

The role of employer towards recruiting and promoting young professionals in the geo information sector

Paula DIJKSTRA, The Netherlands

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SUMMARY

Similar to other public organisations in the Netherlands, the average age of the employees at Netherlands' Cadastre, Land Registry and Mapping Agency (Kadaster) has been rising over the past 15 years. In 2010 the average age was 50.6 years and within the GEO department over 50% of the employees was older than 55 years. This situation, combined with the fact that it is difficult to recruit young professionals with a background in the geo information, are a concern for Kadaster. In order to be able to continue current activities, it is important to recruit young professionals and transfer knowledge from older (retiring) employees.

In this paper it is explored how a public organisation like Kadaster can anticipate on the aging process and how to attract the young geo-professionals to a company whose profile is not popular. The strategies that Kadaster developed as a reaction on the ageing process and the changing role of surveying and jobs related to GEO information are explained.

The paper starts with a description of former and current strategies that Kadaster developed towards the aging process and recruiting. These strategies focus on both the 'outside' as well as the 'inside' of the organisation. On the outside, besides a shift in recruiting processes, Kadaster is also actively enhancing its profile to be attractive employer. The paper describes how Kadaster recruited, educated and encouraged young professionals and what lessons can be learned. An initiative is 'Stichting arbeidsmarkt Geo' (SGA), an initiative to get a better balance between supply and demand for professionals in the GEO sector. To make sure new professionals keep finding their way to the GEO Information sector and thus to surveying and other related GEO jobs, Kadaster supports the foundation SGA to promote education in the GEO sector.

On the Inside, Kadaster has also put a lot of effort to anticipate on the ageing processes. There is attention for the organisational culture, knowledge management and changing working environment. Kadaster supported the establishment of Young Kadaster, where young professionals are connected and can share knowledge and experiences about their careers within the company.

Also from an international perspective it is good to share and exchange knowledge among young professionals within a world where open data and sharing data becomes more and more important. Supporting a job exchange program for a Finish surveyor is good example.

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1. INTRODUCTION

The Netherlands' Cadastre, Land Registry and Mapping Agency (Kadaster) observes three trends which affect its operations: the aging of the current labour force, the shift in geo-data chain/skills and an increased need for young professionals in the geo information sector. These trends are the context for this paper

1.1 Babyboom Generation

The current labour force in the Netherlands consists of four generations, the babyboom generation, generation X, generation Y and the Einstein generation. These generations are not equally divided within organisations. One reason for this is the nature of the business a company is in. Another reason is the demography of a country.

In the years after World War II there was a babyboom throughout Europe and USA. This babyboom generation will retire over the coming years. Organisations will be affected by this experience and knowledge 'drain'. Especially organisations that have a high percentage of senior employees need to anticipate this 'drain'. Succession needs to be arranged and knowledge management (including transfer) must be in place

1.2 Changing geo sector

The geo information sector is changing, and the demands on the geo-data chain is rapidly changing. In the last decades the collected data is now mostly available in digital form and can be accessed more and more easily. Data from different sources are combined and can be used for all kinds of purposes. Because data can be combined more easily with a geo component, geo information is becoming part of other sectors besides the traditional geo sectors. This change of environment requests different talents and skills. This demand for new skills and talents need to be supplied by educated and trained young professionals. At this moment the demand is higher than the supply and the expectations of growth of geo related jobs.

data collection	41%
data storage	51%
data supply	45%
data use	43%

Table 1: expected growth in business (GeoBusiness Nederland, 2009)

1.3 Young geo professionals in the information sector

Besides the demand for new skills, there will be a demand for skills in the existing professions, like geodetic experts. The babyboom generation of geodetic experts needs to be replaced by the next generation.

This changed geo information environment combined with the replacement of the babyboom generation opens the search for young professionals with an education in geo related fields. Kadaster is dealing with both issues and actively involved in anticipating the processes. The case of how Kadaster is dealing with these issues is described and reviewed in eight initiatives.

Vocational students	100 – 150
Bachelor students	90 – 140
Master students	60 - 100

Table 2: Demand of number of graduates each year (GeoBusiness Nederland, 2009)

Vocational students	30
Bachelor students	16
Master students	62 (26 stay in Netherlands)

Table 1: Number of graduates in 2008 (GeoBusiness Nederland, 2009)

2. KADASTER: PROBLEM DEFINITION

Kadaster is an independent public agency at national level, responsible for the land registry, cadastre and mapping of the Netherlands.

Kadaster has integrated both the registration of property and the surveying of land within the organisation. Besides these registrations, it also is responsible for other key registries. Within Kadaster employees work on different parts of the chain; data collection, data storage, data supply and data use. Some parts of this chain are carried out in close cooperation with other partners, like municipalities.

The concern of Kadaster is the unevenly distribution of its personnel regarding to their age, and the hiring of new personnel.

2.1 Age structure

The average age within public organisations and government institutions in the Netherlands is high. In 2020 three out of every ten employees working for the government will retire. The babyboom generation is amply represented in these organisations (Verbond Sectorwerkgevers Overheid, 2010).

Within Kadaster the average age is getting higher each year. In 2008 the average age was 49.7 years, but at the end of 2011 the average is 50.9 years. More than 65% of the employees is 50 years or older. Only 3% of the employees is younger than 30 years.

Due to early retirement schemes, most of the babyboom generation will retire before the age of 65. This means that the employees born between 1947 en 1952 already stop working.

Average Age	
2008	49.7
2009	50
2010	50.6
2011	50.9

Table 4: Average age within Kadaster (Kadaster, 2012)

Age structure (2011)	
<30	3.0 %
30 – 39	13.1 %
40 – 49	18.7 %
50 – 54	18.9 %
55 – 59	25.6 %
60 – 69	25.6 %

Table 5: Age structure within Kadaster (Kadaster, 2012)

2.2 Recruiting

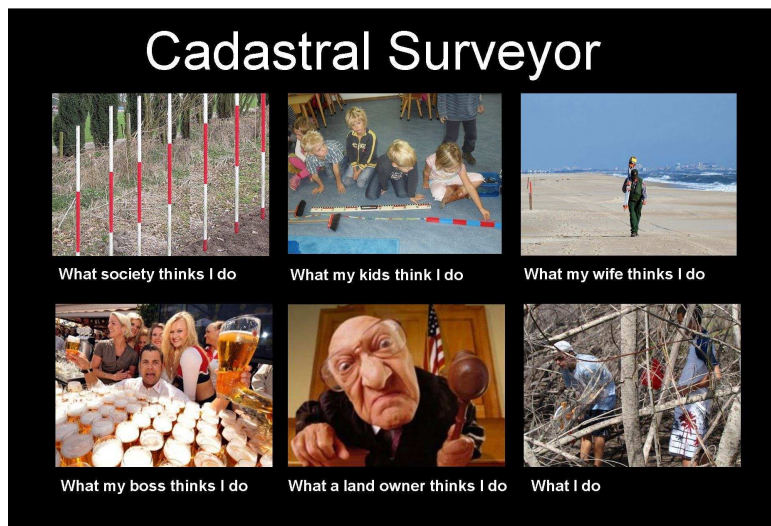
Many of the employees who are from the babyboom generation have a long employment record at Kadaster. It is not rare for this generation to have an employment record of more than 35 years.

Because of such long employment records and the high average age, recruiting has not been one of the priorities of Kadaster in the last decades. With the ‘retirement boom’ coming up the recruitment department needs to prepare itself for a quest for young talented professionals.

2.3 Reputation

The Geo sector has predominantly been a male employment sector. At the end of 2011 73.8% of the employees were male (Kadaster, 2012).

Together with the high average age the outsiders regarded Kadaster as an employer for ‘grey old man’.



Picture 1: What I do

To tackle these challenges Kadaster developed eight strategies.

3. KADASTER: TOWARDS A SOLUTION

The goal of Kadaster is to be *the* supplier of property and geo information in the Netherlands. As key player in geo information it is important to ensure the existence of the geo information chain, the processes of data collection, data storage, data supply and data use. Kadaster needs to be ready to face the challenges; replace the retiring babyboom generation, anticipate change in skills, and fulfill the demand for young geo professional. The strategies of Kadaster focus on both the ‘outside’ as well as the ‘inside’ of the organisation.

3.1 Recruiting

Overall the organisation of Kadaster is declining. Since 2008 580 employees left Kadaster. This decline will continue not only due to the retirement, but also because of outsourcing and more efficient working methods.

One of the priorities of the HR policy was an age aware policy. These steps included modifying the recruitment and selection policy. Recruitment advertisement used to be oriented on the technical professions within the organisation and attracted male technical professionals. To attract young professionals from another generation, generation Y, and to attract more females the recruitment methods had to be re-orientated. It also means that these people have to be attracted by the working conditions and a working environment that fits their needs.

Examples of this are advertisement with less technical language and more attention to the public interest of the work of Kadaster.



Picture 2: Recruiting campaign Kadaster www.werkenbijhetkadaster.nl

3.2 Personal Development

Kadaster makes every effort to ensure that its employees develop to their full potential and will continue to do so in the future. This serves the interests of both Kadaster and the employees themselves. The Kadaster terms and conditions of employment are simplified and modernized to make more flexible agreements with the manager possible.

3.3 Diversity



To change the reputation of 'grey old men' employer Kadaster focused on diversity. In 2008 the Board of Management signed the 'Talent to the Top Charter'. The motivation behind this Charter is the fact that the Netherlands lags behind internationally with respect to the participation of women at higher levels in organisations. A number of initiatives were taken in 2008 to support this goal, including an exchange project in which female employees are given the opportunity to trade positions for a week with other employees (male or female) who occupy key positions within the organisation. Several workshops were organised to raise awareness of the added value of diversity in teams. Kadaster has meanwhile chosen to expand its diversity policy to aspects of diversity

other than gender, like ethnicity and disability.

Each year ambassadors are appointed to promote diversity within the organisation.

Also in the corporate communication the focus on diversity is clearly visible.

Picture 3: Diversity on the cover of the Social Annual Review (Kadaster, 2012)

3.4 Young Kadaster

The number of young professionals is increasing. To make it easier to share knowledge and experiences between colleagues in a similar life phase, the Young Kadaster association was established in 2010. Its main goal is to let young professionals work in an enjoyable environment. Every employee of 35 years or younger can become a member.

The association organises activities for the young professionals on themes of personal development, knowledge transfer, sound board and networking.

3.5 Exchange abroad

Kadaster is encouraging its staff, particularly the highly talented younger employees, to undertake traineeships abroad, the extensive network fostered by Kadaster International over the years offers tremendous opportunities for an international exchange of Kadaster talent. Employees get an opportunity to learn from experiences abroad and Kadaster benefits from their new experience and knowledge as well. Also Kadaster welcomes experts from abroad to give the opportunity to learn from Kadaster.

3.6 Knowledge transfer

Kadaster aims to be the best knowledge institute possible regarding geographical and real estate information. To achieve this, it is necessary to secure knowledge from the leaving employees. Knowledge management is the key to secure this knowledge. Within Kadaster the Knowledge tree is introduced as a tool for knowledge management. By using this tree, the inventory of knowledge is the same throughout the whole organisation. With this overview the organisation knows what knowledge is available and where there are bottlenecks to solve to provide the services to the customers.

3.7 Social Media - Yammer

Another example of sharing knowledge, as well as adapting the work environment to the younger generation is the use of social media. Kadaster uses Yammer, as an internal social network. Colleagues interact in ways similar to facebook or twitter. It brings the different (geographical) offices and departments together. It also allows to create (closed) groups for department or project discussions.

3.8 Capacity building

It is a fact that the geo sector in the Netherlands has a shortage in skilled personnel (see section 1.2 above). There are not enough graduates to fulfill to (future) demand in the changing geo sector (see tables 2 and 3). This shortage will lead to a 'war on talent' within the sector and in addition outside the geo sector because of the growing importance of data with a geo component.

Together with other stakeholders Kadaster started discussions in 2007 about 'the war on talent' on geo professionals. The product of these discussions was a covenant between the private sector, the public sector and the chamber of geo professionals (geodesists, land surveyors, cartographers, hydrographers and Kadaster staff).

Result of this covenant is establishment of a foundation to ensure capacity building and innovation of geo education. The board of the foundation consists of the following representatives (Stichting Arbeidsmarkt Geo, 2012):

1. Public sector (chair Kadaster)
2. Private sector (geobusiness Netherlands)
3. GIN (chamber of geo professionals)
4. MBO-council (vocational education)

5. HBO-council (higher education applied science)
6. WO (university education science)
7. Secretary (Kadaster)

The foundation focuses on the mismatch between supply and demand. There are three pillars:

1. Promotion
2. Innovation of education
3. Cooperation

3.8.1 Promotion

To attract young people to the geo sector the 'GoGeo' campaign is developed. The target group is high school students. The campaign shows the public interest of geo information and geo ICT. The campaign shows that a profession in the geo sector is not pure technical, but that other backgrounds are also very useful within this sector.

On the GoGeo website you can interact with geo professionals. For example, you can post questions to professors of universities and get a reply. Also you can play a geogame where you can see that geo information is part of issues all over the world, tracking tornados, bird migrations, farming etc (GoGeo, 2012).

3.8.2 Innovation of education

The foundation works like a catalyst. It brings the different institutes of the educational sector together and in contact with the geo sector companies. The demands are discussed allowing education to be developed in relation to the demands.

3.8.3 Cooperation

Key to success is the cooperation between all the stakeholders to promote GoGeo and to help students to a job after they graduate. This already shows in the combined minors.

The GeoPlaza website is a platform where students and employers can interact. Students can meet employers for dialogues about internships, job vacancies, guest lectures, equipment etc. Participation of students is free, employers pay a subscription.

As organisation Kadaster is involved in the foundation, to ensure that the employees of the future have the right background and skills to work in the geo sector.

4. KADASTER: RESULTS

4.1 Recruiting results

Since 2008 more than 350 new employees have been recruited. The different recruitment methods attracted young professionals and employees to create a more diverse workforce. In 2011 26% of the current workforce is female. This is an increase of 7% since 2008 (Kadaster 2012).

Recruitment

	2008	2009	2010	2011
Hiring	199	96	30	28
Male	53.8%	68.2%	54.1%	64.3%
Female	42.2%	31.8%	45.9%	35.7%

Table 6: Numbers of hired employees 2008 – 2011 at Kadaster (Kadaster, 2011/2012)

Kadaster's HR efforts are paying off. It has been recognized for its working conditions, career opportunities, training and development and company culture. At this moment Kadaster is 3rd best employer in the public sector, 4th best employer for working parents and has also been awarded as TOP employer for public and private organisations. Profiling this helps to attract the young professionals that help Kadaster to be ready for the future. Testimonials from current young professionals create a positive image helping in attracting new employees.

4.2 Personal development

Various training programmes have been created for both managers and employees. A number of especially talented people have also been identified and given the chance to develop their skills by conducting certain challenging projects outside of their regular work.

4.3 Diversity

Diversity is embraced by the organisation. This is still work in progress. Focus is on several aspects of diversity, for example awareness of the (cultural) differences between generations which improved working relationships. And awareness that young employees have different needs. Kadaster created an environment fitting the young employees, where it is possible to explore new methods and processes, and to learn from mistakes. Kadaster aims to give young employees the opportunity to educate and develop themselves. Also through talentpools and management development courses (young) professionals are challenged.

Disabled people have been hired and successfully integrated in the organisation. The more diverse workforce has given a positive impulse to the work environment.

4.4 Young Kadaster books results

After two years Young Kadaster has 66 members. Young Kadaster organises activities such as workshops on personal development, business lunches with board members and brainstorm sessions about the future work environment. Young Kadaster allows members to get to know other employees across the company and build a network facilitating knowledge exchange. Young Kadaster members are also invited by the board and strategy departments to share their vision on various organisational issues. For instance, they participate in creating a new trainee programme, they are involved in the open innovation

Also Kadaster gives young employees the opportunity to educate and develop themselves. It created an environment where it is possible to explore new methods and processes and to learn from your mistakes. Through talentpools and management development courses (young) professionals are challenged.

Testimonies from young professionals create a positive image to recruit new employees. New employees receive information about the association from one of the ambassadors of their office location.

Young professionals are outnumbered by their older employees, but with help of Young Kadaster the bridge between the generations is strengthened.

4.5 Exchange Abroad started

Younger employees have already been involved in projects in Surinam, Honduras and Turkey. Kadaster is also involved in exchange programs to receive colleagues from abroad. Last year a surveyor from Finland participated in a Finish program for a civil servant (oneway) exchange and a graduate from Turkey worked for one year at Kadaster. This summer two surveyors from France will visit the organisation.

Kadaster welcomes these initiatives among the younger employees. Being able to exchange knowledge and experiences is valuable for both employers and employees.

4.6 Knowledge management implemented

The knowledge management tool is successfully implemented by a few departments, others will follow. The tree shows what knowledge is available, what the level is of that knowledge, the ambition to enrich that knowledge and at which time this knowledge will leave the organisation. With this inventory gaps can be identified between the existing and desired knowledge within the company. It provides insight whether knowledge you are interested in can /should be acquired with the company or is better sought via collaboration with other partners.

4.7 Social Media in full swing

More than 1200 employees have created an account on Yammer. However not every member is actively involved in the discussions. Most of them are silent members and follow the discussions. The groups are successful within Yammer. One of the Management Teams is using a closed group to discuss issues and the innovation department uses the platform to exchange and enrich ideas. It gives the users the ability to respond to issues or to be involved in discussions while not being in the same office of available at the same time. Other public organisations in the Netherlands are also able to connect to the Yammer platform to stimulate cross company discussions / networks.

4.8 Capacity building results

It is not only important for Kadaster to maintain the chain of geo information data, but also that its partners are willing to do the same. The success of the foundation is already visible. An increased number of students can be observed: each year there are 70 more master students, 50 more bachelor students, and 20 more vocational students. This is the success of the GoGeo site, mailing, careerdays, publications, congresses and symposia.

Also the related studies are innovated, which can be seen on the GoGeo site listing all studies related to the geo information sector. A new minor Geo Information study will start in September 2012. Six universities are involved in one national Geo information minor. On vocational level there is a national course on land surveying, national pilot GEO-ICT, evening

classes land surveying, GIS@MBO and plans for associate degree. On applied science level there are new initiatives for bachelors at several higher education institutes, as well as cooperative minors.

Politicians are involved to influence the capacity building, this is both on National as on European level.

5. CONCLUSION

Kadaster is has been aware of the issues that impact their (future) operations: aging workforce, change in geo skill demands, and the recruitment of young geo professionals. It has taken action.

The change in recruitment, the focus on diversity and the effort of an education focused foundation have yielded positive results. Kadaster has become a more attractive employer and it receives many applications for its vacancies. By putting efforts into capacity building for education via the education foundation, Kadaster also assures the flow of new geo professionals into the future labour market.

6. RECOMMENDATIONS

The case of Kadaster gives insights into how a company can respond to the challenges of an aging workforce, including knowledge transfer, and recruiting young geo professionals.

Three initiatives are crucial in recruiting young geo professionals and responding to the possible knowledge gap by senior employees retiring.

- Be an attractive employer for the (young) geo professional
- Use international experience of (young) geo professionals
- Combine the expertise of each generation

With combined effort of all stakeholders the geo profession can be promoted among students and young professionals. This can only become a success if the stakeholders evolve similarly.

Geo information will become more important in a European and global context. Data travel (more and more) across borders. Knowledge of foreign systems and organizations will enhance the cooperation between organisations. In addition, foreign exchange programs can be installed by umbrella organisations. It will provide young geo professionals opportunities to a 'global' workplace, knowledge base and network.

To ensure knowledge is secured it is important to let the different generations work together. This is not only between the retiring generation and the young geo professionals, but also between other generations. Associations like Young Kadaster and the Young Surveyors are useful networks to initiate knowledge sharing.

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CONTACTS

Paula Dijkstra
Kadaster
Hofstraat 110
7311 KZ Apeldoorn
THE NETHERLANDS
Tel. +31 88 183 5509
Fax + 31 88 183 2074
Email: paula.dijkstra@kadaster.nl
Web site: www.kadaster.nl