reorganisations within BDD, a functional split of activities and the introduction of some selective editing, separate monthly and annual survey branches were created.

The actions detailed in this paper concentrate on the work of the Integrated Annual Unit, the largest branch within BDD where ONS's largest business surveys are edited and validated at micro level. These surveys include the Annual Business Survey (ABS), the Annual Survey of Hours and Earnings (ASHE), the Business Register and Employment Survey (BRES) and the Products of the European Community (PRODCOM) survey.

The Senior Management Team at ONS endorsed the use of Lean Six Sigma as a preferred method of process improvements. A Continuous Improvement Zone was created in 2012 to develop a capability to allow the Office to apply a structured approach to process improvement, improve quality and demonstrate value for money. A number of staff achieved certified Lean Six Sigma accreditation, namely Yellow and Greenbelt. All BDD staff attended White Belt training, the aim being to create a lean culture where ideas for change were generated by staff at all levels.

The basis of the work outlined in this paper comes from a Greenbelt project on Workforce Planning. The aims of this project were:

To make best use of people within the unit, so that:

- workloads are fairly distributed
- peaks and troughs in workflow are reduced
- staff morale is improved

But with no reduction in the quality of our service to customers

3. The Challenge

In order to meet Government imposed efficiency targets, there was a need to improve productivity while preserving quality. The first step taken was to gain a better detailed understanding of the workflow across the unit and to explore customer needs. The majority of people involved in the editing and validating processes are Administrations Officers (AOs) who are staff on the basic pay grade. Their salaries account for approximately 90% of the unit's expenditure.

Initial evidence seeking activities included collecting data relating to the despatch and receipt dates of business questionnaires, determining volumes and patterns of receipt; assessing average rates at which AO staff process questionnaires which fail validation and essential customer delivery dates.

Additionally, AO staff were asked to complete a brief survey so that experience and perceptions about respective workloads could be gauged.

Our customers are all internal to ONS. We deliver cleaned micro data to our Results, Analysis and Publication colleagues to an agreed timetable and at a quality level appropriate to their needs and within budgetary constraints.

We discussed their priorities and explored with them what their key requirements were in terms of quality.

4. Considering the Evidence

We considered the evidence collected and converted the raw data relating to error clearance, questionnaire return patterns and validation failure into working units which we called AO months per survey. That is, using the predicted rate at which an AO grade employee can process returned survey questionnaires, we calculated how many AOs we would need per month to meet our business commitments. This information was entered onto an annual chart which provided a good overall picture of the work across the year and survey cycle.

Fig 1 below displays the workflow as AO months required for each survey across the year if work is processed in the month it is receipted.

90.0 80.0 BRS BRES 70.0 ASHE 60.0 ■ Stocks 50.0 Prodcom Capex 40.0 Business Spend 30.0 ■ GOVERD 20.0 ■ BERD (S) ■ BERD (L) 10.0 ABS 0.0 Jan Feb Mar AprilMay June July Aug Sept Oct Nov Dec

Fig 1 Survey Requirements – in AO months.

This immediately confirmed anecdotal evidence that the workflow across the year was uneven.

We then entered survey delivery dates and discussed detailed customer requirements to ensure quality was not sacrificed for the sake of economy. Our customers agreed that a more even workflow could have a positive effect on quality and should reduce last minute or rushed decision making.

At this point we also recognised that the project was likely to suggest large potential savings at Administration Officer (AO) grade and that involving our staff more directly in the process could be the key to acceptance and ultimate success. We rely on the commitment of our staff and this is central to our quality agenda. Without the buy-in of our workforce, new ways of working which enhance quality and promote curiosity would justifiably be perceived as purely cost cutting and would undoubtedly be viewed with suspicion and scepticism.

5. Generating Solutions

We involved staff in looking for ways to reduce peaks and troughs and organised workshops where we encouraged curiosity and creative thinking. We set the scene as a puzzle to be solved and made it clear that we had no preconceptions about outcomes. People worked in small groups and their remit was to make best use of the staff resources available to meet all targets and distribute the survey work evenly across teams.

The expected outcomes were variations on a theme and interesting interpretations of the presented task. The unexpected outcome was greater appreciation of the difficulties involved in resource planning and workforce management. Admin grade staff were surprised by how difficult it could be to juggle conflicting targets and customer requirements while at the same time making good use of skills and experience. We also found that including staff in the mechanics of decision making helped in allaying some previously expressed concerns relating to unfair workloads.

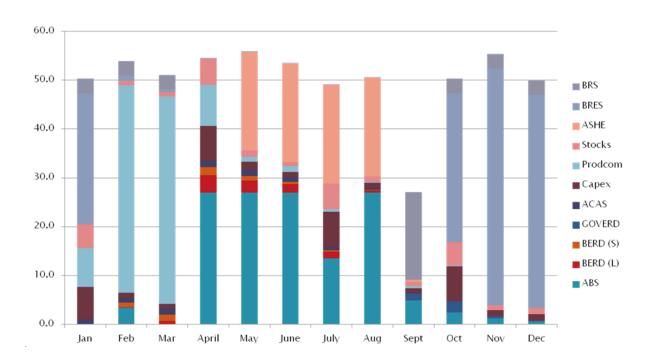
6. The proposal

The recommended deployment of staff was a mixture of ideas from the project team, the suggestions from staff and my own preferences which were driven by more long term goals than the other two. It ensured that:

- all surveys had at least the minimum number of AOs allocated to it.
- peaks and troughs were reduced
- teams were able to concentrate on one large annual survey at a time
- surveys were processed early in their cycle to the delight of customers and thereby building in time to recover from any hitches, should they arise; and giving customers large amounts of data early and subsequently the potential to start analysis early
- there is a small allocation of staff to large surveys throughout the year to ensure adequate capability to deal with customer queries

Additionally, it emerged from the proposed plan, that we were in a position to have a "quiet" month, namely September. This could be utilised to train staff on surveys which were new to them and it allowed a breathing space for pause and reflection.

Fig. 2
Proposed Survey Pattern



From fig 2 it can be seen that the survey requirements, in a perfect world, could be reduced to 55 from the original peak of more than 80 AOs (as seen in fig 1). There are no immediate plans to dramatically reduce our workforce numbers, but having identified the scope we have to make efficiency savings, we are in a good position to make those difficult decisions when the need arises. We are confident that in the immediate future staff reductions will be achieved through natural attrition, and as staff leave they are not replaced without negatively impacting on quality.

Training more staff on a variety of surveys will also increase flexibility and potentially leads to earlier achievement of targets. Additionally it will reduce the risk to delivery as more staff can be effectively utilised if unexpected problems occur. It will also improve people's understanding of more surveys which will encourage an increased awareness that different surveys are processed at different rates and require different skills.

7. Conclusions

- Quality has been strengthened as Results and Analysis colleagues will receive
 validated data earlier in the survey cycle and will therefore have longer to investigate
 the datasets and analyse the data.
- Quality will be enhanced as editing and validation will take place earlier in the survey cycle, reducing the tendency for rushed last minute decision taking.
- Staff working in the editing and validation unit have ownership of the workforce planning process, feel part of the change and are more aware of each other's workloads and priorities.
- We have large amounts of data available to us in relation to workflow and a deeper understanding of the dynamics of our survey validation processes.
- Potential reductions in resource levels have been identified and these can be safely
 made, when required. Most will be achieved as a result of natural attrition although
 some managed moves will be inevitable.
- We have a more flexible and multi-skilled workforce.