

Mobility and Knowledge sharing

Mrs. Marleen VERBRUGGEN and Mrs. Adrie YKEMA
Programme Knowledge and Innovation
Statistics Netherlands

Abstract. We notice several trends in society that ask for an appropriate response from statistical offices. A few examples: the political pressure to reduce the administrative burden, respondents (both households and companies) who are less willing to respond to time consuming questionnaires, the high volatility of information and the increasing need for rapid, to-the-point and easy accessible information, the shift to mobile devices and finally, the increasing importance of social media. It is the challenge of statistical offices to use their knowledge and innovation power to the optimal extent and in a creative way in order to be prepared for the future.

The paper describes how Statistics Netherlands has developed a Knowledge and Innovation programme. The Knowledge part of the Programme has three goals: (i) to preserve knowledge with regard to the expected retirement wave (ii) to develop and share knowledge in order to be prepared for the future, and (iii) to provide adequate tooling for knowledge sharing. Mobility of employees is an important vehicle for knowledge sharing. Besides job rotation there are other instruments that can be used to create more flexibility in the organisation and stimulate knowledge sharing. The paper presents the first experiences of Statistics Netherlands with instruments like working in flexible, multidisciplinary teams and internal network communities in order to stimulate knowledge sharing and developing and to make use of best practices.

1. Introduction

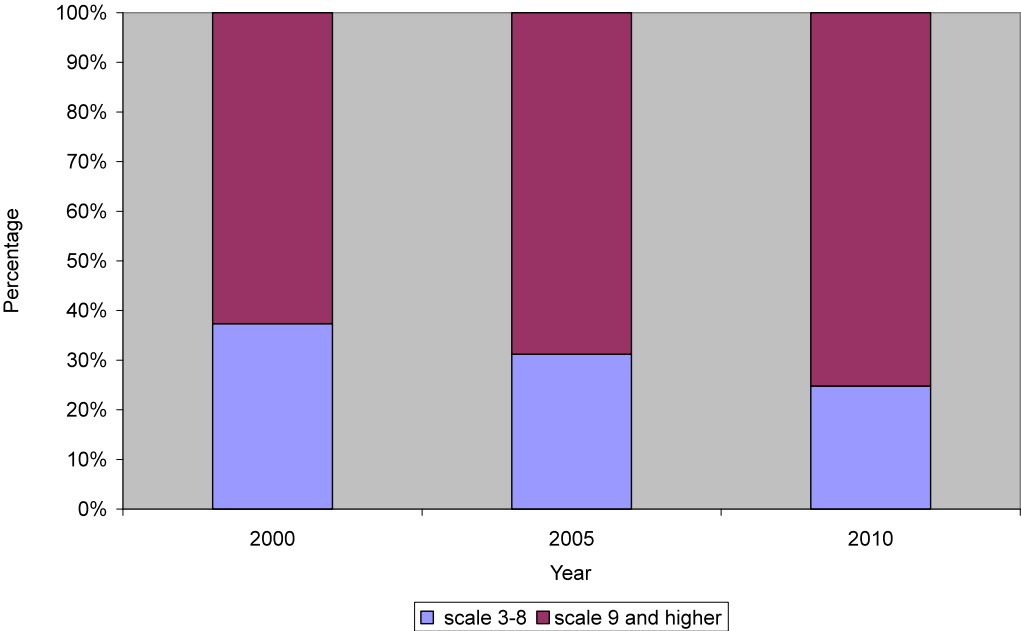
We notice several trends in society that ask for an appropriate response from our statistical office. A few examples: the political pressure to reduce the administrative burden, respondents (both households and companies) who are less willing to respond to time consuming questionnaires, the high volatility of information and the increasing need for rapid, to-the-point and easy accessible information, the shift to mobile devices and finally, the increasing importance of social media. It is the

challenge of statistical offices to use their knowledge and innovation power to the optimal extent in order to remain able to perform pro-actively and in a creative way to these developments.

In addition to those trends that influence the content the statistical work programme, there are also several factors that have an impact on the quantity and composition of the work force. At Statistics Netherlands we face the following issues:

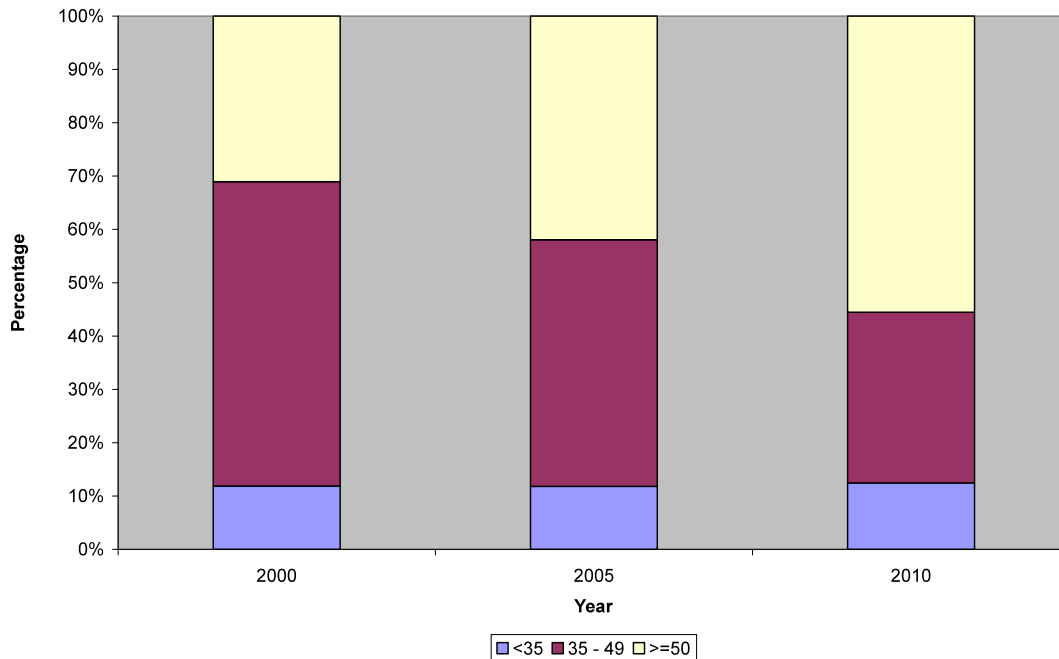
- *Budget cuts*: Statistics Netherlands faced several budget cuts over the past years. During the period 2003 – 2012 the workforce decreased from 2,630 to 1,850 fte. Instead of a reduction in the statistical programme we faced an even higher demand for output.
- *Changing skill needs*: the budget cuts over the past years were realised by an increase in efficiency. This was achieved by streamlining the process and introducing smart IT-solutions. Next to that a switch was made in some statistics from primary to secondary data collection like the use of fiscal data for production statistics. As a consequence of these changes, the number of staff in low and medium skilled jobs decreased considerably, while the number of staff in high skilled jobs showed a moderate increase (Fig. 1).

Figure 1 – Ration between low and medium (scale 3-8) and high skilled jobs (scale 9 and above) in 2000, 2005 and 2010



- *Ageing staff*: the average age at Statistics Netherlands is about 50 years, which is much higher than the average in other Dutch governmental organisations. This average age has increased considerably in the last 10 years (Fig. 2).

Figure 2 – Age distribution Statistics Netherlands in 2000, 2005 and 2010



- *Retirements*: within the next 4 years about 270 persons will retire, more than twice the number of the last 4 years (Table 1). The 4 year period after 2016 the number will increase even more (assuming no change in the retirement age of 65). These data illustrate the importance of an adequate knowledge management programme in order to preserve crucial knowledge.

Table 1 – Retirements in fte in the period 2009 – 2020

Year	Low and medium skilled staff (3 - 8)	High skilled staff (> 9)	Total
2009 – 2012	23	79	102
2013 – 2016	77	190	267
2017 - 2020	101	246	347
Total	201	415	716

- *Offering an inspiring working environment*: as the possibilities to recruit and dismiss will be very limited the coming years, flexibility at the “internal labour market” is needed. And, in addition, the question how to motivate and retain employees will become more important.

Employability, mobility and knowledge management are key words in this regard. In the Strategic Personnel Plan 2006 – 2012 (CBS, 2006) much attention was devoted to mobility in the sense of: recruitment, internal and external mobility. In 2008, a vision and action plan “Transition Statistics Netherlands” (Muiswinkel, W.J. van, 2008) was published. This document focussed entirely on mobility at Statistics Netherlands. In 2009 the Strategic Personnel Plan was updated, taking into account the additional budget cuts, the impact of changing competence requirements and the ageing population. The importance of employability, mobility and knowledge management were reconfirmed.

In this paper we will elaborate first on the interaction between mobility, employability and knowledge sharing in Chapter 2. In chapter 3 the actors and activities to achieve these goals will be described. In Chapter 4 the recently started Knowledge and Innovation Programme is described. Chapter 5 summarises our experiences and in the last chapter some concluding remarks and questions are provided.

2. The interaction between mobility, employability and knowledge sharing

From an organisational point of view, we would like to achieve 2 very important goals with internal mobility: flexibility in the organisation and sharing of knowledge and best practices.

As described in Chapter 1 at Statistics Netherlands flexibility is needed because the content of the statistical work changes and the possibilities to recruit and to dismiss people are limited. This means that the work now and in the near future has to be done by the present work force.

A second important goal of mobility is the sharing of knowledge and best practices. The lower the level of internal mobility the higher the risk that knowledge sharing will be limited. Knowledge is likely to remain within the organisational borders of a statistical process. More mobility will result in employees having a better network and a better understanding of the goals and processes of other organisational units and the organisation as a whole. Staff will be more prepared to share knowledge and to work with other experts within or outside the organisation. Next to that, an active exchange of best practices within the organisation will lead to improved processes and a quicker learning process. In this way the organisation can better deal with external changes.

From the perspective of the employee, we can also identify two main goals:

- Increased employability
- Keeping an interesting and challenging working environment

Increased employability is not only beneficial to employers but also to employees. They improve their opportunities for an attractive job if the present job ceases to exist. A very low level of mobility also increases the risk of so called “pigeon holing” (Weggeman, 2003). Pigeon holing may occur by increasing familiarity of tasks and responsibilities. The expert builds up routine in his tasks and starts relying on these routines. In the longer run, the expert trusts to an increased extent on his known solutions for all occurring situations: “if you have a hammer every problem becomes a nail”. In the long term his expertise may become outdated and his employability will decrease considerably. Keeping an interesting and challenging environment speaks for itself. Most people are better motivated to stay with an organisation if their work environment offers enough variety and challenge.

Tabel 2 – Average upward mobility at CBS (% chance yearly)

Scale	< 35 years	35 – 49 years	> 50 years
3 to 5	14,0	6,4	1,5
6 to 7	18,0	8,5	2,1
8	12,3	5,5	1,3
9	19,0	9,1	2,2
10	19,2	9,3	2,2
11	10,0	4,4	1,1
12	12,1	5,4	1,3
13	22,5	11,1	2,7

Summarising, internal mobility offers both employers and employees important benefits. However, there are also a few constraints that limit the internal mobility rate within Statistics Netherlands considerably:

- A very high level of mobility increases the risk of discontinuity in (the knowledge of) working processes.
- The benefits of internal job mobility are visible in the longer term (e.g. increased employability) while the costs manifest themselves in the short term (e.g. learning time).
- With an increasing age, employees seem less eager to change jobs and the upward mobility slows down.

3. Actors and their main responsibilities

At Statistics Netherlands there are several actors stimulating mobility, employability and knowledge sharing. The main actors are:

The manager of a statistical unit: is responsible for the encouragement of the personal development and employability of his staff. The manager discusses suggestions for education, training, learning on the job, mobility etc. When a staff member leaves his unit, he is responsible for timely recruitment of and the transfer of crucial knowledge to the successor/unit.

The employee: the employee is responsible for his own personal development and employability. He identifies e.g. his training needs and discusses these with his manager.

The human resources manager: advises and assists the manager of a statistical unit with suggestions for training and mobility, recruitment of personnel. Every statistical unit has its own human resources manager.

The CBS mobility manager: has a central advisory and coordinating role with regard to recruitment, internal and external mobility. He is chairman of the Matching Consultation, a regular meeting with representatives from the statistical units, aiming at filling vacancies to a maximum extent with internal candidates. He also coordinates the external mobility programme (external networking, coordinating special mobility assistance for employees etc.).

Staff Knowledge and Innovation programme: stimulates knowledge sharing and innovation at Statistics Netherlands. In order to strengthen the impact of the measurements introduced by the Strategic Personnel Plan, Statistics Netherlands has started a Knowledge and Innovation Programme in 2012 to give an extra impulse to mobility and knowledge sharing.

4. The start of the Knowledge and Innovation programme

At the end of 2011, when the plans for the Knowledge and Innovation Programme were prepared, the choice was made to focus on three goals (i) preserve knowledge with regard to the expected retirement wave (ii) development and sharing knowledge in order to be prepared for the future, and (iii) adequate tooling for knowledge sharing. It is considered crucial to focus on the knowledge needed for innovation and, as statistical office, being prepared for the future.

At first a literature study was done and it became clear that there are a lot of instruments that can be used to achieve the knowledge goals. However, it became also very clear that not all instruments are evenly successful in all organisations. Therefore, other organisations were visited, profit as well as non profit organisations, 8 in total, to ask for their best practices. This yielded an enormous amount of good ideas and, even more important, lessons learned. The focus in knowledge programmes and the preferred instruments were surprisingly different for the visited organisations. Some organisations

focussed entirely on structure / process instruments, others focussed on development of their staff, or even on tooling.

Based on the literature, on the suggestions of external and internal advice it was decided to organise the Knowledge programme around the following eight instruments:

- *Preserve knowledge:* (1) Expert - apprentice collaboration and (2) Organising interviews/debriefing experts leaving the office (retirement).
- *Share knowledge:* (3) Organisation of a general introduction and familiarization programme (4) Organisation of dedicated theme meetings, brain storms, presentations and workshops. (5) Stimulation multidisciplinary collaboration, expert collaboration across organisational boundaries (networking, communities) (6) Stimulation of collaboration with universities and private companies.
- *Tools for knowledge sharing:* (7) Improved accessibility of internal documents (e.g. papers) and (8) Proper use of internal means of communication (e.g. Intranet, Sharepoint, Yammer, wiki's).

As internal mobility within Statistics Netherlands is very low and appears to be very difficult to increase, the term “virtual mobility” is introduced, i.e. other instruments besides internal job rotation that encourage flexibility and/or knowledge sharing. Small and bigger projects are initiated in collaboration with the statistical units and the personnel unit, with the aim to reach the goals and to learn what kind of approaches are best suited for Statistics Netherlands.

5. Activities initiated to stimulate knowledge sharing and ‘virtual mobility’.

In this chapter we will briefly describe several activities initiated by the Knowledge and Innovation programme. But first a short interlude on the elephant and its rider:



*The psychologist Jonathan Haidt says in his book *The Happiness Hypothesis* that our emotional side is an Elephant and our rational side is its Rider. Perched atop the Elephant, the Rider holds the reins and seems to be the leader. But the Rider's control is precarious because the Rider is so small relative to the Elephant. Anytime the six-ton Elephant and the Rider disagree about which direction to go, the Rider is going to lose.*

Most of us are all too familiar with situations in which our Elephant overpowers our Rider. You've experienced this if you've ever slept in, overeaten, tried to quit smoking and failed, gotten angry and said something you regretted and so on. The Elephant's hunger for instant gratification is the opposite of the Rider's strength, which is the ability to think long-term, to plan, to think beyond the moment. But what may surprise you is that the Elephant also has enormous strengths and that the Rider has crippling weaknesses. The Elephant isn't always the bad guy. Emotion is the Elephant's turf—love and compassion and sympathy and loyalty. That fierce instinct you have to protect your kids against harm—that's the Elephant. That spine-stiffening you feel when you need to stand up for yourself—that's the Elephant.

And even more important if you're contemplating a change, the Elephant is the one who gets things done. To make progress toward a goal, whether it's noble or crass, requires the energy and drive of the Elephant. And this strength is the mirror image of the Rider's great weakness: spinning his wheels. The Rider tends to overanalyze and overthink things. If you want to change things, you've got to appeal to both. The Rider provides the planning and direction, and the Elephant provides the energy. When Elephants and Riders move together, change can become easier by:

- *Directing the Rider.* What looks like resistance is often a lack of clarity. So provide crystal-clear direction.
- *Motivating the Elephant.* What looks like laziness is often exhaustion. The Rider can't get his way by force for very long. So it's critical that you engage people's emotional side—get their Elephants on the path and cooperative.
- *Shape the Path.* What looks like a people problem is often a situation problem. When you shape the Path, you make change more likely, no matter what's happening with the Rider and Elephant.

Source: Switch - How to Change Things When Change is Hard, by Chip and Dan Heath (2010)

The metaphor of the elephant and the driver gives a nice illustration of the approach chosen for knowledge management. In the past several initiatives were started with more or less success, while in general “knowledge management” and “knowledge sharing” are perceived as subjects difficult to persist. The Programme has started several small initiatives – new or building on best practices – that will hopefully motivate the elephant and direct the driver. At this time we do not exactly know what initiatives will be best suited, but we will discover them along the way. The challenge is to treasure the initiatives that perform well and quickly stop the initiatives that are not appealing.

5.1. The Innovation Lab

The Innovation Lab is a physical space (actually two rooms: one in The Hague and one in Heerlen that are connected by video conferencing facilities) that encourages quick elaboration and testing of ideas (innovation) and collaboration.

The Innovation Lab in The Hague



Many ideas need the so called “attic environment” to grow. The Innovation Lab offers this facility. In the Innovation Lab statisticians can work on laptops with less restrictions to test for example new methods, software of simulate statistical processes. The Innovation Lab can also be used as a collaboration space. Every piece of furniture is on wheels, which makes the use of space very flexible. This makes the Innovation Lab a suitable environment for brainstorm sessions, workshops, informal presentations and open coffees etc.

The Innovation Lab is not a goal in itself but it provides the means to stimulate creativity, brainstorming, collaboration and focus. Due to its flexibility, alternative methods and processes can easily be simulated and tested. The Innovation Lab stimulates collaboration between different fields of expertise. It is an inviting and inspiring environment. The Innovation Lab was officially opened by the Director General and Deputy Director General last May.

The first experiences with the Innovation Lab have been very positive. In the first month after the opening almost 20 workshops were organised in these facilities! The (technical) facilities and informal ambiance are highly appreciated. The Innovation Lab is also used to work on several innovative ideas.

5.2. *Organisation of workshops, events and open coffees*

Statistics Netherlands has a pool of facilitators that have been trained to organise and facilitate workshops. They are very experienced in: formulating the aim of a workshop, the issues to be solved, designing the workshop programme and work methods, and chairing the meeting. The Knowledge and Innovation programme works in close collaboration with these facilitators e.g. by the organisation of workshops around the special priority themes of the Innovation programme.

Workshop Output Innovation



The organisation of workshops has already proven at Statistics Netherlands to be a powerful tool for brainstorming and focus at the start of a project, to reach a breakthrough at a difficult stage of a project or to exchange experiences between different projects / at a specific field of interest.

Events, like “markets”, lunch meetings, presentations and open coffees are also easily accessible means to stimulate sharing of knowledge between different fields of expertise.

5.3. *The R- and SPSS-community*

CBS has a very successful R-Community. R is a statistical software package used for statistical production and analyses. Statisticians can only get an R-licence if they have attained (internal) R-training and join the R-Community. The R-Community is very successful because issues encountered during programming are solved more quickly with the assistance of R-expert colleagues and the standards developed by the R-community are followed, which assures that software code can be better reviewed by colleagues (better quality of programming) and maintained in an production environment (knowledge sharing). Experts contribute to the community and experience that they get something of at least equal value in return. The coordinator of the community is a R-expert, who by his enthusiasm, readiness to help, communication and persuasion power has built the community bottom-up. He and his fellow experts help colleagues with questions and code reviews, he organises meetings and is moderator of the R-wiki. This approach works very well.

The approach is being copied for SPSS. SPSS is a statistical tool that is being used by many experts in the office (about 50% of all staff uses SPSS on a daily basis). “Code reviews and standardisation (conventions in coding) will also be a big help here. If someone claims they don’t need to write comments and are bombarded by questions in a review— if several peers start saying, ‘What the heck are you trying to do in this piece of code?’— then they’ll start putting in comments. If they don’t do it on their own, at least their manager will have the ammo to make them do it” according an expert.

The model is also copied to other areas of expertise, outside IT-development, like the community of project managers, facilitators and users of mind mapping. They have slightly adapted the approach by selecting the most appropriate means for their communities e.g. building wiki’s, organising peer coaching etc.

The benefits of communities are the following:

- Sharing of knowledge. By offering assistance and help the quality of e.g. the software code improves.
- The work can be done more efficiently, because an expert doesn’t need to find all the solutions himself. Solutions found by other experts can be re-used (and need to be re-used).

- Leads to more standardisation / agreeing on conventions and a higher quality of the software code or the services provided (e.g. in project management, facilitation of workshops) and best practices will spread in the organisation.
- Stimulates the use of state-of-the-art solutions, commitment and motivation of staff members.
- The organisation will be less dependent on individual internal or external experts.

5.4 *The 50+project*

The 50+ project was the result of a workshop organised in 2008 for staff members of age 50+. The topic of the workshop was age specific human resource policy or how to keep an inspiring and motivating work environment. The group concluded that 50+ employees tend to stay for a long time at the same job for several reasons. When applying for (internal) vacancies they seem less successful and they are more reluctant to give up security (they are often satisfied with their well known, present job and are less motivated to try a new job). Performing different tasks on a temporary, project basis can be (part of) the solution.

The 50+ project is managed by a project group (all aged 50+) and supported by a group of managers from statistical units. The project offers two possibilities: a temporary change of job or participation in a project outside the usual work environment of the participant. In both cases the participant will return to his “old” job. In cases where two participants switch jobs with a positive evaluation, the change of jobs can be made permanent. The 50+ project functions as a kind of market place. Managers offer projects and temporary jobs, statisticians apply for these projects and temporary jobs. The 50+ project started as a pilot project in one statistical division. As the approach proved successful, the scope of the project was gradually extended to other statistical divisions. Since the start of the project more than 20 persons have found other work on a temporary basis.

6. **Concluding remarks and discussion**

We notice several trends in society that ask for an appropriate response from our statistical offices. It is the challenge of statistical offices to use their knowledge and innovation power to the optimal extent in order to remain able to perform pro-actively and in a creative way to these developments. In addition to those trends that influence the content the statistical work programme, there are also several factors that have an impact on the quantity and composition of the work force, like budget cuts and the composition of the work force (e.g. ageing work force).

Employability, mobility and sharing of knowledge have become important topics over the past years and will remain very important in the future. Job rotation is a powerful mean in this regard, but has also its constraints e.g. the trade-off between short term investments (learning costs) and longer term benefits (increased flexibility and employability) and therefore resistance by management and staff. Initiatives in the past were not very successful – the internal mobility is still very low. Therefore Statistics Netherlands has taken additional “virtual mobility” measurements to increase flexibility and employability, such as stimulating working in ad-hoc multi-disciplinary teams, 50+-project and (virtual) communities.

The first results of the Knowledge and Innovation Programme are promising. The Innovation lab appears to be a stimulating place for meetings and workshops. Many workshops have been held the last couple of months in the Innovation lab. The workshops are up till now very successful: in a short time, mostly half a day, in multidisciplinary teams, a shared idea is created and/or developed. Discussions appear to be very fruitful and lead to new insights. Most of the workshops were focussed on innovation, some of them on knowledge sharing subjects. Of this last category, 2 workshops were especially very interesting: one was aiming at strengthening the interaction with Dutch universities. This has resulted in an action plan, shared with representatives of the universities. In the second workshop 7 “owners” of tools (share point, wiki, intranet, library etc) developed a shared view on the tooling landscape for the coming years.

The R- and SPSS communities started and give a lot of positive energy. However, it will take a while to find out if this way of working will be sustainable also in the long term.

Concluding: although the programme is still very young and the results are premature, we noticed 2 important things:

- 1) Successful activities within Statistics Netherlands have to be “informal and interactive” and
- 2) “Virtual mobility” seems promising in our organisation in addition to “physical mobility” (job rotation) programmes

Discussion:

- **What experiences do other statistical offices have with similar programmes / projects?**
- **What would be a suitable way to exchange experiences and best practices between statistical offices and develop our *next practices*?**

1. Literature

Heath, C. and D. Heath, Switch, How to Change when Change is hard.

Muiswinkel W.J. van, et al, Strategic Personnel Plan 2006 -2012, CBS 2006.

Muiswinkel W.J. van, Transitie CBS 2008 – 2012, Visie en actieplan mobiliteit CBS.

Weggeman, M., Provocatief adviseren - Organisaties mooier maken, Scriptum 2003.