

# *Transportation & Logistics 2030*

## Volume 5: Winning the talent race

*Strategies to help transportation & logistics companies improve their talent management.*



Our cover picture shows Margret Inga Gudnadottir,  
who works in the Assurance practise for PwC Iceland.

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# Welcome

*The race is on! Good employees aren't just a commodity anymore; they've become a scarce resource. A company's workforce is more than a certain 'head count' or number of 'full-time equivalents'. It's made up of people with a wide range of technical and soft skills and unique perspectives on their work and their employer. Diversity is increasing, with employees of different ages, genders and cultural backgrounds working together. That's a welcome development, because mixed teams often perform better.*

*The starting position of transportation and logistics companies couldn't be better. They can offer their staff varied types of work, often in an international and cosmopolitan working environment. That should translate into popularity with job seekers. But the reality is somewhat different. The transportation and logistics industry is confronted with an image that's less than ideal. Work in warehouses, on ships or in trucks and trains tends to be associated with unpleasant working conditions and a less than attractive career path.*

*Will sector companies nonetheless succeed in capitalising on their advantages and winning the best employees? Will they be able to build a strong employer brand? The next generation of talent isn't just concerned with salary and career development, they want to work for a company with strong values too. Will transportation and logistics companies be able to inspire them? How will they improve their recruiting, compensation and development strategies?*

*To get some answers, we've put together a global panel of experts and posed a series of questions using a RealTime Delphi methodology. Will transportation and logistics executives be standing in the winner's circle in 2030? You can read the experts' views in this report. And we also present some suggestions on how transportation and logistics companies can position themselves. One thing is clear: the race is a marathon, not a sprint. Talent management will need to be at the very top of the agenda for transportation and logistics leaders for decades to come.*

*We hope our report will help you get off to a running start in your company's own race for talent.*



**Klaus-Dieter Ruske**  
Global Industry Leader  
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## ***A note from our academic partner***

*In logistics it's all about goods? One might think so. Actually, it is about people. This study demonstrates it with absolute clarity: The success of transportation and logistics operators depends decisively on the quality and qualifications of its employees. This prerequisite will not decrease but increase in the future. Considering that exactly this requirement for success already causes difficulties today, qualified personnel will be a determining factor for the success and survival not only of companies, but also of entire supply chains.*

*The results of the study are alarming: the Delphi panel, which was activated for the purposes of the study, predicts that the attractiveness of logistics will suffer in the coming years. Many young individuals, managers and decision makers do not consider the industry to be attractive enough to apply for a position in it. That is bad news. The good news: Every company whose managers are capable of remedying this existence-threatening situation, simultaneously open the door to the future. One important way to do so is through 'employer branding'. For small and mid-sized enterprises, building a 'recruiting alliance' with peers can also have a major impact. Successfully handling the future entails things, which are weakly developed today, namely adequate future awareness in the executive rankings, or implementation and regular use of techniques and tools of corporate foresight, such as scenario techniques, Delphi panels or trend research.*

*We are living in times of terrible catastrophes and surprising structural breakdowns. The world is spinning faster than ten years ago. He, who adjusts his futures competence to this vicissitude, will also do roaring trade.*



***Dr. Heiko A. von der Gracht***  
*Director, Institute for Futures Studies and Knowledge Management (IFK)  
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## ***Executive Summary***

Around the world, populations are ageing. In many developed economies, increasing numbers of workers are contemplating when to retire. That's a major problem for some sectors, like road freight, where labour shortages due to retirements are already beginning to take their toll. In developing economies, transportation and logistics as a sector is growing rapidly – but workforce development isn't yet keeping pace. How will transportation and logistics companies cope?

It's a question with strategic implications for every aspect of the business. That's why the first step needs to be making sure that human resource (HR) management is a strategic partner of the C-suite, rather than a supporting function.

The next order of business will be addressing the image problem. The sector's poor image came up again and again in the responses from our Delphi panellists, regardless of the question asked. Transportation and logistics as a sector isn't viewed as attractive by most job seekers – when it's considered at all. Many transport jobs are considered to be low-paying dead-ends. Higher skilled logistics roles with good pay and advancement potential don't even make the radar screen of many talented graduates.

The problem is compounded by a dearth of training programmes in many areas and an insufficient focus on learning and development within individual companies.

There's no doubt that investments will be needed. Logistics companies in emerging countries need to invest heavily in training, development and education for their young joining workforce. In developed countries, training the next generation and adapting the workplace to the needs of older employees will be key.

***Training and development of younger workers and adapting the workplace to the needs of older workers will mean investments – but they're an absolute must.***

***Transportation and logistics executives need to make improving the sector's image a top priority – and the commitment should come straight from the top.***

**Companies need to get compensation right to attract and keep skilled employees. Aligning individual and company goals can help.**

Improving recruiting efforts will be important all over the world. Small and medium-sized enterprises (SMEs) have the toughest time – but establishing alliances with their peers and taking advantage of new opportunities provided by virtual recruiting methods can help them catch up.

Attracting more women to the male-dominated transportation and logistics sector won't be easy, but companies that succeed will have access to a rich new labour pool. Gender and cultural diversity can pay off in other ways too, for example by sparking creativity and enhancing innovation. Our Delphi experts believe that diversity management will continue to be a marginal issue in transportation and logistics. And companies that make sure to include women in top roles may find that profits increase too.

Companies across the board will need to get compensation levels right for both men and women – and that includes more than just wages. Benefits and working conditions will be important too. Also, individual objectives of employees should be aligned with the overall corporate strategy. That increases productivity and helps workers feel they have a share in the organisation's success – an important factor when it comes to keeping talent on-board. Enhancing opportunities for advancement and improving working conditions are vital too.

By making sure current workers are satisfied, companies can improve their employer brand. While staff perceptions aren't the only factor in building an employer brand, they are an important element. Corporate responsibility helps too, especially in reaching out to younger workers. The strength of the company brand can also go a long way towards helping an individual organisation overcome the sector's negative image.

**Satisfied employees, a well-respected company brand and a robust corporate responsibility programme are key building blocks for a strong employer brand.**

*Delphi survey findings*





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## Demographics

Demographic changes pose a dramatic threat to the business models of many transportation and logistics companies. It remains to be seen if the industry can cope and attract a skilled workforce.

In 2030, over 8 billion people will live on earth. That's around a billion more than in 2010, and 95% of this increased population will be born in developing and emerging markets.<sup>1</sup> It's not news that more developed countries will make up a smaller percentage of the world's inhabitants. For more than 50 years, developing countries' population growth has outpaced that of Europe in particular. In fact, by 2030 only 23% of the world's population will live in Europe, North America and Australia.

The global economy is being re-shaped, and so is the distribution of wealth. And as world trade grows, so do the challenges for the transportation and logistics industry. More people means more production. Global trade in goods and services is likely to rise more than threefold to US\$ 27 trillion in 2030.<sup>2</sup> That's putting pressure on the industry to keep goods flowing. In 2010, drivers already belonged to the top 10 jobs that employers are having difficulty filling among 36 countries worldwide.<sup>3</sup>

### ***Growing populations mean an increased need for logistics in emerging economies***

It might seem that with so many people being added to the workforce, most emerging economies shouldn't have any issues with labour shortages. Not so. Many of the countries that will be home to 'the next billion' will need to invest in healthcare and education. By 2030, 100 million school-aged children and teens between 5 and 19 will live in emerging markets. To compete in a global economy, most will need a better education than they can now find locally. In many countries, economic growth is already significantly outpacing talent development, leading to serious skills shortages. Transportation and logistics companies in developing countries will need to pick up the slack. That will mean providing in-house training and skills development programmes.

2022:  
**25m**

2011:  
**7.3m**

Employees needed to staff the transportation and logistics sector in India.

Take India. According to the National Skill Development Organisation of India, the transportation and logistics sector employed around 7.3 million people in 2011. But the number is expected to increase to about 25 million by 2022. Transportation and logistics companies will need to find more than 17 million more workers over the next 10 years. That's an enormous challenge, particularly considering that the logistics sector is already struggling to find workers with the requisite skills to handle the entire supply chain. Companies that plan to expand in fast-growing emerging markets, whether domestic or international, will need to have considerable success recruiting promising employees and developing them once they're on board. And training programmes will also need to play a major role.<sup>4</sup>

The situation is similar in other emerging markets and the stakes are high. In South Africa, the shortage of

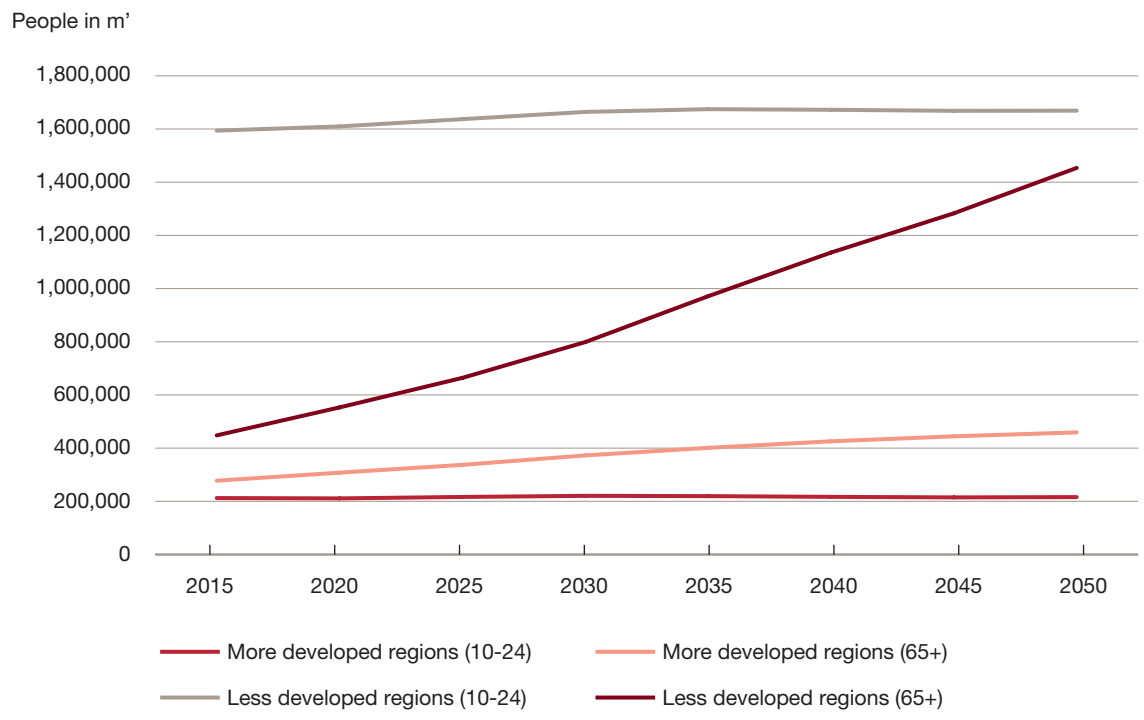
skilled employees in the transportation and logistics industry is already stifling overall economic growth.<sup>5</sup>

**Ageing is having a major impact**

Population growth isn't only happening because of high birth rates; in many places, people are living longer too. The world's population is ageing as life expectancies rise. That's true the world over (see Figure 1). The older population is growing faster than the total population in practically all regions of the world – and the difference in growth rates is increasing.<sup>6</sup>

In general, the more developed countries are in a more advanced stage of demographic transition, as the baby boomer generation reaches retirement age. The exception is China. Due to its one-child policy, China is ageing at an extraordinary pace. In 2030, China's population will be older than Europe's.<sup>7</sup>

**Figure 1: Populations are ageing in all types of economies**



Source: United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision

until 2025:

1 million

Drivers needed in the US trucking industry.

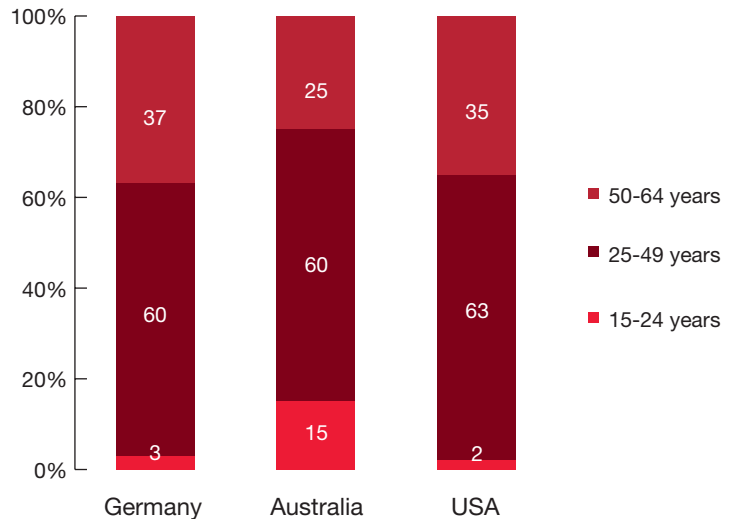
With a smaller percentage of the population working, transportation and logistics companies in developed countries will have a harder time employing workers with the needed skills, in the right place, at the right time. For some transport modes, there's already a significant skills gap.

The US trucking industry is a good example. In 2010, an estimated 400,000 more truck drivers were needed. The market for quality drivers is getting extremely tight and fleets are aggressively recruiting to fill their openings. And the situation is only going to get worse. The National Private Truck Council (NPTC) projects a growing wave of professional drivers exiting the workforce once the first baby-boomers begin turning 65 in 2012.<sup>8</sup> Replacing them won't be easy; the pool of 21 year olds eligible for a commercial driving licence isn't keeping pace. The Council of Supply Chain Management Professionals estimates that the US trucking industry will need to hire 1 million new drivers in the next 15 years just to deal with replacing retirees and increasing levels of freight.<sup>9</sup>

Retiring workers and an ageing population will lead to shortages in other parts of the world too, like Germany and Australia (see Figure 2). And in Europe, the percentage of employees nearing retirement age (i.e. currently 50-64) in the road transport sector is higher than the average percentage for other industry sectors.<sup>10</sup>

Canada is short on truck drivers too, but that's not all. In recent years Canada has moved from a labour surplus to a deficit in every part of the transportation sector.<sup>11</sup> On the other side of the globe, Australia is coping with an ageing workforce, rapidly changing transport technologies and increasing demand for more highly skilled workers. Freight levels are rising exponentially. In 2020, Australia will

Figure 2: Age distribution in transportation and logistics in Germany, Australia and the US



Sources: Germany: Bundesamt für Güterverkehr, 2011, Australia: Department of Transport, Victoria, 2008, USA: Global Insight tabulations of CPS micro-data files for Jan-Oct, 2004, PwC analysis

need to move twice as much freight as in 2006 – and by 2050, the amount of freight will have tripled.<sup>12</sup>

There are some transport modes where labour shortages are happening across the board, regardless of demographic changes or increases in local trade. For example, pilots and sailors are both in short supply, and the situation is likely to get worse. The Ocean Policy Research Foundation expects there will

be an 'up to 364,000 seafarer shortfall by 2050'.<sup>13</sup> And in the aviation sector, Boeing's long-term market outlook forecasts that 'over the next 20 years, the world's airlines will need to add 460,000 pilots and 650,000 maintenance technicians, both to fly and maintain the new airplanes and to replace current personnel who are due to retire during the period'.<sup>14</sup>

until 2030:

1 million

Pilots and maintenance technicians needed worldwide.

## **Creating ‘elder-friendly’ workplaces**

With older workers making up a greater part of the overall talent pool, companies will need to rely on them more. Looking out to 2030, can transportation and logistics companies adapt work environments to the needs of older workers in order to avoid risks to productivity and quality (see thesis 2, page 50)? Some of our Delphi panellists think the answer is yes.

One reason is technology. Some experts point out that a number of technological innovations and advances in material handling systems are already taking place. Such systems make some types of workplaces more ‘elder-friendly’, although companies may be more motivated by concrete calculations around increasing productivity and gaining technological advantage than they are about how such systems impact their people. But a number of experts are less optimistic. They point out that companies may struggle to fund the high costs of critical workplace improvements. In our view, there is a strong argument for considering the longer-term benefits these types of investments may provide in helping companies retain older, more experienced workers.

In other research we’ve seen evidence that some companies are already using technology to help address skills shortages. In interviews for our 15<sup>th</sup> Annual Global CEO Survey, 32% of transportation and logistics CEOs told us they’ll probably make such investments over the next three years.<sup>15</sup>

## **Sector’s negative image poses a big challenge**

So the experts aren’t sure how successful companies will be at retaining older workers. But how does the picture look overall? Do they think transportation and logistics companies will be successful enough in attracting a skilled workforce? Will companies have sufficient staff to manage their business effectively in 2030 (see thesis 1, page 50)? Again, our Delphi panellists are sceptical. Many experts pointed out that the transportation and logistics industry is already having trouble attracting young and skilled people. The reason they cite most often? Image problems.

The experts also noted a number of other factors that are preventing the industry from attracting a sufficient pool of candidates, including low wages and less than optimal work environments. On the plus side, some experts believe that ongoing globalisation and increasing flows of goods will help boost the visibility of this sector. Some panellists are hopeful that the increasing number of universities and postgraduate programmes focusing on logistics topics will also help fill the future gap.

## **Making HR an executive priority**

As demographics and other factors change the market for human capital, addressing the talent challenge is tremendously important. And it’s increasingly becoming a C-suite issue. According to the EU HR Best Practice Report, a growing number of HR leaders report directly to the CEO.<sup>16</sup> In 2011, the percentage jumped 9 points, from 65% in 2010 to 74% in 2011. When HR reports directly to the C-suite, it often signals the shift to a more strategic view of the importance of a company’s workforce. In one report on the practices of ‘Top Employers’ in Europe, 66% report that: “HR plays a crucial role in strategy formulation and operational success.”<sup>17</sup>

Will transportation and logistics companies also make HR a strategic partner of the C-Suite in the future (see thesis 15, p. 50)? Our expert panel says not only will the transformation have been realised by 2030, it’s already happening now. We saw one sign of that among the CEOs who participated in our 15<sup>th</sup> Annual Global CEO Survey. 81% of T&L CEOs told us that the head of HR reports directly to them.<sup>18</sup> In fact, there’s no alternative for companies that want to continue to thrive as labour becomes scarcer in all parts of the world.

*Logistics companies in emerging countries need to invest heavily in training, development and education for their young joining workforce. In developed countries, recruiting and training the next generation and adapting the workplace to the needs of older employees will be key. So transportation and logistics companies need to make sure that a strong commitment to addressing human resources challenges comes straight from the top.*

# Office of the future

Work space profoundly affects the physical, cognitive and emotional well-being of everyone in the organisation. Ideally the workplace should provide tools and settings to encourage formal and informal collaboration, freedom from distraction for work that requires concentration and most importantly: the ability to choose *how* you work.

That will mean changes to the workplace as it exists today. In the 1940s the term 'office of the future' described a vision of the paperless office – a prophecy that still hasn't been fully realised. Researchers are exploring a wide variety of ways that our work environments will evolve and one thing seems certain: the office of the future will be digital and data-driven.

It may be very personal too. Rooms that recognise who enters (either by using fingerprints or an individual's unique scent) could adapt the individual working settings for a specific employee.<sup>19</sup> Prototypes already exist. The 'Hello.Wall' developed by the IPSI-Institute is an ambient display that emits information via light patterns, a type of informative art. The wall is also able to recognise who is in the room and display relevant information transmitted through changing light patterns.<sup>20</sup> Sensors track all employees' movements and let employees know which co-workers are also available in a given area.

The office of the future will also be a rich virtual space that helps make global collaboration an everyday reality. Research by the University of California is improving the everyday graphical display environment. The team is also developing 3D tele-immersion capabilities that create the illusion that employees in different parts of the world are actually together in a shared office space.<sup>21</sup> Further development of that technology is a hologram table, using a combination of proprietary software and special lenses and lights, which will be able to render 3D-holograms of real-world objects.<sup>22</sup>

Teleconferencing suites will be equipped with software that translates languages simultaneously, expediting chats among colleagues who don't speak the same language.<sup>23</sup>

These developments should enhance productivity, but the well-being of individual employees also has a profound impact on how much gets done. That's why the office of the future will also promote a much more active workstyle. Research shows that the long stretches of sitting that most people do every day, including at work, is a major contributing factor to obesity, a problem that's growing around the world.<sup>24</sup> Finding ways to increase movement at work can have a significant impact. That could include furniture selected to encourage movement. Height-adjustable work surfaces will allow workers to do individual work in a standing or seated position, and special stand-up counters for group meetings will easily become settings for stretching exercises. 'Active rooms' will contain gym equipment, so that every employee can take short breaks to exercise.<sup>25</sup> And more creative approaches will come into play too, like embedding inscriptions in the floor which encourage employees to jump or bounce rather than walking normally.

The world in 2030 will be interconnected, global, and mobile. That calls for an interconnected, technologically advanced workplace that facilitates collaboration and nurtures worker well-being. Creating state-of-the-art working environments will enhance company brand and culture. And they'll play a critical role in attracting, developing and engaging talent.

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# Recruiting

Transportation and logistics companies are lagging behind other sectors in terms of recruiting and hiring. SMEs in particular are not regarded as preferred employers of the future.

As companies look to replace retiring employees and keep pace with growth in emerging markets, recruiting will become even more important. Transportation and logistics companies will need to compete to attract and recruit qualified employees – and they'll need to make not only their company, but also the industry, more attractive than the competition.

How will they manage it? What talent management and recruiting strategies will help them appeal to a more mobile, diverse and global workforce? Right now the transportation and logistics industry relies primarily on recruiting agencies and job postings in newspapers and on the Internet.

That means they're overlooking some powerful ways of reaching talented staff. Very few employers in the transportation and logistics industry use networking organisations or websites as a way to find new employees, for example. And most are not yet looking across national borders to recruit staff – a viable option.

Some companies are already hiring highly experienced specialists and managers from the competition – and even from other industries. That kind of hiring can work in both directions, so retaining skilled staff already on board is becoming even more important.

The shipping sector is already trying some new strategies to fill open spots. Some companies are using current employees to help recruit new hires by paying bonuses to staff that bring new forwarding and shipping agents on board.<sup>26</sup> And the sector as a whole is working on its image too. In 2008, the International Maritime Organisation (IMO) launched the campaign 'Go to sea!' together with the International Labour Organisation (ILO) and other partners. The programme was designed to attract more workers to the sector and includes a website with detailed information about careers at sea.<sup>27</sup>

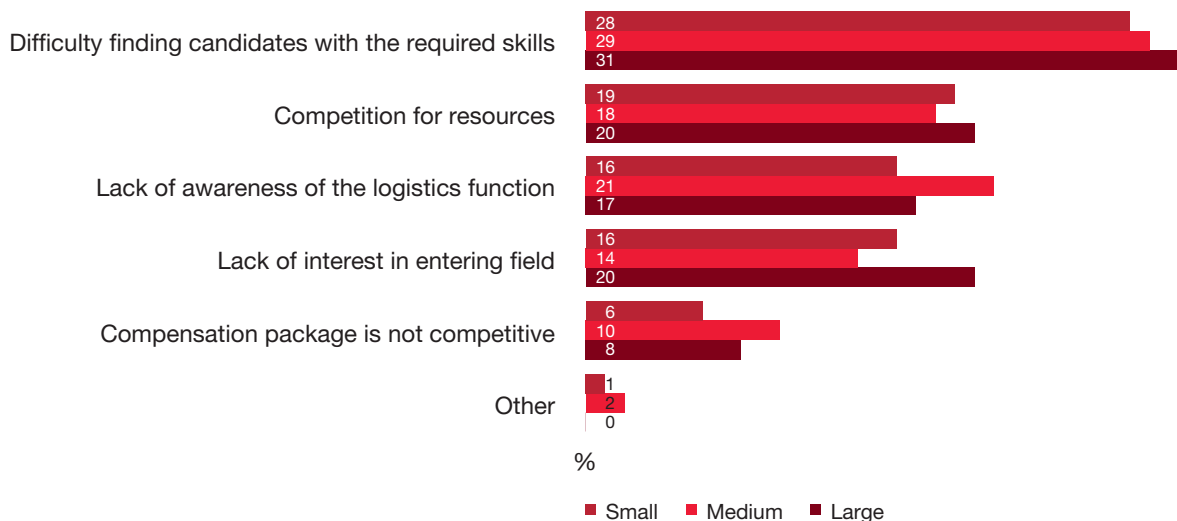
### Will the transportation and logistics industry provide truly global workplaces?

Transportation and logistics is a global industry. As the world becomes more interconnected and employees more mobile (in other research, we found that 71% of ‘millennials’ expect to work abroad at some point during their careers), that could potentially mean access to a much larger, global labour pool. Do the Delphi experts believe that the global nature of operations and global recruiting strategies will help transportation and logistics companies overcome any labour shortages in the future (see thesis 3, p. 50)?

Our Delphi panellists aren’t sure. Many experts argue that potential employees – professionals and younger workers alike – feel more attracted by other industries, e.g. energy, technology, healthcare and automotive. Some feel that transportation and logistics companies, particularly SMEs, still need better HR structures to make cross-border recruiting viable. And a few point out that some labour intensive areas like ‘last mile’ delivery are inherently local. One expert with a more positive view noted that for bigger companies, a global footprint would mean the ability to shift workforces from one region to another.

That’s often not an option for smaller companies. Still, big and small companies alike face similar human resource issues (see Figure 3). For logistics companies of all sizes, finding employees with the needed skills tops the list. And it’s difficult to attract good candidates, especially younger, skilled employees, with competition for resources tight and awareness and interest levels relatively low.<sup>28</sup> Educating and training aren’t always adequate, and it’s tough to keep pace with technology. Addressing the needs of an ageing workforce is of major importance, and so is succession and career planning. So new hires can eventually fill the shoes of their more experienced colleagues.

Figure 3: Recruiting issues are similar for logistics companies of all sizes



Source: Canadian Supply Chain Sector Council, Canadian Logistics Skills Committee (2005)

## Working together: alliances can help SMEs compete

When it comes to recruiting, though, SMEs are at a disadvantage compared to their larger competitors. The transportation and logistics sector as a whole is deeply fragmented; SMEs actually make up the bulk of the industry and hire most of the employees working in the sector.<sup>29</sup> Their collective size doesn't translate into more attractiveness as employers, though. In fact, getting the right people on board seems to be even tougher for SMEs.

We asked our Delphi experts whether small and medium-sized transportation and logistics companies will have evolved into preferred employers compared to market leaders by 2030 (see thesis 4, p. 50). The answer was a resounding no. Panellists argue that market leaders still offer more career opportunities and higher salaries. They also benefit from well known employer brands.

The news wasn't all bleak, though. Some experts noted that employees have more potential to be heard in a smaller organisation, can move up faster and take on a broader range of responsibilities – all points that may appeal to younger employees. The experts' discussion also raised another possible way for SMEs to bridge the gap. Cross-sector strategic partnerships may help enhance working conditions and employer branding of SMEs in the future.

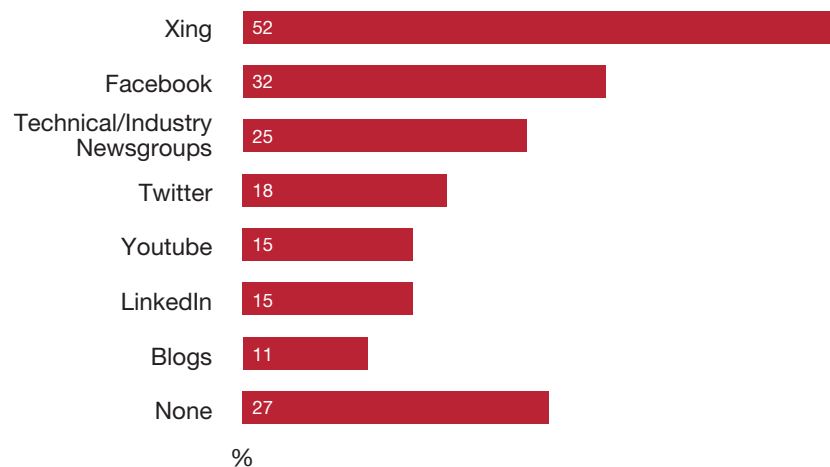
Operational partnership of transportation and logistics SMEs are already underway, aiming to develop, execute and optimise logistics services across countries. By bundling services with the network, each individual firm is able to offer a far broader range of services to customers.

Such alliances could help smaller companies offer more to potential employees too. They raise visibility and by working with partners, SMEs may be able to offer international job opportunities and more extensive development programmes that wouldn't be possible otherwise.<sup>30</sup> That's why we strongly believe that such collaborations provide an excellent platform for building 'recruiting alliances' in the future (see *Recruiting and Development Alliances*, p. 40).

## Virtual recruiting

Recruiting is changing. Internet job boards have already displaced print sources as the primary place to post job openings. And while face-to-face job fairs aren't likely to disappear entirely, companies are starting to use social media more actively in their recruiting efforts.<sup>31</sup> In Germany, for example, more than half of logistics companies already use Xing, a local professional networking site, nearly a third see Facebook as a valuable communication channel and a quarter are looking to technical or industry newsgroups (see Figure 4).

Figure 4: Communication channels used by logistics companies in Germany, 2011



Source: Bremerhaven University of Applied Sciences, Prof. Dr. Heike Simmet, "Social Media in der Speditions- und Logistikbranche", 2011



Transportation and logistics companies overall do increasingly recognise the importance of social media for employee recruiting (47% of the surveyed companies). At the moment, though, they're using sites like Facebook, Twitter and Youtube primarily to manage public relationships, optimise customer relations and acquire new customers.<sup>32</sup>

Will social media reshape recruiting in the future? We asked our Delphi expert panel if only HR functions which use social media will be able to recruit new employees in the long-term future (see thesis 14, p. 50). Views were mixed. Some experts argue that there are already many ways to recruit adequate staff. These experts believe that the importance of social media may be overrated. Others see social media as key to future recruiting strategies.

In our view social media will most certainly increase in importance. There's already a 'Social Media for Logistics' group on LinkedIn for example.<sup>33</sup> LinkedIn and other sites focused on professional networking are also offering companies special packages to raise their company profile to potential job seekers and to comb the site for possible candidates to fit specific positions.<sup>34</sup> SMEs in particular may be able to use social media as a core part of recruiting strategies in the future. That will help them be more visible to potential employees and gain an edge over competitors in reaching out to 'passive' job seekers.

Recruiting isn't likely to get easier for the transportation and logistics industry in the near term. It's likely to take years until current initiatives to increase sector visibility will lead to a significant positive impact on its competitiveness against other industries in the fight for talent. International hiring may help some companies. Reaching out to talent pools like women, young people, mature workers and career changers may be another good strategy.

*Logistics companies must continue to invest in traditional ways of recruiting staff, but they also need to use new recruiting channels including social media. Strategic recruiting alliances can help logistics SMEs win an edge in the war for qualified staff.*

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## Compensation and Incentives

Salary will remain one of the most important factors in hiring and retaining workforce.

Transportation and logistics companies pay lower wages than companies in many other industries. That's true all over the world. The Global Wage Report from the ILO lists transport as one of the key sectors where low-wage employment is concentrated.<sup>35</sup>

It's very difficult to compare wage levels between countries as survey methodologies differ widely. Still, we found a consistent pattern that in many countries, wage levels in the sector rate far down the list compared to other industries (see Figure 5). In Germany, the transport and storage sector ranks next to last out of twelve industries, and in the US the sector is last on the list. One exception is China, where transport and storage comes in sixth place. Nevertheless, transportation and storage salaries are 42% lower than in the best-paying industry.

Within transportation and logistics there are significant variations in salary levels between different employment groups. In this multifaceted industry, job profiles range from pilots and seafarers to truckers and rail drivers. The skills needed and working conditions vary enormously, and so do the corresponding wages and benefits.

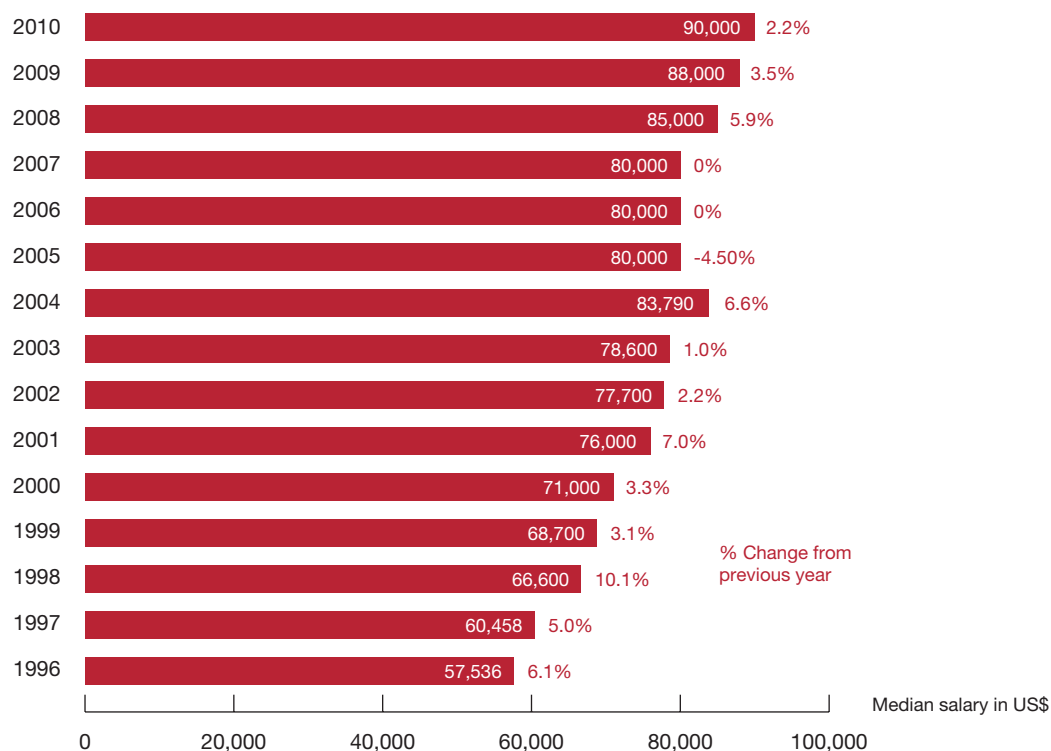
Jobs within the road sector are traditionally lower-paying, but that's becoming a point of contention in some countries. In Ireland, trade unions are lobbying for increases in drivers' pay. In Bulgaria, trade unions say drivers have to work long hours – violating regulations around working time and rest breaks – just to make ends meet.<sup>36</sup> Some self-employed drivers elsewhere in the EU would actually prefer working longer shifts to earn more. That's potentially a safety issue, since tired drivers may be more prone to accidents. The 2009 EU Working Time Directive limits the number of hours all drivers can stay on the road, including self-employed drivers, essentially reducing pay levels for many.<sup>37</sup>

Figure 5: Comparison of wage levels across industries and countries



Source: National Statistics Offices, PwC Analysis

**Figure 6: Salary development within the logistics sector in the US**



Source: Logistics Management Magazine (2011). 27th Annual Salary Survey

In some transportation and logistics sectors, companies are already raising salaries to fight labour shortages. For example, the average annual salary for a logistics professional in the US has gone up 45% between 1996 and 2004 and another 13% since 2007 after a 3-year period of stagnation (see Figure 6).

Wages aren't the only form of compensation that matters. Benefit packages are important too, although which benefits are most important varies around the world. Two types of benefits that essentially increase salaries – 'variable cash bonus' and 'expense reimbursement' – make the top 5 all over the world regions (see Table 1).<sup>38</sup> Other important benefits include healthcare and pension plans – both areas where expectations have been changing in recent years and where the cost implications for companies are major, especially with ageing populations.

**Table 1: Benefits that are perceived as important by logistics employees**

Rank	Europe	Asia	America's
1	Pension plans (57%)	Variable cash bonus (50%)	Expense reimbursement (64%)
2	Variable cash bonus (50%)	Healthcare benefits (63%)	Pension plans (64%)
3	Company car (49%)	Insurance (55%)	Variable cash bonus (58%)
4	Company phone (43%)	Expense reimbursement (55%)	Share or options (58%)
5	Expense reimbursement (42%)	Transport allowance (51%)	Healthcare benefits (56%)

Source: Europhia Consulting (2008). Global Salary Development Survey – Logistics & Supply Chain Sector

There are other factors that are important too. According to the annual salary survey undertaken by the Logistics Management Magazine, company politics and lack of room for advancement were actually the two most important considerations contributing to job dissatisfaction in 2011, and workload ranked nearly as high as salary. Companies with a positive company culture, active development programmes and reasonable workload expectations have an advantage when it comes to retaining employees.

But what about new hires? Will transportation and logistics companies need to offer above-average salaries compared to other industries in 2030 in order to bridge the current gap and make their sector more attractive (see thesis 5, p. 50)?

According to our Delphi panel: it depends. When it comes to jobs requiring only basic skills, they think it's likely that wages will stay low. On the other hand, they think for management functions and highly skilled positions like those in supply chain management the industry will need to offer above-average salaries in order to attract 'smart people'. Here, again, they cited the industry's negative image compared to other sectors as a major drawback. Since every industry competes for the best employees, transportation and logistics companies need to differentiate themselves.

The prevailing view from our Delphi panellists is that non-monetary incentives play a role, but that 'salary still remains one of the most attractive factors in recruiting and retention strategies'.

*Transportation and logistics companies need to take a critical view of their remuneration systems and benchmark their salaries against their peers and other industries. Salary alone isn't the only way to compensate employees; companies should look at improving benefits packages and working conditions too.*

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## Career Paths

There is a strong need for differentiated development options in the transportation and logistics industry. Making sure that there are enough skilled candidates and suitable advancement options for talented staff won't be easy, but it's critical to future success.

In the transport sector, most employees have medium or low qualification levels. That's changing, as the sector's need for better educated workers increases.<sup>39</sup> Post-secondary education, whether it be in vocational training programmes or at institutions for higher learning like community colleges, polytechnics and universities, is now important for an increasing number of transportation and logistics jobs. It's not just logistics professionals who rely on advanced training. Mechanics, train drivers and ships' stewards are just a few of the types of workers who can also benefit.

More training and learning opportunities in the transportation and logistics industry are needed. Such programmes could help increase the available labour pool, as other industries have already done with some success. Currently, even in logistics many students simply are not aware of the discipline and its potential as a career field. Research shows that there aren't sufficient numbers of courses offered or enough qualified faculty to teach them. And to make the problem worse, academics and industry professionals don't agree on what an appropriate curriculum would look like.<sup>40</sup>

That needs to change, because demand for professionals with such training is increasing. As transport-oriented companies become more logistics-oriented, they need to provide better customer service – and for that they need skilled staff.<sup>41</sup>

### ***Logistics programmes are booming in China***

In some countries, more programmes are already being offered. In China, where the sector is booming, the number of schools that offer a major in logistics and the number of logistics programmes have increased steadily. Today there are 284 universities offering logistics management and 58 universities providing classes in logistics engineering. In fact, there are six universities in Beijing alone offering logistics programmes.<sup>42</sup> The majority of logistics departments or institutes have also launched logistics labs. In these logistics labs, students get to know the advancing state of technology in logistics, such as: forklifts, high-rack stackers, high-bay racks, pick by light or pick by voice or RFID.<sup>43</sup>

## ***Progress in the rail and maritime sectors***

Activities are happening at the sector level too. One example is the European Rail Research Network of Excellence (EURNEX) which includes more than 60 universities from 18 EU countries.<sup>44</sup> This network of excellence has jointly defined guidelines for future training and education in the railway sector. Its aims include creating a pool of short training courses implementing international PhD and Master programmes and launching a virtual European University of Railways.

Significant developments are also likely in the maritime sector, in response to new regulation around how ships are manned and operated. In 2012, the Manila amendments to the Standards of Training, Certification and Watchkeeping for Seafarers (STCW) convention came into effect. The STCW, originally passed in 1978, established minimum standards of crew competence that seafarers must meet or exceed. The comprehensive set of updates includes adding new requirements for training in modern technology such as electronic charts and information systems (ECIS), introducing modern training methodology including distance learning and web-based learning and new requirements for security training designed to help seafarers cope if their ship comes under attack by pirates.<sup>45</sup>

The Maritime Labour Convention 2006 (MLC) has not yet taken effect, but the ILO expects that more countries will ratify it in 2012. That would mean the regulation would enter into force in 2013.<sup>46</sup> Among other impacts, it will make sure that seafarers' basic rights are protected and that rules for minimum working and living conditions are enforced.<sup>47</sup> These regulations are responding to the future requirements for people working in the maritime sector.

Indeed, in maritime shipping (and in some other sectors too), the competition for talent has become so severe that many companies will have to look beyond the minimum requirements around pay scales and working conditions regardless. It's becoming increasingly important to address other fundamental issues, like security and career advancement.<sup>48</sup>

## ***Training needs are changing***

Training will be important too. Traditionally, the transportation and logistics industry has provided relatively easy access to employment. But as technology changes the working environment, greater skills are demanded on entry-level and formerly low-skilled roles, so minimum education standards will need to be higher. There will also need to be a greater emphasis on technical skills development, including critical 'e-skills' (ICT-related skills and competencies).

And the industry is getting more international, so strong language skills will be more important. National and regional governments will need to adapt educational offerings and vocational training systems in response. Companies should do their part too, and make sure that apprenticeship programmes, for example, really prepare workers for future challenges.

# Key types of positions

How are these changes impacting specific jobs? We looked out to 2030 for some key types of positions. In the following section we suggest what skills will be needed and note what's changing and how training programmes might need to adapt.

## Pilots

### **Needed skills**

- strong concentration
- ability to react quickly in emergency situations
- fluent English
- e-skills

### **What's changing:**

Cockpit technology is evolving and becoming more computer-based. New navigation and control systems are automating some aspects of flying, but pilots will need even stronger e-skills to manage the planes of the future.

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## Ship's officers

### **Needed skills**

- strong social skills
- ability to work with people of other cultural and ethnic backgrounds
- time management
- stress management

### **What's changing:**

Regulation is increasing, so ship's officers will need to keep up-to-date on new laws and regulations. Work-related stress is increasing too, so more training on stress and time management will be important. Piracy is also on the rise, so ship's officers will need to be briefed on how to deal with a crisis. Companies should also have support systems in place to help cope after a traumatic event.

## Logistics professionals

### **Needed skills**

- strong analytical skills
- e-skills
- understanding of new technologies like RFID and automation

### **What's changing:**

Automation is increasing and logistics is becoming more complex and global. That means analytical and e-skills will be even more important. Social and cultural skills will be more vital too.

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## Rail drivers

### **Needed skills**

- technical and e-skills

### **What's changing:**

Modern high-speed trains may operate more international routes, requiring greater language and communication skills.

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## Truck drivers

### **Needed skills**

- commercial driver's license
- ability to work alone
- e-skills
- technical competencies

### **What's changing:**

Traffic and congestion is increasing, so road drivers in non-scheduled and non-passenger transport will need to use new navigation systems that help them change their route while on the road. New technologies inside (e.g. driver assistance) and outside the vehicle (e.g. traffic management, car-to-infrastructure systems) will also call for a higher degree of e-skills and technical competencies.



With so many changes in the offing, will transportation and logistics companies make above-average investments in defining job profiles and implementing apprenticeships and development programmes until 2030 to develop and educate their workforce (see thesis 6, p. 50)? The Delphi panel is optimistic that the industry will make such investments by 2030, building on efforts that have already started.

But while the general view is positive, some experts still stress that education and development programmes in the industry are currently inadequate (“Business schools’ logistics programmes lag behind finance, marketing and accounting.”) One expert notes that the level of professionalism in the sector is ‘below average’. This is one area where there seem to be significant differences between regions.

### ***Transportation and logistics companies need to create more advancement opportunities***

Training new employees to prepare them for the jobs of the future isn’t the only issue. Companies also need to provide continuing education to current employees, to help them increase their skills and enhance job satisfaction. According to PwC’s recent survey among millennials (the generation born in the 80’s and 90’s, also known as the Net Generation, Generation Y or Digital Natives) starting their work career, transportation and logistics companies lag behind the overall sample in terms of opportunities for advancement.

Our research asked whether new joiners made any compromises when accepting their current position. Most had, and career potential was one area they mentioned: 14% of respondents from all industries told us their position has more limited opportunities for advancement than they had hoped for. But in transportation and logistics, 27% took a job with less potential.<sup>49</sup> That creates a big risk for the future, as many of those new employees may look elsewhere to escape a job they see as a dead-end. It also signals a significant gap in current possibilities for advancement in the sector.

Transportation and logistics companies will need to do better to support millennials, who are looking for support and encouragement throughout their careers. There are already good ways to achieve this, e.g. through mentoring by more experienced workers, detailed and regular feedback, continuous learning or rotations of roles to gain experience.

### ***Aligning company and employee goals has major benefits***

Another way to enhance employee loyalty is by developing ‘alignment’, where organisational goals mirror employees’ personal goals. A truly aligned organisation can go far beyond traditional performance management systems, where goals are typically set and tracked by the quarter or year. Instead, individual objectives should be linked to strategic corporate goals. To get there, every employee needs to have a thorough understanding of the purposes and goals of the organisation. That’s not all though. It’s also important to make individual objectives consistent with the overall plan, for example by linking individual bonuses to company (or department) performance.

When individual tasks are aligned with corporate goals, companies achieve greater transparency. They also make sure that the actual work being done in the organisation supports evolving business needs. And when individual workers understand how their efforts contribute directly to their success and to the success of the company, they tend to be more motivated and feel a greater commitment. That’s especially important to younger workers and doesn’t apply just to monetary compensation. Feeling that their work is worthwhile and that their goals are part of a broader corporate purpose is important to many.

How close will transportation and logistics companies come to achieving this goal? We asked our Delphi experts, if in 2030 transportation and logistics companies will perfectly align the personal and career objectives of their entire management staff with their overall corporate strategy (see thesis 8 on p. 50). The experts don’t see it as likely. One reason is that aligning personal objectives with corporate strategic objectives is difficult in general and a challenge for every industry. But the experts also believe it’s even tougher for transportation and logistics companies to achieve, particularly when companies are operating globally and across many cultures. It’s also difficult to make the expectations of many different employees fit into one overall picture.

Companies that manage the juggling act may have a big advantage, though. When a company’s targets are in line with the individual goals of its employees, it has a significant positive impact on motivation and productivity. Our experts see it as a win-win situation for both parties. It’s also an important step towards an integrated HR strategy.

Improving alignment can help improve retention too, as our Delphi panellists noted. That’s urgently needed, particularly in some sectors. Although most employees were willing to make compromises during the economic crisis, more than 50% of logistics and supply chain professionals are actively looking for another job with better offers.<sup>50</sup> And as we’ve noted, demographic challenges are also looming.

*Transportation & logistics managers need to work together with governments to make sure there are programmes in place to train future employees. Development programmes which align strategic corporate goals with personal ambitions can help transportation and logistics companies meet their staff’s expectations.*

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# Diversity Management

Diversity management will continue to be a marginal strategic issue in transportation and logistics. The industry will fall short of taking full advantage of the significant benefits that gender and cultural diversity can offer.

Within the last decade, the workforce of many companies has undergone a fundamental transformation. The new reality is a highly diverse workforce composed of employees from many countries and cultures. Diversity isn't limited to cultural background. Men and women of all ages and social situations are now working together – but it's not always easy. The sheer number of dimensions along which employees differ and the need to achieve both consistency and diversity pose real challenges for many companies.<sup>51</sup> That's why managing diversity has gotten so much attention in recent years.

Human resource professionals are directly responsible for some elements of managing diversity. Many have found that rather than being a disadvantage, it can actually be an important organisational strength. Indeed, there's actually a strong “business case for diversity”.<sup>52,53</sup> It helps companies access a new labour pool and enhances a company's reputation and image – building the overall corporate brand and the employer brand in particular. For many companies, interactions between diverse employees also spark creativity and improve innovation efforts.<sup>54</sup>

Diversity can have other positive benefits too. In the US, drugstore chain Walgreens has even seen productivity climb as a result of efforts to include disabled employees in the workforce at distribution centres (see *Making disabled people part of the team at Walgreens*).

## ***Men still dominate transportation and logistics, but women are making some progress***

How diverse is the transportation and logistics industry? While some companies already employ staff from different cultural backgrounds and diverse age groups, compared to other sectors, transportation and logistics is still largely male-dominated. Recent surveys suggest that globally the number of women participating in the industry is as low as 20% to 30%.<sup>55</sup> Less than 10% of employees in management positions in the transportation and logistics industry are women.<sup>56</sup>

There are signs that numbers could go up substantially in the future, though. More women are getting advanced degrees. In 2030, 40% of women will have completed secondary education. That's 8 percentage points more than in 2003.<sup>57</sup> More women are studying logistics too, so there is a growing pool of talented women with sector-specific qualifications.<sup>58</sup>

Does our Delphi panel think that this growing talent pool will lead to an increase in the overall percentage of female employees across all functions and hierarchy levels in the next 20 years (see thesis 13, p. 50)? For many panellists, the answer is no. There wasn't a clear consensus, though. And the female experts we surveyed tended to be less pessimistic than their male peers.

Some experts argue that female thinking will enrich and enlarge the set of managerial options and female leaders may inspire other female employees. Others differentiate between highly qualified academic positions that will include a high percentage of women and jobs requiring physical strength that will continue to be male-dominated.

Certainly some of the jobs where labour shortages are most pressing – like truck drivers and seafarers – are also heavily male-dominated. There are real issues in recruiting women to these positions. Long-distance truck driving often means sleeping alone in the cab at un-policed rest stops at night<sup>59</sup>; women looking to join a ship's crew are confronted with an extremely masculine environment.<sup>60</sup> Indeed,

women seafarers may even face sexual harassment or the assumption that they are incompetent.<sup>61</sup> Companies that develop ways to address these concerns, for example, by training female drivers on rest-stop safety or improving conditions for women on-board ship, may be able to tap into an important new talent pool.

In our view, it's likely that more women will have higher-qualified jobs as we move towards 2030, but will still lag behind men in both developing and developed countries. For logistics companies, one important challenge is to make sure that a larger pool of qualified women candidates means more female hires. To attract women, they'll need to close the wage gap. Research has found that women MBA were being paid, on average, \$4,600 less in their first job than men, even when prior experience, time since MBA, job level, region, industry and even parenthood were taken into account.<sup>62</sup>

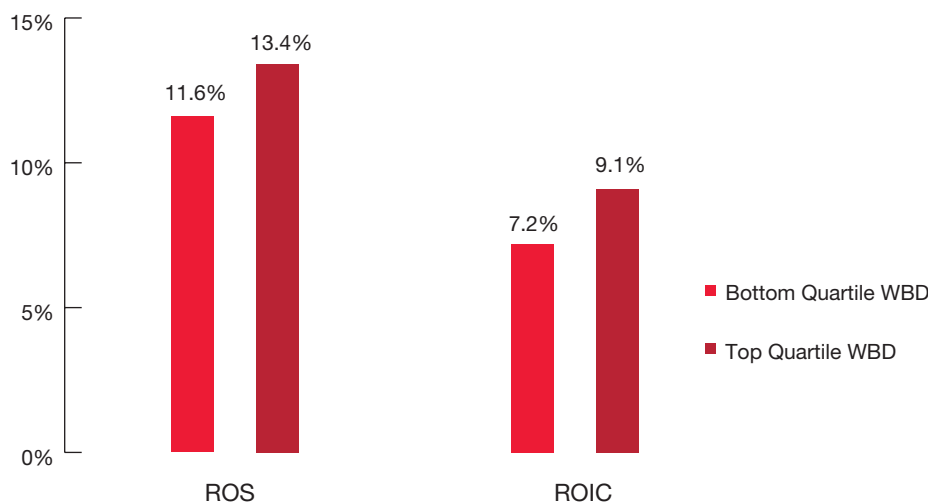
Just hiring more women isn't enough. Companies need to make sure that they can advance through the ranks too. That may mean taking a hard look at work-life balance issues, since more women are juggling work and family commitments.

## More women can improve the bottom line

Why should companies look to hire and promote more women? Better results. Research demonstrates that improving the proportion of women leads to higher financial returns to logistics companies.<sup>63</sup> That's why transportation and logistics companies need to take a serious look at how they are implementing gender diversity initiatives. Professional development and mentoring programmes can help women get their share of promotions to management. Participation in industry-wide networking forums could also help.

The commitment should go right to the top levels of the C-suite. Very senior women serve as important role models for more junior staff, and can help in recruiting more talented women too. And again, they can help the bottom line. Research has shown that companies with more women board directors outperform their less diverse peers.<sup>64,65</sup> Companies with the most women board directors outperform those with the least by 16% in return on sales (see Figure 7). Results are even better when you consider return on invested capital; the companies with the most women board directors outperform companies with the least by an impressive 26%.

Figure 7: Women Board Directors (WBD): A Comparison of Economic Results



Source: Catalyst (2011). *The bottom line: Corporate Performance and women's representation on boards*

## **Cultural diversity matters too**

As with gender diversity, cultural diversity increases the performance of logistics firms.<sup>66</sup> For a global firm, that includes relying on local employees, whose knowledge of local market conditions or culturally sensitive issues around customer service provides an edge. Drawing on the skills of operations around the world can then help make the company as a whole more diverse. Currently, 20% of transportation and logistics CEOs say that their senior management team is composed of native leaders representing their home regions, but 35% see this as the ideal.<sup>67</sup>

We asked our Delphi panel whether in 2030 the transportation and logistics industry will have taken the lead in using the cultural richness of its workforce (see thesis 12, p. 50). Most of the experts think the answer is no. Some note that while diversity management might be beneficial, it's unlikely that transportation and logistics companies will do more in this regard than will their peers in other industries. According to the panel, in 2030 the workforce in transportation and logistics will not be much more diverse than today.

That's unfortunate, given the benefits cultural diversity provides. There's still time to change the situation, though. Companies need to take action to attract a more diverse workforce. Setting concrete goals can help. So can thinking about the environment within the company; are there any barriers to integration that can be eliminated? Even something as simple as the menu in the company canteen can have an impact, if some staff belong to ethnic groups that avoid meat and pork chops are a staple offering.

Whatever efforts are made, it's also critical to set the tone from the top. Cultural diversity initiatives need total support from top management to be successful.<sup>68</sup>

*Transportation and logistics companies should encourage cultural diversity and promote women at all levels of the company. Making sure to appoint women to top jobs in the C-suite can have a significant impact, by setting the right tone and providing important role models for women throughout the organisation.*

# *Making disabled people part of the team at Walgreens*

Walgreens, a US based drugstore chain, is a leader in hiring people across the spectrum of disabilities. Its distribution centres employ many people with disabilities. In 2002, Walgreens senior vice president of supply chain and logistics, Randy Lewis, began leading the effort to create job opportunities for people with disabilities.

In 2007, Walgreens opened its 14th distribution centre in Anderson, South Carolina, in the Southeastern US. Built to support the company's expansion in the region, this centre was the first facility of its kind to employ a significant number of people with disabilities. More than 40% of the facility's workforce has a physical or cognitive disability – and it's actually become their top ranking distribution centre.

According to the company, broadening the workforce by employing people with disabilities is not just a nice gesture, it makes good business sense. Walgreens found that, with the right mix of training, technology and awareness, the newest generation of distribution centres runs more efficiently and productively than older counterparts.

Walgreens worked with local agencies to train and attract people with disabilities for employment at the centre. An on-site training facility also helped those with special needs become prepared for employment so that everyone could work productively and

effectively. Since, 'this isn't about charity', as Lewis stresses, 'we didn't lower any of our performance standards. Every team member is expected to perform at the same high level. Same pay, same performance, side-by-side.'

The inclusive environment has changed the whole team. Not surprisingly lives of people with disabilities have changed by earning wages, benefits, recognition and new relationships. However, the impact on those without disabilities is immense as well. As one manager says: "I need to learn from this person. I need to take things from them. You know, I may be the manager but, you know, I'm learning here from my team members." And as Lewis has stated: "The surprising thing is we started out wanting to change the workplace. What we found out was, we were the ones who were changed."

*Source: Walgreen's Corporate Website*

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# Employer Branding

Future job seekers still won't see transportation and logistics as a desirable industry. To stand out, transportation and logistics companies must proactively manage their company brand.

Companies need to attract the best employees to stay profitable. But how do job seekers make decisions on which offer to accept? Why do they prefer one company to another? The answer often lies in the perceptions about the company which make up the employer brand.<sup>69</sup> Wages and workload are important, but they only come into play once a candidate has applied for a job. In fact, initial decisions are often made on the associations job seekers have with the company and its image.<sup>70</sup>

Employer branding doesn't only help increase attractiveness of companies to potential new joiners, it also strengthens retention, motivation, satisfaction and the identification of employees with the company.<sup>71</sup> Many companies recognise the advantages; the number of companies employing talent and employer brand managers has grown considerably. At some companies, employer brand considerations now actually shape overall HR strategy.<sup>72</sup>

## ***Transportation and logistics lags behind sexier sectors***

When it comes to the world's largest companies, IT companies and consulting agencies dominate the rankings of top employers. The logistics industry lags far behind, and transport companies don't even make the cut.<sup>73</sup> According to the PwC study 'Millennials at work', 7% of the respondents would not want to work in the transportation

and logistics industry solely based on its image.<sup>74</sup> In this study, its popularity ranks close to the metals or banking sectors.

We believe that overall, the transportation and logistics industry suffers from a lack of attractiveness. That's not just true for low-skilled jobs; the image problem hurts senior management recruiting too. In the logistics sector, CEOs and directors identify executive talent shortages as one of the key challenges to their business.<sup>75</sup>

We asked our Delphi panel to consider whether in 2030, it will be more desirable or hip to work in the transportation and logistics industry (see thesis 9, p. 50). Their answer: most probably not. Experts argue that transportation and logistics industry lacks products employees can easily identify with. Indeed, strong overall brands may help when it comes to attracting employees. Apple and Google were the world's two most valuable brands in 2011 – and they were also the two employers that young US professionals most want to work for.<sup>76,77</sup>

The sector also tends to be associated with lower wages. The panel sees a strong need for a better and 'sexier' image for the industry. Experts feel that more visibility and transparency would help. Importantly, logistics companies are still considered to be more attractive than traditional transport firms.

## Corporate responsibility and a strong corporate brand are a good basis for building the employer brand

How can individual companies overcome the sector's poor reputation? One way may be to use corporate responsibility (CR) efforts to help build the employer brand. In one study looking at the main reasons why job seekers accepted a position in a logistics company, 'employer values' tied with job security as the third most cited criteria (after 'more money' and 'career advancement') – 15% rated it as the most important factor in their decision, almost as many as cited salary concerns (20%). In fact, more than half of logistics employees expect strong CR initiatives from their companies.<sup>78</sup>

Just how important will CR be to employer branding in the future? We asked our panel if CR will become the most important factor of employer branding, rather than lifestyle issues or a company's reputation for innovation (see thesis 11, p. 50). Most of the experts were rather sceptical. Some argue that CR can help build the brand externally, but doesn't improve internal perceptions of the company, which are just as critical to building an employer brand. One expert even views CR as a trend, rather than a fundamental shift, and doesn't believe its importance will continue until 2030. The panel believes that companies should concentrate on innovation and business development as the most important factors in ensuring solid revenues and safe jobs.

Certainly not every expert sees CR as a passing fad. In fact, some positive voices think that CR will become the standard evaluation criterion for companies. And as companies become more global and look to demonstrate a commitment to fair working practices and sustainable environmental practices in every part of the world where they operate, CR can break down social and cultural barriers.

What else can companies do to overcome the sector's negative image? Building the overall brand may be one important step. In our Delphi study, we asked whether transportation and logistics companies "will have to proactively manage the company brand in order to survive" (see thesis 10, p. 50). The answer was: Yes, definitely. Experts point out that the importance of

'Employer values' rates almost as high as 'more money' as the top reason for taking a job at a logistics company.

15%

20%

brand visibility will increase, so transportation and logistics companies already need to improve how they're perceived in the market. A strong brand helps differentiate companies from their competitors and guarantees future revenues. It's also an essential basis for a strong employer brand.

### Tailoring today's efforts to tomorrow's needs

And a strong employer brand is absolutely vital, for retention as well as recruiting. While HR budgets may be focused on filling open vacancies, it's important to take a longer view and invest in activities which build the employer brand. That means understanding what image your organisation has now. Companies can start by looking internally. What do your employees value about your company? Are they considering looking for a new employer? External perceptions are also revealing. Which types of candidates are attracted to your company? What's most important to them? Are there candidates who see your company as an ideal employer, but would hesitate to actually apply?<sup>79</sup>

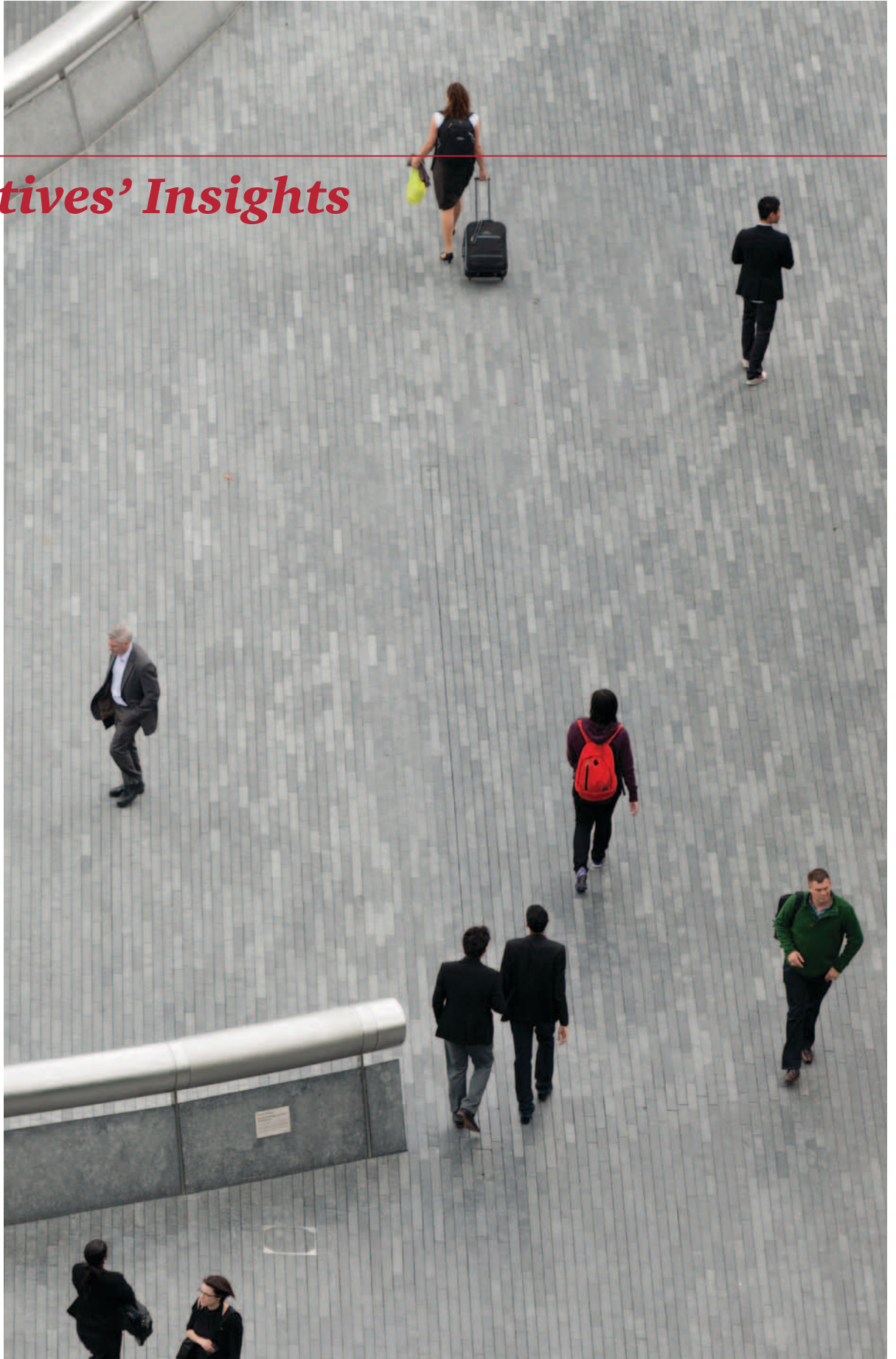
It's also important to take a systematic approach to HR planning – what we call 'making talent strategic'. In the past, an assumption has held that the market analysis element of a strategic plan is paramount, and how a business 'resources up' to meet the plan is something that's worked out later. Now, leading businesses are looking beyond the next budget round to plan talent needs. A longer-term strategic view is needed, if they want to close the gap today and map how talent needs will change.<sup>80</sup>

Once that's done, you can compare your current employer brand to future needs. Does your company have an attractive 'Employer Value Proposition', a strong argument why the types of candidates you need should choose to work for your company? As a final step, it is important to implement and measure branding activities on a regular basis.<sup>81</sup> That could include a variety of types of marketing platforms or communication channels.

Adjustment is important too. Remember, for an employer brand to be successful over the long-term, it needs to be authentic. So if you're promoting advancement opportunities, but most potential high-flyers complain they've hit a dead end mid-career, you'll need to rethink either your recruiting messaging or your development procedures.

*Transportation and logistics companies suffer from the sector's negative image. Building their employer brand is an essential way to cope. That means understanding what makes a company unique and attractive, then using different marketing platforms and communication channels to get the message across to young people, careers counselors, business people and the media.*

# *Executives' Insights*





# 3 Questions to...

Anne-Cathrin Schreiber

Chairwoman of Task Force Leadership & Lifelong Learning,  
Business and Professional Women (BPW) Europe



## 1. What are women's particular skills that transportation and logistics companies could benefit from?

In a globalised and complex world, interconnected thinking and acting is becoming more and more important. Many women tend to think holistically, having a big, complex picture of the business field and its resulting consequences to companies' stakeholders in mind. Women are often team players who improve the company atmosphere with their ability to integrate and interconnect other people's experiences, opinions, ideas, wishes and understanding. They are able to realise relevant essentials in a short time. Women usually have a natural ability to communicate and share knowledge and experience, to consult and mentor other employees (consciously and unconsciously!), making them strong managers and decision makers. They have good expertise in active conflict solving, considering underestimated psychological aspects. Many men may be characterised as avoiding problem solving. Therefore, especially in relationship management matters women's social competence may be of fundamental relevance to important decision making processes.

## 2. So what do you suggest, how can male-dominated sectors such as the T&L industry increase the proportion of women in their field?

Male-dominated sectors may proactively invite women to take on greater leadership responsibility. They could implement particular work-time-models, special training, mentoring, group dialogues, experience exchanges etc. to ensure mixed-gender boardrooms and top-management teams. It would be helpful to have some 'role model companies', which make best-practices, benefits and successes visible. Women have to learn to take more responsibility, be decisive and increase their self-awareness and self-esteem. Men should be encouraged to see women in leadership positions as factors in holistic success. Both genders should better understand, accept and integrate the strengths and perspective of the other instead of creating 'enemy' stereotypes. The development and practice of such measures may guide male-dominated companies to achieving surprisingly positive financial results.

## 3. What can transportation and logistics companies do to improve their employer brand?

A first point: employer branding means employee branding. That means, to view and treat employees as internal customers is a major tool for companies to successfully promote their brand. Employer branding has to appear within the company first to make a difference to the external environment. Employment patterns often reflect

the characteristics of board members and top managers. They are often role models for the workforce and the corporate culture. Transportation and logistics companies may increase the public awareness of their employer brand by making their particular human relations and corporate culture activities visible (e.g. by writing articles, giving interviews, providing leadership examples, best practices or developing particular campaigns to gain people's interest). The active attraction of talented employees at different organisational levels will automatically strengthen companies' attractiveness and competitiveness.

But how can employee fluctuation be avoided? In my opinion, the key characteristic for a sustainable employer branding is to demonstrate a trustworthy, communication friendly, open and family-oriented corporate culture. It is important to provide flexible work-time programmes and human resources development options and to consider individual learning and understanding styles, intercultural experience and exchanges.

Transportation and logistics companies should offer platforms to employees to integrate private interests and experiences relevant to the business field (i.e. voluntary work experiences and contacts). They could aim to offer attractive internal job opportunities. It is not necessary to make tremendous financial investments to create a living atmosphere at work. Instead, it is important to step into each stakeholder's shoes and understand their perspectives.

## 3 Questions to...

Dr. Rüdiger Grube

Chairman & CEO of Deutsche Bahn AG, Germany



### **1. What particular skills are absolutely central to your strategy?**

Our business requires a broad range of skills. Just to give you an idea – Deutsche Bahn has 296,000 employees working in more than 300 occupational categories. And we annually train about 10,000 apprentices in more than 25 vocational skill areas. All in all, we recruit from many target groups with a particular focus on non-academic professionals. To systematically prepare our staff members and managers in dealing with current and future demands, we've introduced a standardised set of employee and management skills. For example, vital employee skills include a customer orientation, the willingness to change, good communication skills, and the willingness to cooperate. Among our important management skills are change management, personnel management and development, and corporate responsibility.

### **2. Are talent challenges different than they used to be?**

The demographic changes that we see occurring in many of the regions where we operate – shrinking populations, an ageing workforce and diversifying demographics – compound the challenges we face and intensify the war for talent. In response, we've taken a three-prong approach to talent: First, we try to attract new employees from all demographics. For example, by

2015, our target is to increase the proportion of staff that is female to 25%; and the proportion of management that is female to 20%. Second, we have to continuously develop our workforce and promote individual employability. And finally, we have to retain the employees who are already on board by providing attractive employment conditions and establishing a value-driven corporate culture.

### **3. How are you collaborating with educational institutions or governments to better develop a pipeline of future employees?**

We collaborate with educational institutions and with the government in order to promote Deutsche Bahn as an attractive employer and to disseminate information about job openings. Let me first give you some examples of our activities with educational institutions. In cooperation with different regional educational institutions we offer a programme called "Dual Studies", which includes a bachelor program for students who want to work and to study at the same time. We also support university R&D programmes both in Germany and abroad. Our relationships with Georgia Institute of Technology and Technische

Universität Darmstadt are two examples of that. We have also endowed chairs at various universities – Technische Universität Berlin and St. Petersburg State University in Russia, for example. As well as providing us with technical research and insight, these relationships with universities provide us with a campus presence for purposes of recruiting. Regarding cooperation with government, our aim is to lend support to industrial and social initiatives. One example of this is our support of the national scholarship programme which is sponsored by the Ministry of Education and Research.

# 3 Questions to...

Hussein Hachem

CEO of Aramex, Middle East & Africa, UAE



## **1. Looking forward, what is the one risk to your growth that you are most concerned about? Why and how are you preparing for it?**

Talent is an extremely important issue that is detrimental to the future of the company. Talented employees usually seek an environment where they can think freely and innovate, and we have worked hard from our early days to create a conducive environment for innovation, where trial and error can happen – an environment that does not punish mistakes. This has also changed our corporate culture, as our staff continues to challenge our thinking, our processes, and how we do business and thus we became very open to change with change as one of the core pillars of our internal culture. We will continue to encourage our people to come in and say: “Okay, you are doing this function, that way, but maybe this is the best way to do it.”

From our experience, talented employees want a good salary but it’s not only about the money at the end of the day. They want to work for a company that has an engaging corporate culture, high ethical values and a significant contribution to the societies where it operates. They want to work for a brand that they can add value to and be part of its success story.

In 2011, we launched our Global Change Leadership Program, a 12 months program to empower and nurture our senior managers to

emerge as future global leaders. The programme aims at supporting and guiding our leaders by taking them through a holistic journey of learning, experimenting, questioning and reflecting, volunteering, exploring new areas and interests and exposing them to global platforms and local realities.

In this unique program, our next generation of leaders will be exposed to internal and external projects, in collaboration with NGOs, international organisations, and social innovators. In addition, these leaders will undergo leadership training with some of the world leading business & management schools, including INSEAD, IMD, Oxford and Cambridge.

In addition to that, we have another leadership program developed in cooperation with the American University in Beirut, which aims at developing capacity in middle management through several management modules, over two weeks that will tackle different tools and topics that are needed for leader’s development.

## **2. What does it need to attract the people you need?**

Contrary to common belief, we compete for talent with the Nestlé’s, the Unilever’s, the Proctor & Gamble’s of this world, and not only with competitors in our industry. While we at Aramex are not the largest, nor do we necessarily pay the highest; we offer our talent a unique package. If you come to this organisation, you have the opportunity to be very creative,

the opportunity to learn and the opportunity to teach your colleagues. Anyone in Aramex can challenge the process and work mutually with the management and staff to grow this company.

## **3. How do you develop a pipeline for future employees?**

Most universities in emerging markets offer limited opportunities for specialisation in our industry, logistics & transportation, so most of the talent that is recruited has training in the fields of business administration, marketing or finance. Thus, we have to recruit talent with potential and appetite for learning and then invest in their education and training in our field, like route management, supply chain or logistics.

You need to work with the local talent and transfer knowledge and not just parachute in expatriates. You need to make sure you have the right partners on the ground so that you understand the business environment and culture.

## 3 Questions to...

Inge Mulder

CFO of South African National Roads Agency Limited (SANRAL), South Africa



### **1. What are particular challenges the transportation and logistics sector in Africa/South Africa faces regarding talent?**

SANRAL has made significant progress over the last 5 years with regard to the acquisition of talent and the retention of talent. However, the shortage specifically with regard to experienced engineers remains a challenge in South Africa. Younger engineers are coming through the ranks, however, they do not have the requisite years of experience that come from having implemented large scale infrastructure projects. As we all know such projects require capital investment. This investment was dormant for many years until the recent investment impulse.

### **2. Which programmes have you initiated or supported in order to develop human capital?**

Since 1998 we have been involved in programmes which promote the built environment and support learners with mathematics and science from the school level. Over the years we have intensified our efforts through the SANRAL Scholarship Programme, which has since its inception attracted young talented learners across the country. Approximately 200 applications are received annually. In the year 2012, 158 learners will receive sponsoring from the SANRAL Scholarship Programme. University chairs are the Chair in Transport Planning of the University of Cape Town and the Chair in Pavement Engineering of the Stellenbosch University.

SANRAL also has a bursary programme which offers financial support to undergrad as well as post graduate students – our current number is 58. We also facilitate regional internships on our projects as well as internships for students who require experiential training in order to complete their studies. We have always had provisions within contracts with contractors to provide training on site as well as a certain number of bursaries.

### **3. What can the transportation and logistics industry do to improve its industry brand?**

Continued capital investment will create a more stable environment. Students are unlikely to choose to study civil engineering if the industry is depressed – which is what happened in the early 80's. This is a worldwide phenomenon.

It is also imperative to keep abreast of changing technologies and to invest in these as well as investing in people. Civil engineering makes a huge contribution to the improvement of the lives of ordinary South Africans – this needs to be communicated to everyone on a consistent basis. It will take joint efforts from the public as well as private sector to achieve this but it's most certainly doable.

Despite the difficulties to improve the image, especially for civil engineers, there have been good career opportunities. Even during the bad economic times since 2008 the transport industry still experienced job growth and increased infrastructure. The construction industry is also able to take up a large amount of unskilled labour, effectively assisting the unemployment rate specifically in South Africa. This is something positive which we should market.

# *Opportunities*



**So what can transportation and logistics companies do to address talent issues and improve their human resource management and strategy?**

In this chapter, we offer 21 forward-looking activities, supported by a brief description and the time horizon for when the activity could be put into practice. In the ‘opportunity grid’ (see figure 8) our 21 suggested activities are illustrated along the lines of the study’s six key topics:

1. Demographics
2. Recruiting
3. Compensation and Incentives
4. Career Paths
5. Employer Branding
6. Diversity Management

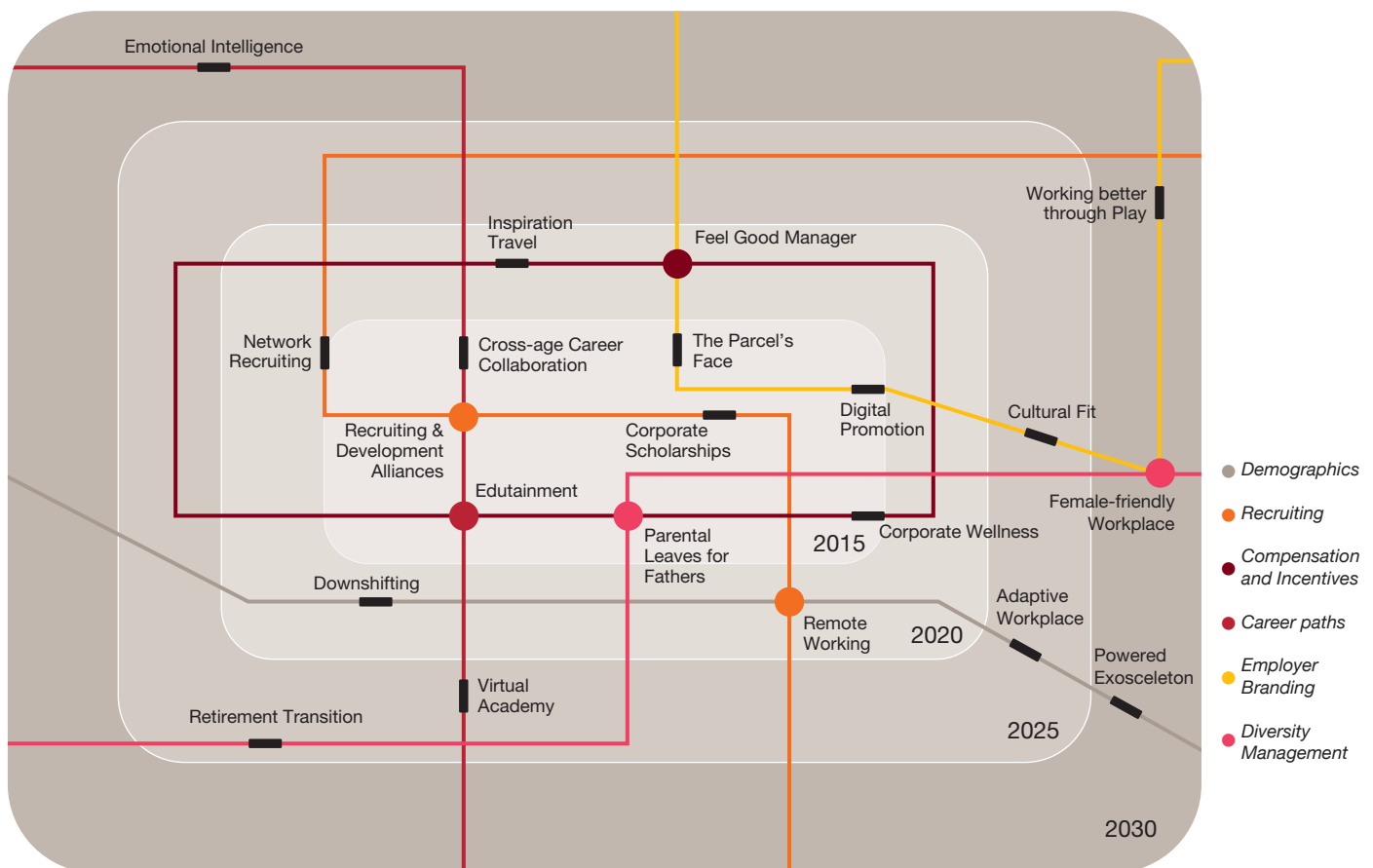
The options span a wide range, from the introduction of new technical devices to improve working conditions and communication processes to changing how companies organise and implement learning and education. Some are aimed at helping companies better recruit and attract skilled

employees, while others make life easier for those already on board. In some cases, ground-breaking companies are already starting to employ the techniques today, while others represent radical departures from the status quo.

A number of our opportunities help employees find the right work-life balance and stay healthy and motivated. That improves productivity, leading to better performance for transportation and logistics companies. Drawing on the skills of female employees is another way to improve performance, by enhancing communication, conflict solving and customer orientation.

Our list is not exhaustive, and not every activity will be a good fit for every organisation. It should, however, serve as a pragmatic starting point for thinking creatively about how you can optimise your human resource profile.

**Figure 8: Opportunity Grid**



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# 1. Demographics

## *Downshifting (2020)*

Not every employee is looking for fast career advancement. For some people, enjoying more time for family and leisure may become a bigger priority. Freelance and half-day work is already increasing in popularity in some countries, and given the choice, more people might opt for such positions. In Britain, more than two million people said they would give up pay for a better work-life balance.<sup>82</sup> Transportation and logistics companies that help employees to 'downshift' by offering choices such as flexible working locations, flexible hours, compressed hours, sabbaticals, job sharing and the option to shift to part-time work would enjoy an advantage in recruiting and retaining personnel.

## *Adaptive Workplace (2025)*

Today, fleet managers can buy vehicles where seat adjustments are made automatically, so that different drivers don't need to manually adapt the settings every time they get into a truck. Why shouldn't more applications in transportation and logistics environments also adapt to individual users and thereby make work environments more comfortable for older workers and better suited to the

needs of disabled workers? Workplace infrastructure could implement a set of tools, technology, software and services that provides an integrated functionality, including a 'memory' of individual physical requirements and personal preferences. Whole sites, warehouses and offices would be fitted with flexible, integrated and adaptive tools and devices, which are linked to each other. People might configure their individual workplace from off-site via their smartphones.

## *Powered Exoskeleton (2030)*

A powered exoskeleton is a wearable machine. The first powered exoskeleton project (BLEEX project) was founded by the Defense Advanced Research Project Agency (DARPA).<sup>83</sup> It was originally designed for use in defence settings, but it can be applied for simple limb movement and for mobility assistance for aged and infirm people as well. In the future, Exoskeleton-Suits could enable older and less fit workers, e.g. warehouse workers, to do heavy lifting that wouldn't be possible for many today. They could also help open up some jobs that require high levels of physical strength to women.

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## 2. Recruiting

### ***Corporate Scholarships (2015)***

Students with exceptional skills, with greater financial need or in under-represented groups already receive scholarships to top high schools and universities. It's much rarer to see financial support for vocational training programmes. But as we've shown, many previously low-skilled jobs are increasingly requiring post-secondary training. Logistics and transportation companies that offer scholarship support for programmes in areas like truck driving or port logistics could help improve the pool of candidates.

### ***Recruiting and Development Alliances (2015)***

Transportation and logistics companies are already having difficulty recruiting enough skilled candidates, and the situation is getting worse. SMEs in particular may have problems positioning themselves as desirable employers. Setting up recruiting and development alliances could help. Companies involved in such programmes could work together on recruiting initiatives. They could also help companies to offer more appealing development opportunities, like cross-company job-rotation. SMEs already cooperate to offer optimised logistics services. The next step may be cooperating in recruiting and developing, with the goal of establishing a strong employer brand for the alliance.

### ***Network Recruiting (2015)***

Recruiters need to establish direct relationships with job-hunters. Getting actively involved in networks can help them get to know future candidates. That could include being present in face-to-face gatherings of logistics professionals or alumni, for example. But emerging networks on social media sites will certainly be important too – and not just for high-skilled jobs.

### ***Remote Working (2020)***

As cloud computing becomes more prevalent, the options to work from everywhere, anytime are likely to expand beyond standard office jobs. Today's telecommuting will evolve into remote working, where, for example, logistics and warehouse processes could be entirely controlled from off-site. Companies that offer staff the option to work from home or from a 'Third Place' might have a major advantage in recruiting, particularly of younger employees, many of whom already spend significant hours each month working outside of a traditional office.<sup>84</sup>



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## 3. Compensation and Incentives

### *Corporate Wellness (2015)*

Seafarers, truckers and train drivers often work in isolation, or are exposed to extreme situations as hijacks, piracy or hold-ups. That can cause burn-out. It's not limited to high-stress jobs, though. Even office staff may suffer from the physical effects of long periods of sitting. Offering exercise options in the workplace can help, for example by reducing the intensity of headaches and neck symptoms.<sup>85</sup>

Corporate wellness programmes, delivering a wide range of individualised physical and psychological offerings, will keep workforces healthy, motivated and confident. It's not a new trend, but transportation and logistics companies that develop robust offerings in this area could take the lead. Helping employees stay healthy will enhance their reputation – and could help reduce healthcare costs and absenteeism.

### *Feel Good Manager (2020)*

Helping workers maintain their physical health isn't the only goal. Mental health is important too. Many companies already offer social activities for employees, but designating 'Feel Good Managers' goes an additional step to improve employees' motivation and energy levels. Spreadshirt, a German company, is one of the first companies to employ a Feel Good Manager and the

response from employees has been very positive.<sup>86</sup> The Feel Good Manager would take the lead in organising culinary, sports and cultural events for employees. Employees will be encouraged to come up with own ideas that the Feel Good Manager would help turn into reality.

### *Inspiration Travel (2020)*

Experiencing new cultures and new adventures can spark creativity and lead to new ideas. By offering their employees 'Inspiration Travel' companies could enhance creativity and inspiration, as well as increasing employee satisfaction. Some companies already offer their employees time to pursue their own projects in order to accelerate their job creativity.<sup>87</sup> Why not offer 'Inspiration Travel' to employees as a source of ideas as well? Employees travelling on the company's own planes or trains may see new ways to improve customer service or come up with innovative service offerings.

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## 4. Career Paths

### ***Cross-age Career Collaboration (2015)***

Career paths have traditionally been developed individually, rather than across teams. New trends in career design are now taking a broader view. For example, some companies now systematically pair up junior and senior project managers. That helps younger employees advance faster and gives more experienced employees the opportunity to develop mentoring competencies. We call this ‘Cross-age Career Collaboration’ (3C). 3C could enhance the employer brand and serve as an important point of differentiation for transportation and logistics companies.

### ***Edutainment (2015)***

Edutainment combines education with entertainment to make learning more fun. It’s a strategy that’s long been employed successfully with children, but it works for adults too. For example, the MIT Sloan School of Management developed a game around beer distribution to help teach students about the importance of visibility in the supply chain. It’s proved so successful that many other supply chain management courses have followed suit. Empirical studies show that using edutainment strategies in e-learning increases enjoyment – and more importantly, learning retention.<sup>88</sup>

The demands on transportation and logistics employees are increasing and in some cases changing rapidly, which means more and more frequent training will be needed. Edutainment for transportation and logistics would

promote learning through exploration, interactivity, trial and error and repetition, while not losing the fun component. That would mean better prepared employees who look forward to their next training session.

### ***Virtual Academy (2025)***

As workforces become more global and mobile, their working and educational needs are changing. While e-learning solutions are already popular in many industries, they are generally only available within the company computer system. A Virtual Academy, as part of a cooperative project or governmental initiative, would offer a broad range of educational services available online, accessible from all over the world. The German leading-edge logistics cluster (‘EffizienzCluster LogistikRuhr’) is currently working on the ‘Supply Chain School’ project, a preliminary step in this direction.<sup>89</sup>

### ***Emotional Intelligence (2030)***

What makes a good leader or a strong team player? Daniel Goleman’s 1995 book, *Emotional Intelligence*, suggests that emotional intelligence plays a big part. That means understanding yourself, your goals, intentions, responses and behaviour, as well as understanding others and their feelings.<sup>90</sup> Comprehensive training of staff in how to increase their emotional intelligence might help companies differentiate their development offerings. That may be especially important for leadership programmes.<sup>91</sup> But it could also help improve motivation levels overall, if employees learn to interact with more sensitivity.

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## 5. Employer Branding

### *The Parcel's Face (2015)*

Online shopping is growing rapidly. More and more, people are relying on the Internet for purchases. Many people are getting packages delivered much more frequently. That could add up to a big opportunity for delivery services to establish direct relationships with customers. Companies could help customers get to know their local delivery person by including a short biography or link to more details about the delivery person online. The parcel becomes a 'face' – and the delivery company becomes more appealing, both as a service provider and as a potential employer.

### *Digital Promotion (2015)*

There is a whole range of new ways to promote a business and enhance the overall corporate brand as well as the employer brand. Many of these use digital channels. They range from the obvious (placing banner ads on job search websites) to the more subtle (optimising job descriptions to match commonly used search terms). Raising visibility among your customers and the public at large – by posting videos on Youtube, or establishing a Facebook or Twitter presence, for example – can help attract potential employees too.

Such approaches are particularly important for SMEs. They need to start actively using digital promotion strategies to position themselves. Those that don't take action risk being left behind. Many of their larger peers have already begun to take advantage of these new marketing channels.

### *Cultural Fit (2020)*

Employees whose styles mesh with the company culture are likely to perform better and stay on-board longer. While many companies already consider cultural fit when hiring, companies could focus much greater effort on systematically evaluating candidates for cultural fit in a whole range of factors, like personal style, engagement, openness, expectations of after-work life, usage of social media. Transportation and logistics companies who give priority to candidate who fit in with their culture can enhance their employer brand. Essentially every employee would represent the values the company stands for and serve as a 'brand ambassador.'

### *Working better through Play (2030)*

Many companies have already focused attention on creating a more pleasant working environment; some are already taking the idea one step farther. Google's offices around the world famously feature a whole host of extras designed to help employees relax and recharge.<sup>92</sup> The company expects employees to work hard – and that's easier if work feels more like play. In the software industry, some companies go one step further and turn coding into a game for programmers. Office environments that incorporate fun and relaxation will be a strong selling point for logistics companies recruiting new staff, and they'll help make employees on-board more productive and satisfied too. Companies that can turn work itself into play will fare even better.

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## ***6. Diversity Management***

### ***Parental Leaves for Fathers (2015)***

In many countries worldwide, the legal system and company policies offer a minimum of a couple days or weeks of paid paternity leave. In Sweden and Norway, parental leaves for men are deeply embedded in and supported by organisational cultures. In some cases, parental leave programmes may actually help increase productivity – and they’re great for employee morale. Family-friendly policies may increase female and male employees’ commitment to their company.

### ***Retirement Transition (2025)***

As older employees near retirement, they may no longer be physically and mentally capable of some of the more strenuous aspects of their work. This is especially relevant for employees working in physically challenging settings. Transportation and logistics companies that offer the option for a smooth transition into retirement – for example by switching from night and weekend shifts to day shifts for drivers, or moving into office roles – may retain experienced workers longer. And such programmes will help the company build the employer brand and appeal to job seekers too.

### ***Female-friendly Workplace (2030)***

Transportation and logistics companies that proactively hire more women invest in mentoring and developing them, promote them to senior and executive management roles and even recruit them for supervisory board will set themselves apart from the rest of the industry. By creating a truly female-friendly workplace, they’ll enhance the company’s image and build the employer brand. And they’ll appeal to female consumers booking travel arrangements and sending packages.

# *Methodology*



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# *RealTime Delphi Innovation*

In this fifth volume of *Transportation & Logistics 2030* we continue to use a methodology of futurology known as the Delphi technique. Working together with our academic partners at EBS Business School, we were able to use an improved version of the Delphi methodology, which we believe brings significant advantages for both surveyed experts and the monitoring team.

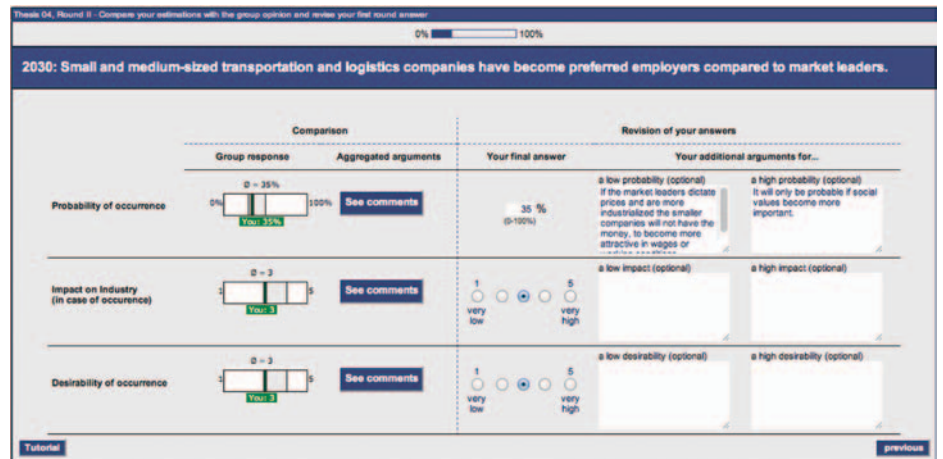
The classic Delphi technique was developed at US RAND Corporation in the 1950s. Their goal was to overcome some of the weaknesses that group studies often suffered from, for example the ‘bandwagon’ effect, where group members follow the lead of the majority, or the ‘halo’ effect, where group members follow the lead of someone who they think is the most knowledgeable expert. Instead, they wanted to systematically develop expert opinion consensus about future developments and events.

The usual Delphi forecasting procedure takes place in the form of an anonymous, written, multi-stage survey process, where feedback of group opinion is provided after each round. We designed our Delphi as an Internet-based, almost real-time survey. The use of an Internet survey form (*RealTime Delphi*) that provides immediate feedback streamlines the classical procedure. It makes the process more interesting and convenient for the surveyed experts, who can see data trends immediately. Using this technique, we were also able to automate much of the data analysis.

Based on extensive desk research, expert consultations and workshop sessions, PwC and EBS developed 15 theses around the future of work and working environments in the transportation and logistics sector (see overview of theses on page 50). Panellists rated each thesis' probability of occurrence (0-100%), the impact on the transportation and logistics industry if it occurred (5-point-Likert scale) and the desirability (5-point-Likert scale). They were also given the option to provide supporting arguments for all answers. Once a panellist finished giving answers for the first round, the statistical group opinion of all participants was calculated immediately. Panellists were then shown a second round screen (see Figure 9).

The final results of the RealTime Delphi survey formed the framework to analyse future opportunities. Our team conducted additional expert workshops, where we used both the extensive qualitative survey data and the results of desk research to better understand future trends.

**Figure 9: RealTime Delphi Screen**

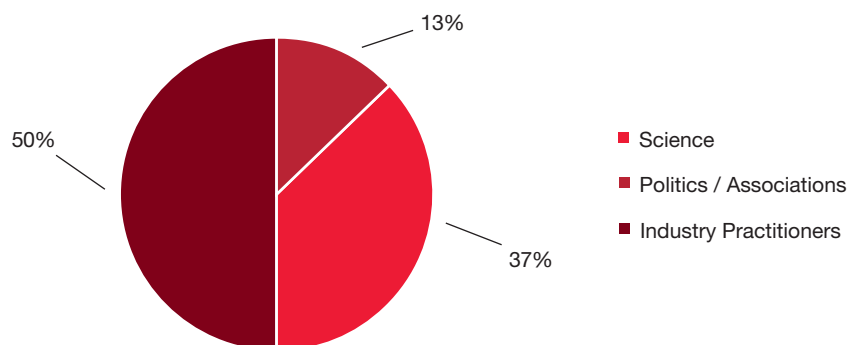


### Delphi Panel

The objective of Delphi studies is not to obtain a representative sample of a population, as with most conventional surveys. Rather, Delphi research aims for a high inclusion of expertise. Our panel included a significant number of experts from business, mainly C-suite level executives and decision makers from global companies. Key criteria for our selection of RealTime Delphi participants were industry and educational background and work experience, as well as function in and outside the organisation.

Overall 94 of the invited experts participated in the study, of which 50% were industry practitioners, 37% were academics and 13% came from politics or associations (see Figure 10). The industry share included representatives from all modes of transport. That meant we were able to develop a perspective that took into account a broad view of the industry.

**Figure 10: Segmentation of Delphi experts**



The expert panel was also diverse from a gender point of view. Overall 20 women (21.3%) were represented, which is significantly above the average percentage of women working in leading positions of the industry. Figure 11 shows some differences between women's and men's response behaviour. As a general trend, women attach a higher probability rating to most theses (especially theses 3, 7, 12, 14 and 15), revealing a slightly stronger confidence that the transportation and logistics industry will succeed making some necessary changes in coming years. But they are also aware of the challenges ahead and think – more than their male peers – that the industry will be forced to pay above-average salaries (thesis 5).

The study also has a truly global perspective. Participants were based in 24 different countries, ensuring a balanced and global view (see Figure 12). Around 63% of the respondents came from developed countries and around 37% were from emerging countries. That meant we were able to take into account the views of experts from both emerging and mature economies.

**Figure11: Probability ratings broken down by gender (in %)**

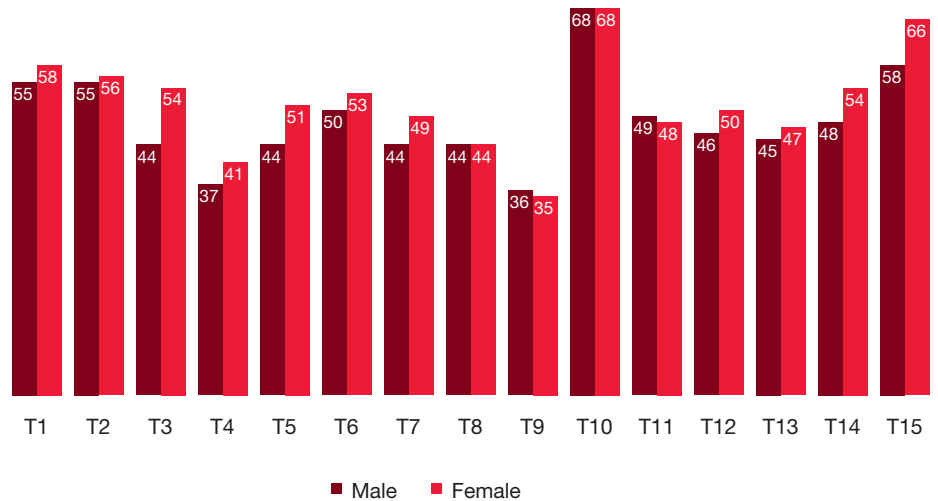
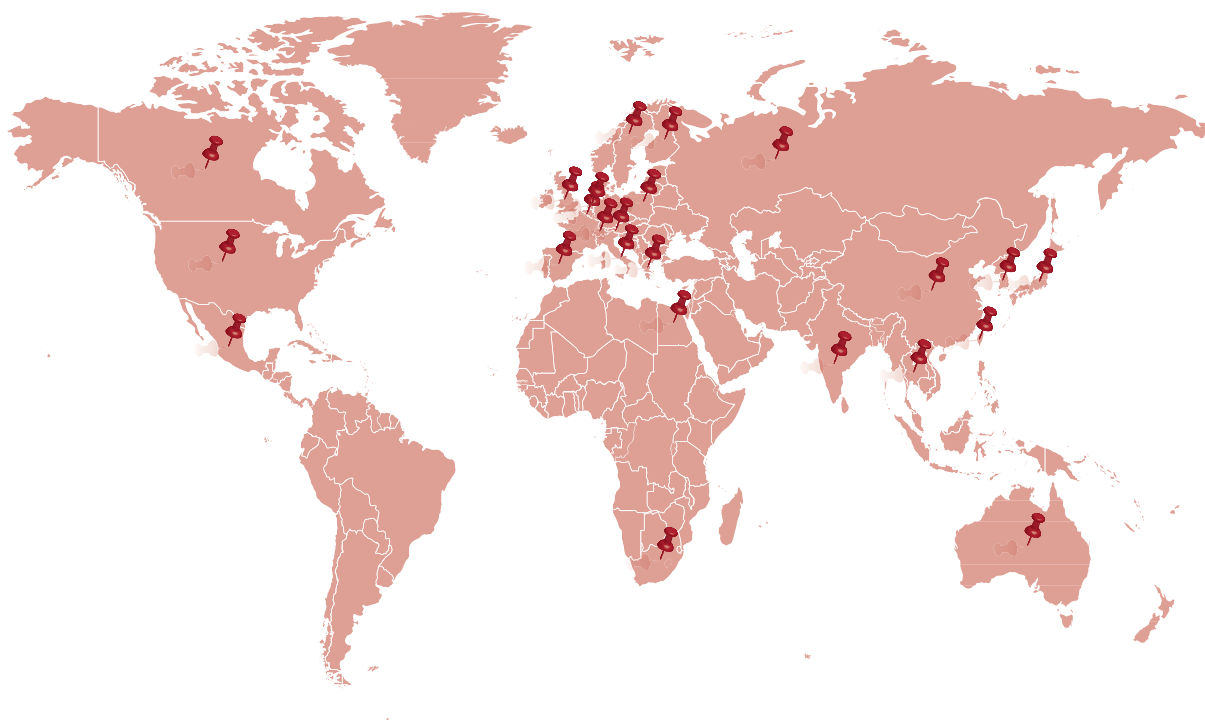




Figure 12: Geographic origin of Delphi panellists



Represented Countries: Australia, Belgium, Canada, China, Egypt, Finland, Germany, Greece, India, Italy, Japan, Mexico, Netherlands, Poland, Russia, Spain, South Africa, South Korea, Sweden, Switzerland, Taiwan, Thailand, UK, USA.

### *The survey process*

One of the major advantages of the Delphi process is that experts can consider the views of their peers (anonymously) and potentially re-consider their own answers when presented with solid rationales for a different position. The panellists in our Delphi survey took full advantage of this dynamic process. During the eight weeks we ran the survey each participant took part on average in 3.0 Delphi rounds. That means each participant on average ran through a first and second round per thesis and also logged on 2 additional times to re-assess their answers. The maximum number of rounds measured was 6.

The statistical group opinion per thesis was provided in the form of a box plot, also known as a “box-and-whisker plot”. Numerical data is shown together with several characteristics of the data series (e.g. median, distribution, outliers). Participants were also able to review the comments and arguments already submitted by other experts for each projection. At the end of a full survey cycle, i.e. first and second round screens for all theses, each panellist was also shown a consensus portal. This meant the panellists could view how their answers compared to those of the group as a whole. Each respondent was then able to access each thesis separately at any time until the final closure of the portal, allowing the experts to check for updates and revise their own estimates. There were 833 written arguments provided; that is the equivalent of more than 8.9 comments per expert. The large number of comments shows a high level of engagement on the part of the panellists, underscoring the quality of the data.

## Overview of theses

**Figure 13: Overview of theses**

No.	Theses for the year 2030	EP	C	I	D
1	2030: Transportation and logistics companies have been successful in attracting a skilled workforce and have sufficient staff to manage their businesses effectively.	55.9	25	4.0	4.3
2	2030: Transportation and logistics companies have adapted work environments to the needs of older workers in order to avoid risks to productivity and quality.	55.5	25	3.7	4.0
3	2030: Due to the global nature of its operations and its global recruitment strategies, the transportation and logistics industry does not face any shortage of labour.	46.5	30	4.0	4.0
4	2030: Small and medium-sized transportation and logistics companies have become preferred employers compared to market leaders.	38.2	20	3.1	3.1
5	2030: Transportation and logistics companies are forced to offer above-average salaries compared to other industries.	45.8	28.75	3.9	2.4
6	2030: The transportation and logistics industry has made above-average investments in defining job profiles and implementing apprenticeships and development programmes.	51.0	20	3.7	3.8
7	2030: Transportation and logistics employees remain longer with their employers as compared with other industries.	44.8	20	3.7	3.8
8	2030: Transportation and logistics companies perfectly align the personal and career objectives of their entire management staff with overall corporate strategy.	44.4	13.75	3.7	4.0
9	2030: Compared to other sectors, it's more desirable/ hip to work in the transportation and logistics industry.	35.6	13.75	3.8	3.9
10	2030: Transportation and logistics companies must proactively manage the company brand in order to survive.	68.3	20	3.9	3.9
11	2030: For transportation and logistics companies, corporate responsibility has become the most important factor of employer branding, rather than lifestyle issues or a company's reputation for innovation.	49.0	20	3.5	3.4
12	2030: The transportation and logistics industry has evolved into the leading industry regarding the effective use of the cultural richness of its workforce.	46.7	20	3.5	3.8
13	2030: Compared to other industries, the transportation and logistics industry has increased the rate of female employees across all functions and hierarchy levels more strongly.	45.6	30	3.5	4.0
14	2030: Only human resources functions using social media will be able to recruit new employees.	49.6	27.5	3.4	3.0
15	2030: Human resource departments have been transformed from supporting units to strategic partners of the C-Suite/ top management in transportation and logistics companies.	59.5	20	3.8	4.0

EP= estimated probability (in %); I= Impact (1-5); D= Desirability (1-5)  
 Measures of C= consensus (interquartile range <= 25); dissent (interquartile range > 25)

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