The Effects of Relocation on Blaise Support in O.N.S.

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1. Introduction

Until 2006, the Blaise support team (Blaise Development, Standards and Support, or BDSS) at Office for National Statistics (ONS) was based in London, within the Social Survey Division, which is responsible for carrying out social surveys such as the Labour Force Survey and the General Household Survey.

In 2006, ONS relocated many of its functions from London to Newport in Wales, including Social Survey Division (SSD) and as part of this, BDSS. Although everyone concerned had the opportunity to relocate, very few people moved and nobody from BDSS relocated. There was a big recruitment exercise to fill in the vacant posts across the whole office, and although many posts were replaced, much knowledge and expertise was lost. Many areas suffered and not just SSD - Labour Market Division, Business Surveys, Regional Analysis, as well as the central support areas such as Human Resources, Finance and IT and many others were all affected.

Prior to relocation, the solving of simple bugs, programming new questions and so on would be done by researchers within the survey. The loss of knowledge within a survey about their Blaise questionnaire, as well as the loss of general Blaise knowledge meant that BDSS were now doing more bug solving and programming. This extra burden on BDSS meant that they had little time to devote to development projects, such as exploring Blaise IS.

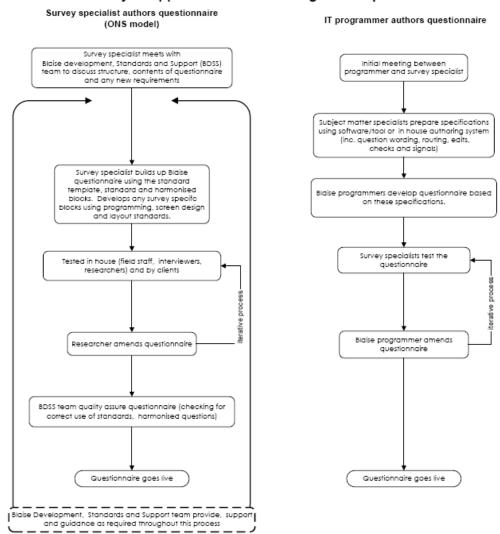
2. Prior to relocation

Many organisations have a team of specialist programmers who carry out all Blaise work, but in ONS, the programming is carried out by the survey researchers. The researcher is responsible for the authoring of the entire questionnaire (following what Gatward, 2007, calls the 'survey specialist model' as shown in Chart 1 below). ONS considers that it is important for survey quality that researchers have a hands-on control and knowledge of the questionnaire.

Prior to relocation, the BDSS team worked closely with the IT division, which is responsible for case management systems, telecommunications and data output. The team also had close links with the Field division which is in charge of interviewer recruitment, survey allocation and interviewer training.

Due to the stability of staff within SSD, BDSS team members and researchers within survey teams had built up their experience in Blaise as well as having an in depth knowledge of their survey questions and outputs.

Chart 1. Summary of approaches to authoring Blaise questionnaires



2.1 Training

In order to build up Blaise knowledge of new researchers when they joined SSD, BDSS ran a half day introduction to Blaise. The aim was to introduce people to the BDSS team and its role, as well as to introduce the basics of Blaise, including the chance to create a very small, simple questionnaire. Then shortly after, new researchers would attend a three day training course conducted by Statistics Netherlands, hosted in ONS, London which started with Blaise basics and covered more advanced topics such as nested blocks and hierarchical lookups.

In addition to these formal training courses, new researchers would also be given on the job training by their fellow researchers within the survey team. A standards seminar was presented by BDSS, which covered programming standards and screen standards for ONS's social surveys.

2.2 Standards/BDSS role

Whilst the majority of programming was done within survey teams, BDSS still had a role to play in assisting surveys in developing their Blaise questionnaires. BDSS provided a series of standard block templates to researchers to make programming easier and to keep surveys standardised, or 'harmonised'. ONS surveys have a series of demographic questions which should be the same across all government social surveys, such as household details, marital status, employment questions, ethnicity, tenure, benefits information and so on. This

ensures that data are comparable across surveys. Also there is a standardised administration block at the end of each questionnaire which includes calculation of outcome codes for response rates, as well as interview timings and notes. Any changes to these questions have to be agreed by the ONS Harmonisation team first, and then only BDSS can make changes. Survey teams then have their own blocks which they can amend as and when they need to.

BDSS also kept mode libraries and depmenus up-to-date for surveys to use. Quality assurance of surveys was carried out before each survey went out into the field, and a more in-depth audit was conducted each year to make sure that screen standards were being adhered to and that the surveys were using standard blocks and questions. New blocks and questions were tested thoroughly before being released to survey teams.

Researchers were able to handle most aspects of their questionnaires along with the use of block templates, and BDSS could just step in and help out where necessary, and assist with debugging and solving more difficult routeing problems, and updating external lookup databases. BDSS operated an open-door policy where researchers could approach the team with queries or advice about their questionnaire, anything from creating a text file from an external lookup database to putting variables into a table.

BDSS had time to concentrate on development issues and looking at new ways of using Blaise-related tools (e.g. audit trails, Audio-CASI, event history calendars, documentation tools and so on). The team had time to develop new solutions such as rotation methods and also recode blocks and sections of code to make them more efficient.

The 'survey specialist model' was working well up to this point.

3. Addressing issues in the early phases of relocation

3.1 The relocation

Towards the end of 2004, ONS announced that it would be closing down the office in London and relocating most of its posts to its sister site in Newport, and the rest to its other site in Titchfield, near Southampton. Several hundred staff would either need to relocate or lose their jobs as part of a Government-wide cost-cutting exercise.

As many people decided not to relocate, the recruitment team in ONS had a huge job to build up the office in Newport. The relocating business areas of the office suffered from a huge loss of skilled staff and had to train up many new staff over a short period of time and continue to produce high quality outputs.

3.2 Effects on SSD

As with other business areas of ONS, the effect on SSD was the loss of a huge amount of knowledge and experience.

A system was put in place for around a year during relocation called 'parallel running' where a post was created and filled in Newport for each of the posts to be moved from London. The London staff who decided not to relocate trained up their 'shadow' member of staff to eventually take over their job.

3.3 Effects on BDSS

During relocation, BDSS was still in London but the people they were supporting were based in Newport. This led to issues usually associated with cross-site working such as poor communication and struggling without help. Eventually one person moved into BDSS in Newport from another work area as a 'shadow' member so the researchers had someone they could talk to directly and discuss their problems. There was very little Blaise experience in teams as most new recruits had not used Blaise before. The BDSS team in London finally left ONS early in 2008.

The effect of going through this major organisational change was that BDSS lost a lot of historical knowledge, such as why things were done in a certain way, and technical knowledge in that new members of the team had little or no Blaise knowledge. Questionnaires were not being quality assured before going out in the field, a task which used to be performed before each monthly or quarterly 'scatter' and then annually, in more depth. Standard blocks were being changed by survey teams who didn't realise the importance of making changes without notifying BDSS first, and so standardisation across surveys was lost. Testing of blocks and new questions was minimal, due to reduced resource in BDSS, and survey teams' lack of understanding of the importance of testing.

3.4 Breakdown of communication

BDSS used to have a good working relationship with the IT and Field divisions, which was facilitated by the fact that all three were based in the same office. The three areas worked closely to ensure that the entire survey process went smoothly, from questionnaire writing and testing to scattering and then to data production. Any potential issues that impacted on the process were discussed and resolved.

Relocation meant that Field staff were relocated to ONS's other site in Titchfield, with many staff choosing to leave rather than relocate, and communication diminished. Some IT staff were relocated to Newport, while some stayed in London. Working from three locations led to issues where new members of staff in each location were unsure of who did what and there was little face to face contact. There have been a few issues over responsibility, for example whether SVS or IT are responsible for the Manipula scripts for data production.

3.5 Other issues

Around the time of relocation, a major change was happening to one of ONS's surveys. The General Household Survey became a longitudinal survey and brought with it the extra complexities associated with this type of survey, such as feeding forward data and keeping track of respondents over time (see Setchfield, 2007).

Also at this time, ONS introduced the Integrated Household Survey (see Fiacco, 2007).

The ONS then added a couple of other new longitudinal surveys to its portfolio, namely the Household Assets Survey and later on, the Life Opportunities Survey (originally known as the Longitudinal Disability Survey of Great Britain).

With these complex additions, BDSS and survey team resources were really stretched.

4. What we've done and remaining challenges

4.1 New strategic direction

BDSS acknowledged that there was an issue with the provision of Blaise support in the division, as a result of relocation. The 'survey specialist' model that Gatward (2007) described was starting to break down due to the intense period of organisational change. She explained how it was necessary to constantly evaluate how the model is working, especially through change.

The team consulted with Blaise users and senior management and produced a strategy paper which presented different ways of working. At this stage every single option was explored, and this included taking away programming from survey teams altogether and giving all responsibility for this to the BDSS team.

The option chosen was for BDSS to take more responsibility over Blaise questionnaire development and programming for survey teams. It was proposed that BDSS have responsibility for programming all questionnaires for new surveys, with the survey development team providing specifications to BDSS. The survey team will be required to fill in the fields sections, design and implement (with assistance) signals and checks, and program rules if a block is straight forward. In essence, BDSS will provide a skeleton, with any functionality (such as rotation, person selection) required.

Once a survey is in the field, survey teams will be responsible for maintaining the field section, checks and simple routing. BDSS will still undertake complex routing or implementing complex logic into the Blaise questionnaire. Survey teams would still be responsible for coordinating testing and any queries relating to the Blaise questionnaire. However, BDSS will develop best practice principles in relation to questionnaire testing and provide any tools or templates. Survey teams would still be responsible for interactions with IT including scattering of the questionnaire.

The overall aim is to reduce the amount of expert programming required by survey teams, whilst still giving them control and flexibility with their instruments. By centralising the complex programming, it should mean less training overall, and less reliance on a particular survey team member.

4.2 Staffing levels

Following the strategy paper, the BDSS team has expanded from one person to five full time members of staff (in London it was usually around four to five members of staff with a mixture of full and part time). Two members of the team are survey researchers. Following a period of on the job coaching and training, all members of the team are now skilled in Blaise and Manipula and have a combined knowledge of all of ONS's social surveys.

Also the team has recently secured continuous help from the Business Operations Support area which works alongside the survey teams, providing administrative support and dealing with customers. They help BDSS out with organising the Blaise training and creating interviewer instructions using Robohelp software.

The extra resource will allow the team to take on extra programming from survey teams where necessary, and allow the team to concentrate on other areas such as development projects and implementing new ideas and tools.

4.3 Training

The training that BDSS provides to new members of staff has not changed at all since before relocation. New starters still attend a half day course which the team runs internally, then a three day course run externally. Coaching within teams by experienced researchers is not happening as much as it should, which is what has always kept the 'survey specialist model' working. Perhaps with hindsight we should have looked at changing our training to meet the needs of so many new staff, although it was difficult to do this with limited resource. We will be actively encouraging on the job coaching within survey teams, so that knowledge isn't confined to one particular team member, which is an issue faced by many teams at the moment.

We realised that communication had broken down between BDSS, and our Field staff and IT division as an effect of relocation. We have now set up regular meetings to discuss issues and problems, and also a series of training sessions and question and answer sessions so we can understand how each other operates, who has responsibility for what areas such as writing Manipula scripts, and to create good working links.

We already have a special questionnaire set up called an 'Electronic Learning Questionnaire' which is used to train new interviewers and help them to become familiar with the survey they are working on, and how to handle certain interviewing situations. As part of our training overhaul, we will be introducing an ELQ for new researchers to help them understand the basics of how Blaise works, and to demonstrate screen standards.

4.4 Support strategy

During relocation, it was difficult to keep up with records of changes to questionnaires, and other documentation. The interviewer help system was very out of date and there wasn't enough resource to keep it updated with the latest changes, which the interviewers found very frustrating. All Blaise users found it difficult to find out what changes had been made to questionnaires and the reason for any changes.

The BDSS team is about to introduce a new system of logging support work, and this will involve survey teams logging their problems into a database wherever possible before seeking help from our team. This is to encourage researchers to think through their problems first as we believe many issues can be resolved when they start to write out and think through the problem. The team will look over the types of issues that are occurring and make sure that they are covered by our training program. This method will free up time for BDSS to concentrate on other non-support work.

4.5 Reintroduction of QA/Standards

One of the effects of relocation was the loss of the quality assurance of surveys before they go into the field. We will be reintroducing this, and will make sure that surveys are all using the correct versions of the standard blocks and the specified screen layouts. Desk instructions and training will be improved to make sure that survey teams are aware of what versions of the blocks they should be using and how to apply the correct layouts.

BDSS will have time to make sure that blocks are thoroughly tested before being released to survey teams which will reduce the chances of errors creeping into questionnaires. For example, some routing was accidentally changed recently in a standard block which meant that one of the harmonised tenure questions was only being asked to the respondents of one survey instead of all surveys. This affected around two months of data until the error was spotted and fixed. Normally most errors can be fixed using Manipula, but it was unfortunate that this prevented the data from being collected at all. Part of the problem was that some users had modify access to the standard blocks on the network and didn't realise that a change would affect other surveys (questionnaires directly reference these blocks on the network). Access control has been tightened now to prevent mistakes like this from happening again.

4.6 Documentation and specifications

Before BDSS takes on any programming task, we now make sure that the research teams provide us with a detailed specification of the questionnaire first, and any flow charts where necessary. This allows the researchers to think through their problems and the issues and makes our jobs as programmers much easier. Too many programming tasks that we have been given have been poorly described, and BDSS members often end up giving advice on areas such as question design.

One example of a recent problem with a survey was when BDSS was asked to help out with some routeing. The survey team was asked for a paper questionnaire, and was provided with automated documentation taken directly from the questionnaire. This included the errors that needed to be fixed. Many surveys had been working from this type of documentation rather than keeping their original client-specified paper questionnaire up to date. This made it hard to fix errors as it was impossible to see what the questionnaire routeing should look like. Having time to look at documentation tools should help to stop this from happening again.

5. Conclusion

Following the relocation of SSD and BDSS to Newport, it was acknowledged that a great deal of survey knowledge and Blaise expertise was lost, and the traditional approach to Blaise support was not working very well.

After consultation with users and senior managers in SSD, the BDSS team produced a report which outlined all issues surrounding Blaise support in the division, and then successfully managed to recruit more staff into the team. New ways of working were implemented such as a new support strategy, and reintroduction of quality assuring and better maintenance of standard blocks. The approach to training was revised, and a new approach to improve communication between IT and Field was devised.

SSD decided that the researcher doing the programming is still the best model to use in ONS, rather than having BDSS doing all the programming. This model has however been modified post relocation so that BDSS can take on more programming tasks. BDSS will monitor how well the new changes are meeting the needs of the survey teams.

6. References

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