

## **ESF Article 6: Knowmove Project**

# **Age and Knowledge Management in the Motor Manufacturing Industry: final evaluation of a European Project**

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### **1. Purpose of this report**

This evaluation report was commissioned as part of the Knowmove project carried out under the ESF Article 6 sub theme “management of demographic change”. The Knowmove project ran from December 2004 to December 2006 and was led by GKN Driveline, Lohmar. The evaluation study was carried out by the Centre for Research into the Older Workforce, which was part of the University of Surrey, UK until July 2006 when it moved to the National Institute of Adult Continuing Education in England and Wales (NIACE).

As evaluator CROW was expected to monitor and review the progress of the project, providing formative support for the partners as the project progressed, and a summative report at the end reviewing achievements, challenges, and lessons learned. Because of its specialist expertise, CROW was also expected to contribute background knowledge of the older workforce to the partners.

The evaluation was, from the beginning, intended to not merely to monitor the achievement of the contracted project objectives, but also to distil lessons learned, both about age and knowledge management in the motor industry and about the conduct of such projects. This report is the outcome of this work.

## **2. Executive Summary: the achievements of the Knowmove project**

The project was based on the notion that integrating approaches to age management and knowledge management would enable firms in the motor industry to better manage an ageing workforce in the context of rapid industrial and demographic change.

The original aim of the project was, after some preliminary gathering of evidence of current practices and needs, to develop an IT based platform (the "Knowmove Platform") which would make it easy for firms to record the competences of older workers against job profiles; to identify skills and knowledge which were likely to be lost as workers retire; and devise strategies to avoid losing critical knowledge. The Platform would then be piloted in partner firms, evaluated, revised and implemented.

In the event the process proved more complicated, though not less productive. The Knowmove Platform was created, but the original plan for piloting and implementation proved unrealistic for a number of reasons. These included differences in firm culture; low recognition or priority being given to age management itself; and resistance to importing externally developed models. One of the main partners, Volkswagen, withdrew from the project at an early stage. In addition, three of the partners provided advice and support to small automotive component manufacturers who did not have the resources to be fully involved in the project, and while they could contribute to the development of the project but could not test the Knowmove platform. Because SMEs' experiences with and attitudes towards age and knowledge management differ significantly from the large firms, it was agreed at the inaugural project group meeting that the platform would be developed in a way in which the SMEs could be involved, even if they did not fully participate in implementation.

Through discussions between partners, a broader range of techniques to address the core issues was developed and applied. Most importantly, the two distinct approaches explored – the big and complex IT based Knowmove Platform, and the Bekaert approach, rooted in individual HR management strategies, both contributed significantly to a growing consensus among partners about ways forward.

At the end of the project it was clear that awareness of the ageing of the workforce and its importance, and of the potential to link age and knowledge management, had grown in partner firms and in the industry more generally. Thus, although the project did not achieve precisely what was originally planned, the underlying purposes were achieved, and the project had taught participants (and we hope readers of the evaluation) a number of lessons about the management of change in this area.

The following tables summarise what took place against each of the aims and objectives laid down in the original project proposal. The underlying issues are explored in more depth in the following report.

<b>Table 1 – Project Objectives</b>		
1.	to develop, pilot test and evaluate new workplace strategies for age management, based on knowledge management methods, that can contribute to the retention of older workers in employment in the European automotive industry	Achieved, although a broader approach was adopted than originally planned. Two contrasting models were explored: the Knowmove Platform developed by GRIFO with CRF, and the Bekaert “Milking Programme”. In the final months of the project the two converged, and most partners made some use of parts of both
2	to explore the implications of adopting a knowledge management system in a company with ageing workforce	Achieved – evidence in the baseline report and below.
3	to develop alternative working arrangements at enterprise level to make the best use of older workers’ skills and experience	All firms considered this, but Bekaert was the only organisation to implement this on any scale during the life of the project.
4	to develop and test new ways of delivering training to older workers	The Knowmove platform provided access to existing e-learning resources, linked to the competence profiles of staff. The only direct training carried out was in how to use the Knowmove platform and in mentoring for those using the Bekaert “milking” process.
5	to raise awareness of the potential of older workers	Awareness of the implications of demography for firms was raised, among partner firms and more widely. Awareness of the potential of older workers was more mixed: Bekaert was very proactive in managing older workers knowledge. CRF senior executives did not accept the importance of age management. GKN reported that the issue is becoming much more important. In Sweden it was still seen as an issue for the future (perhaps reflecting the fact that the Swedish firms were all SMEs)

<b>Table 2: Planned activities</b>		
1	identification of actual needs of the automotive industry with regard to age management	Achieved in phase 2 (see the baseline analysis) and the work which Mindset did
2	definition of HR policies, organisational models and workplace arrangements which recognise and make the best use of the older workers' experience and skills in the automotive industry;	Achieved in phases 3 and 4
3	introduction and testing, under realistic conditions, of knowledge management tools and methods to assess and capture the competence of older workers, mainly in the area of best practices and continuous improvement of the business processes of the automotive industry	Achieved: the Knowmove Platform was tested in phase 5
4	enhancement of older workers' IT and soft skills (using blended-learning techniques ) to allow them to better perform mentoring and tutoring functions;	Access was provided to e-learning resources through the Knowmove Platform. Mentoring training was provided to staff exploring the Bekaert approach. No soft skills training was provided. Training materials on topics such as age management, leadership, mentoring, coaching, problem solving and communication were made available through the project website ( <a href="http://www.knowmove.org/resources.htm">www.knowmove.org/resources.htm</a> ). Such materials include introductions to topics, practical advice , exercises and theoretical discussions.
5	establishment of a culture facilitating the adoption of knowledge management approaches at enterprise level with the direct involvement of HR managers;	Firm responses were mixed: significant change happened in Bekaert, but not in CRF, GKN or Swedish firms.
6	setting up of age-mixed teams that will work to solve specific problems of the automotive industrial	This was not achieved in the form envisaged, although age mixed groups were created in Bekaert, specifically for knowledge transfer purposes. In most firms, however, project staff were not

	partners and generate new knowledge for the benefit of the whole organisation.	sufficiently close to operational practice to carry this out, and such deliberate age mixing was felt to be artificial and inappropriate in the light of the preliminary research.
7	evaluation of the results achieved, including measurement of the progresses made;	Achieved: this is the report
8	dissemination and mainstreaming of the lessons learnt with the direct involvement of social partners (trade unions and trade associations) representative of the European automotive market sector.	Achieved: dissemination events were held in all countries. A website (knowmove.org) was also set up which contains all of the material produced from the project.

### **3. Evaluation methodology**

Since the project proposal was to create, develop and pilot approaches to age and knowledge management, and to link the two ideas, the evaluators set out to:

- review the state of readiness of partners in the first months,
- monitor the project processes,
- review any changes in the partner firms at the end of the project.

In Italy, Germany and Belgium, evaluation interviews were conducted in English, with local interpretation in a few cases. This proved acceptable in these large firms where linguistic skills were clearly high. In Sweden, where the participants were SMEs, language proved a more serious limitation, and some of the interviewing had to be conducted in Swedish by the lead Swedish partner.

It should be noted that an external evaluator unfamiliar with the occupational sector has the advantage of impartiality, but is always prone to misunderstanding, or reporting things which are very obvious to those in the industry. It is also true that some of the subtleties of discussions can be lost when an interviewee is working in a second or third language, or through an interpreter. We hope that this has not resulted in any inadvertent misrepresentation of the issues..

#### ***Background briefing to the partners***

CROW provided a background presentation on the older workforce at the first transnational meeting in Lohmar in January 2005.

#### ***Attendance at transnational meetings***

CROW staff attended all the 8 transnational meetings of the project, observing and recording processes and emerging issues. At each of the meetings CROW made a direct input into the meeting, reflecting on achievements and issues as they emerged.

#### ***First visits to partners***

In the first months of the project CROW staff visited all the industrial partners, in order to interview relevant managers and trades unionists, to ascertain their level of awareness of ageing and/or knowledge management as issues for the industry, and seek evidence of current or planned strategies to address them. All partners cooperated in this process and provided important information, especially about their very different organisational contexts, social, economic, industrial and organisational. 20 individuals were interviewed at 11 sites in Italy, Germany, Belgium and Sweden. In Sweden, five of the SME interviews were conducted by the Swedish partner in Swedish and reported back to the CROW team. Senior executives at CRF were not willing to be interviewed (for the first and second rounds), but CROW did speak with union representatives and team leaders who were responsible for implementing the Knowmove project in CRF.

#### ***First survey of workers***

Following the first visits, a specially designed questionnaire was created, translated by partners and distributed to workers in 3 partner firms (CRF, GKN Bruneck and Bekaert) and in a number of SMEs in Sweden. This included some questions already used for a more extensive survey of employee attitudes across the whole workforce in the UK, providing the opportunity to benchmark responses.

221 responses were received. 90 from Bekaert, 81 from SMEs in Sweden, 40 from CRF, and 10 from GKN Bruneck.

### ***Second visits to partners***

In the final months of the project CROW staff again visited the participating countries, interviewing managers and trades unionists in partner organisations, to assess changes in attitudes or practices over the project lifetime, and to gather views about the Knowmove platform, and other approaches to age and knowledge management revealed during the project. 11 interviews were conducted, including 3 trades unionists, in 3 countries.

### ***Second survey of workers***

In the final months a repeat survey was issued to the same workers as responded to the first, seeking views on the project activity and particularly the Knowmove platform. 67 responses were received, 53 from Bekaert, 14 from CRF. (It was reported that the CRF numbers were lower because many of those interviewed in the first round had retired before the second).

### ***Dissemination events***

CROW staff contributed to dissemination events for the project in the UK, Italy, Germany and Belgium. Five dissemination events were also held across Sweden.

### ***Contract compliance***

A number of specific objectives were set for the project, among which the clearest were to develop and pilot a model of age and knowledge management in the motor manufacturing industry. This was carried out.

However, in addition to this, as a result of discussions in transnational meetings, and feedback from the national evaluation visits, a number of partners developed or discussed alternative approaches to the same agenda. Most notably the model adopted by Bekaert in Belgium was refined in Bekaert, and formed a basis for development work in most other partners.

## **4. Project Findings**

The project processes proved more complex than planned. The initial stages took longer than anticipated, and the time gap between the creation of the Knowmove platform (a central component of the original proposal) and the end of the project became somewhat compressed. A larger range of approaches to age and knowledge management emerged, and although the Knowmove platform was developed, and demonstrated to all partners, it was only tested on any scale in one, and with relatively small numbers of workers. It was therefore unrealistic to expect to detect major change in worker attitudes or behaviour over what was in practice less than a year of piloting work. The “before and after” evaluation of the platform was therefore of limited value, and the evaluation focused more strongly on learning from the variety of approaches adopted by partner firms.

### **4.1 Age management**

.At the beginning of the project, none of the firms had age management strategies which sought to retain older workers. Where strategies did exist, they focused on encouraging phasing out of work, reflecting historical concerns to manage downsizing of the workforce by encouraging early retirement. In both Germany and Belgium, there had been Government schemes designed to ease retirement by subsidising employers to allow workers to phase out gradually, but in practice this was usually being used to facilitate earlier retirement, and no firm had a policy to promote flexible or part-time working, although these are known to make extending working life more attractive. These schemes were being closed down in response to the Europe wide policy concern with demographic change, but there are still workers working their way through them.

At the end of the project most participating firms were aware of age as an issue, but none had an comprehensive approach to it, though several were planning to develop one. Bekaert and CRF were investigating ways to enable employees to work flexibly, but it was recognised that a change in workplace culture was required and not yet achieved. It would appear that the Knowmove project was one factor in producing the development of age management strategies.

### **4.2 Knowledge management**

Firms’ approaches to knowledge management are, like everything else, driven by perceived business need. Most participating firms recognised the importance of knowledge to their business. This was most evident in CRF and GKN Lohmar, both of which employ large numbers of research staff, and regularly register large numbers of patents. The knowledge of manufacturers like Bekaert is less clearly defined, and more often tacit, needing more systematic strategies to extract and record it. It is important to note, however, that not all firms saw knowledge as a core part of their business. Some of the Swedish SMEs reported that they were essentially working in a relatively simple field, manufacturing using established traditional technologies, with relatively little scope for improvements in process or materials. Some such firms did not see knowledge management as a key factor in their competitiveness or survival. The large firms, and some of the SMEs, in the project all had formal knowledge management systems, designed to collect, store and disseminate formal knowledge throughout the organisation, usually based on large IT systems. Few older workers



seemed to be aware of these systems, and in no case were these systems linked to HR strategies for recruitment or for managing retirement decisions. Certainly the idea that knowledge and age management strategies might be linked seemed surprising to all those interviewed in the first round of visits. However, in the second round visits, the idea was more familiar to interviewees, and respondents said that one reason for not implementing the Knowmove Platform was that it would not obviously integrate with existing systems of this kind.

For the manufacturing plants, most knowledge sharing appeared to be informal, through routine team meetings, and day to day working, and there were few formal strategies for managing this, although the Bekaert model shows one possible approach.

Most workers reported that they were happy to share knowledge, with over half of respondents saying that they spend more than 6 hours a week sharing knowledge with younger colleagues.

One further way of developing and maintaining knowledge is, course, through formal training. It is well established that participation in training declines with age, except in the research intensive workplaces, where keeping up to date is seen as a duty, and often a pleasure. Two thirds of workers in the survey said that their work required skills which they did not have. When asked why they had not undertaken any training to fill these gaps about 1/3 said that their employer had refused a request (sometimes because they were perceived to be too close to retirement), and about 1 in 6 said that they feared that they might be unable to cope, might look foolish, or had competing time requirements. However, half of the respondents who had unmet skills needs said that it had never occurred to them to seek training to fill the skill gap, no one had ever suggested it, or they thought that they could cope without it. This does not suggest that older workers in these firms are in an environment which encourages them to keep up their employability.

### **4.3 Drivers for change**

During 2005-6, the ageing workforce was not the highest priority for attention by any of the participating firms. All partner firms were in a process of continuous change, and many other developments were calling for attention, of which the greatest was clearly globalisation. All firms discussed the uncertain future of the industry in Europe. Two potential partners withdrew from the project (one immediately before the start, and one shortly afterwards) because major restructuring was changing the industrial relations climate. One was replaced (TRW with Bekaert) but the loss of VW, as the only Automotive OEM, was regrettable. At the beginning of the project many firms were moving work overseas to reduce costs or to open up new markets, by the end, some were moving work back, in response to concerns about quality. One firm which had planned to keep research in the home country, had changed its strategy, to locate research close to the manufacturing base.

For most firms knowledge management was as much an issue of transferring knowledge to new subsidiaries in Eastern Europe, China or Latin America, or of protecting intellectual property, as preserving the knowledge of retiring Western European workers.

In general, worker attitudes to sharing knowledge were very positive, even when it came to sharing in China, but there were clearly debates about the future of individual firms, and in some cases the relatively positive picture of the future presented by

managers (typically preserving the high skill, research and prototyping work in Europe while offshoring the manufacturing) was questioned by trades unionists, who saw themselves as closing the plant with the minimum possible suffering for the existing workforce.

For SMEs, the key issue was customer demand. Those whose primary business is supplying specific components to major manufacturers tend to be driven by the requirements of those manufacturers, who may dictate what quality assurance systems should be used and how, leaving little time for new IT based systems for HR management.

The pace and extent of ageing across the workforce varied greatly between firms, and the life cycle of a firm or plant was clearly a significant issue. Some plants faced the sudden loss of a large cohort of experienced workers, because the plant had been created, with a relatively uniform young workforce at some point in the 1970s, all of whom were not in their late 50s. Some SMEs, which had been created by a small group of enthusiasts were facing this problem in a particularly acute form. Sometimes these problems affected only one group of staff, for example managers, while the problem with engineers might be delayed for a few years.

Some firms, on the other hand, faced high turnover of younger workers. This affected CRF, who have a tradition of developing highly skilled specialists, working at the cutting edge of the technologies, and who then move out into the production environment elsewhere in the FIAT Group. In Sweden SMEs can provide good opportunities for people in the early stages of their careers, but they need to move for career progression. In these circumstances knowledge retention is more a question of handling loss of young people than old ones.

#### **4.4 Barriers to change**

These drivers for change on other fronts are the primary barriers to developing more creative age management strategies. At the beginning of the project most managers were aware, in a very general sense, of the ageing of the workforce as an issue, but for none was it a high priority. However, in the second round of interviews levels of awareness were higher, and at the final GKN dissemination event directors and senior managers reported that the issue had recently become a higher strategic priority for the organisation. In Bekaert senior managers were interested and committed to strategies for managing change. In CRF, on the other hand, senior managers were not willing to be interviewed, presumably because the issue is not seen as of sufficient importance

A major factor in preventing change in knowledge management in several firms was internal competition, which was reported as very strong. Sometimes this reflected a history of mergers, which had left individual plants feeling competitive towards each other, while sometimes this appeared to be a deliberate management strategy to foster productivity through competition. In general individuals seemed willing to share knowledge, with 95% of those surveyed agreeing that "I am happy to share my knowledge" although only 65% agreed that "I spend a lot of time" doing this. Interestingly, Bekaert workers seemed more willing to share knowledge with colleagues in China, despite the potential implications for future competition for jobs, than CRF and GKN workers were between plants within Europe.

The time taken to make change happen was also cited as a problem. Senior managers in GKN commented that two years is too short a time to produce the kind of cultural change which the Knowmove project set out to produce.

The Knowmove agenda was in competition with many other priorities for firms, especially for SMEs, who find developing long term strategies of any kind a problem, and tend to be driven by the requirements of their customers.

As a result of these competing pressures, senior managers' perceptions of the age and knowledge management agendas varied greatly, and this was clearly reflected in different degrees of commitment in different plants and firms. It was clear that without senior leadership, the kind of cultural change implied by the Knowmove project would be difficult to achieve.

#### **4.5 The Knowmove platform**

At the heart of the Knowmove project as originally conceived, was the idea that it could be possible to link established, and IT based, techniques of knowledge management and age management. A major element of the project was therefore the creation, piloting and evaluation of an IT platform to do this. This platform was developed by GRIFO Multimedia with CRF, and consisted of a system for mapping the competences required for different roles, linked to a system for mapping the competences of individual workers and teams, to identify training requirements, and anticipate future skills gaps as individuals retire. The competence map linked to a range of support resources, including e-learning programmes, documents, video clips and other files. An individual could thus identify his or her individual strengths and weaknesses, and find resources to help remedy deficiencies. Similarly, a manager could identify the strengths and weaknesses in his team, identify priorities for training and anticipate future skills problems

This platform was created and demonstrated in all participating countries, but no participating firm adopted it on any scale in its full form. On the positive side, it was perceived to be easy to learn and understand, and individuals found it enjoyable to use. The ability to incorporate files, documents, media, etc. was particularly welcomed. It seems likely that the platform will appeal particularly to professions like engineering, which are technically literate and accustomed to systems of formal classification.

However, for a variety of reasons, most participating firms chose not to adopt the platform as a mainstream part of their knowledge or age management strategies. The problems were of two kinds.

Firstly, there were relatively trivial ones which could have been overcome, given more time and/or commitment by the partner firm. For example, firewalls and other security systems of some firms blocked access to the tool, making piloting impossible within the timescale of the project. The Swedish firms were not willing to try a system whose top level access was in English, and the resources were not available to translate these. Although the competence profiling process allows for inputs on individual competence by both worker and manager, Bekaert felt that they preferred to begin with the manager's assessment of an individual's competence, not the individual's own. Again the modification to the system would have been relatively small, but time was not available.

On the other hand, some of the problems were more intractable, rooted in the culture and practices of the individual firm. Some firms recognised the issues but were

resistant to an imported model, and would wish to develop their own approach in house. Some cases firms already had HR systems or IT based quality assurance systems, which appeared to be incompatible with, or to duplicate information with, the Knowmove platform. Some, especially SMEs, but also Bekaert, felt that the effort involved in inputting the competence map for every job was disproportionate to the perceived benefit.

#### **4.6 The Bekaert “milking programme”**

Bekaert, on the other hand, had adopted a different approach to age and knowledge management. As part of a previous ESF Equal project, they had been involved in developing an approach described as a “milking programme” where staff were supported in a structured process of extracting knowledge from retiring employees. They brought this experience to the Knowmove project, where it generated considerable interest, and where the ideas were developed further.

Bekaert developed an 8 stage (subsequently reduced to 5) process for managing knowledge transfer.

Central to the Bekaert approach was the training of both the retiring employee, his successor and supervisor in how to carry out a structured knowledge elicitation process. Together they systematically analysed the areas of activity and knowledge, including tacit knowledge, attached to the role, and recorded the outcome. Thus knowledge was shared with at least three relevant people, and sometimes more, and the use of three questioners reduced the risk that key areas might be overlooked. The interviewees reported surprise at how much they knew and felt very positively about the respect which this process generated for their lifetime of experience. Since a sense of value and respect is one of the features which makes work more attractive to older workers, this is a very positive result. However, there were logistical problems with this approach. It was designed to operate over two years before retirement, but in practice, the decision on retirement often occurred at very short notice, allowing only limited time to identify the successor and organise the programme.

#### **4.7 The importance of context**

While it would be inappropriate to attempt to generalise about firms or national patterns on the basis of the very small sample of plants involved in this project, there is no doubt that national policy contexts have a major influence on the behaviour of firms and employees, in age management in particular.

One key issue is expectation of retirement age. In Sweden there is a general public expectation that everyone works until 65, and then everyone retires. The Swedish Government has introduced the right to continue working to 67, and many older workers have exercised this right. Average real retirement ages are thus very high by European standards, but very few people are still working after 65. At the other end of the spectrum lies Belgium, with the lowest real retirement age in the EU, and a general expectation that manual workers retire at 55 and non-manual at 57. In Belgium, like Germany, there is also a recent history of using early retirement as a way of managing industrial reorganisation and downsizing, and there have been Government schemes designed to ease older workers out of work through state subsidies for part-time working. The experience of GKN Bruneck suggests that a similar pattern applies in manufacturing in Italy, although this is not evident in CRF, which has a different, more research led, culture, and a younger workforce profile. In

all of the participating countries part-time working, which can be attractive to people making the transition from full time work to full time retirement, is rare.

In most of the firms there remained a strong view that retirement (often at a relatively early age) was an entitlement, both for those in physically demanding roles and for those in senior roles.

A second issue is the rate of unemployment. National rates vary considerably between the various countries from 7.5% in Sweden to 11.2% in Germany, but in particular localities rates can be much higher. In Bekaert it was clear that trades unions still held to the “lump of labour” view that retaining older people longer would exacerbate unemployment among their children’s generation, although it was recognised by them during the second round of interviews that the firm was having trouble attracting young recruits.

Finally, it is worth noting that in none of the firms was the implementation of age discrimination legislation seen as a driver for change. HR professionals in the project firms were aware of the European Directive, but in marked contrast to their UK peers, they did not expect it to be the source of major disputes or changes to practice.

Changes to State Pension schemes, and rules on early retirement and redundancy in all of the countries were expected to have a much more significant impact.

#### **4.8 Employee attitudes**

Employee attitudes, as reported in the two surveys were notably positive about work in general. Individuals reported a strong loyalty to their employer, job and colleagues—particularly in small, and family owned firms. In Bekaert, which had recently become a plc, after more than a century as a family concern, trades unionists reported a negative change in employee attitudes which they attributed to the change in status (although this might also reflect current anxieties about the firm’s future). This was also the case with some Swedish SMEs, which had begun as family firms, but are now part of global corporations.

Some interviewees suggested that globalisation had contributed to a sense of disillusionment, particularly amongst blue collar workers, but overall levels of job satisfaction were high, and a majority of respondents said that they would miss work if they retired today.

However, few would consider working after retirement age (whatever that might be). Those who would consider staying longer, want part-time or occasional work, which is rare in the sector. An exception to this is, however, senior managers and technical specialists, who were sometimes happy to return on a consultancy basis, and some firms seemed willing to do this, even at greater cost, as part of strategies to reduce the headcount of permanent staff.

#### **4.9 Kinds of firm**

The firms participating in the project reflected the diversity of the industry, and its impact varied greatly as a result. The most striking feature was the division between what were essentially research organisations (GKN Lohmar and CRF) and manufacturers (GKN Bruneck, and the Swedish SMEs). Bekaert was primarily a manufacturing establishment, though with a significant research and development element, and an ongoing internal debate about how far such functions could be retained in Belgium when an increasing proportion of manufacturing was being moved overseas.

The research institutions had, in general, younger workforces, and a culture in some ways more like a University than a factory. Knowledge was likely to be more formalised and more highly valued, but also to be seen (as in a University) as personal property, liable to depart with the individual, even if the patent remains. In CRF it was reported that most employees continue learning up to the time they retire, or leave the firm, and that keeping up with the leading edge of knowledge was a key expectation of all staff. There, knowledge management had more to do with protecting intellectual property when individuals (especially patent holders) left in mid career, than with retaining the skills of retiring workers. Knowledge was more likely to be perceived as personal property, tradable in a job market, than collective knowledge of the firm itself. In the manufacturing firms, on the other hand, the workforce was generally older and the management of retirement was a current issue, though with different implications in different firms and countries. Bekaert, for example, was keen to gather the knowledge of retiring workers, but was still inclined to see early retirement as a solution to organisational downsizing.

In so far as the smaller firms were aware of the ageing issue at all, they were unlikely to see it as an urgent priority. They were more likely to be driven by their customers, and the systems imposed by them, than by any attempt at an age or knowledge management strategy. Indeed it is proper to ask whether the concept of an age or knowledge management “strategy” is appropriate for a small firm. While they need to be alerted to the need to predict future patterns of retirement, when the problem is pressing they are likely to react quickly and on an individual basis, and this may be the most appropriate approach.

#### **4.10 The project process**

The Knowmove partnership was newly convened for this project, and most participants had only previously had contact with one or two of the others. However, the charismatic management of the project convenor, Professor Ghosh, overcame any difficulties in the early stages, and a diverse group of people met 8 times over the two years on a positive and constructive basis. Unlike some EU projects, there was no sense at any point of any partners not making their proper contribution to the work, and although some of the work took unexpected directions, they were debated in a collegial way and welcomed as creative contributions, rather than as threats to the project’s integrity.

In the final evaluation interviews, several informants commented that the process of moving from a very low level of awareness of the issues to implementation of a major new IT based HR system, even on a pilot basis, within a large organisation, was bound to take more than two years. Were such a project to be launched again, it would be appropriate to allow more time to make appropriate adjustments.

## 5. Conclusions

It is clear that, at the beginning of the project, age management was not a high priority for any of the participating firms, all of whom were, in one way or another, more concerned with more immediate business issues, including the impact of globalisation, which was affecting almost all firms, though in different ways.

By the end of the project, awareness of ageing and the implications of demography for future recruitment had begun to make an impact in some of the firms, and the project can be judged a success in that it has contributed to raising awareness of an issue which is likely to become pressing in the next decade.

Where firms had formal knowledge management systems, they were generally not linked to HR functions or to managing patterns of recruitment and retention. Some firms did not see knowledge as a major element of their business (some SMEs manufacturing standard parts for example), and the research and development led firms, with the highest investment in knowledge creation, were more concerned about preserving their intellectual property than in managing knowledge transfer. Where the relevance of an IT based system was acknowledged, there was a concern that it should be integrated with other major IT based systems, for example those designed to manage quality assurance, which sometimes needed similar data.

In this context it is hardly surprising that none of the partners simply incorporated the Knowmove platform as part of their mainstream business. For all firms, there were more urgent priorities, and in some cases these conflicted directly with the project (Volkswagen, for example, withdrew at the beginning of the project because of major internal restructuring and downsizing). The Knowmove platform was developed and tested most extensively in CRF, but support for the project there was limited to a relatively small group of enthusiasts (perhaps reflecting the fairly individualised, and competitive, culture of the organisation itself), and there was no evidence of serious commitment from senior managers (who were not willing to be interviewed by the evaluators). However, several firms agreed that the platform was been valuable, as a “proof of concept”, which might be built on in the future. If it were to be adopted by any firm in the future, it would clearly need to be tailored to the individual organisation, linked to a programme of cultural and technological change. It might also need to be simplified to make it more cost effective.

One clear message from the project is that organisational context is critical, and that the business case, rather than long term predictions of demography, or national legislation, will determine action by firms. It is also clear that cultural change is necessarily slow, and that ageing and knowledge management, while important issues, are competing for attention with much more urgent ones. A firm debating whether it can retain a viable operation at all in Europe is unlikely to be very interested in either age or knowledge management strategies.

Although one central element of the project was the testing of the Knowmove platform, it was not the only approach to the issues explored during the project. An alternative approach was developed by Bekaert, with their “milking” programme, which depended not on a formal recording of competences, but on a carefully structured process of face to face interrogation of experienced individuals prior to retirement. This appeared to work well, and was particularly welcomed by the retiring workers, who felt their expertise valued, and were proud to hand it on to successors. This approach is easier to incorporate into different firm cultures and structures.

However, towards the end of the project it became clear that Bekaert was adopting some elements of the Knowmove approach, and that some other firms were combining the two in creative ways.

One clear message was that neither knowledge management nor age management strategies were a high priority for SMEs, and in organisations with small numbers of staff both may be inappropriate. Certainly, such strategies are likely to need careful planning to ensure integration with the systems of major customers.

In conclusion, the project was successful in raising understanding and awareness of the implications of demography for motor manufacturers. It also developed a range of tools and resources to support action. The Knowmove Platform, which formed the core of the original proposal, was developed and demonstrated, and has shown what could be possible in terms of gathering and managing human capital in larger firms, but that such an approach can probably best be implemented in conjunction with strategies derived from the HR domain.