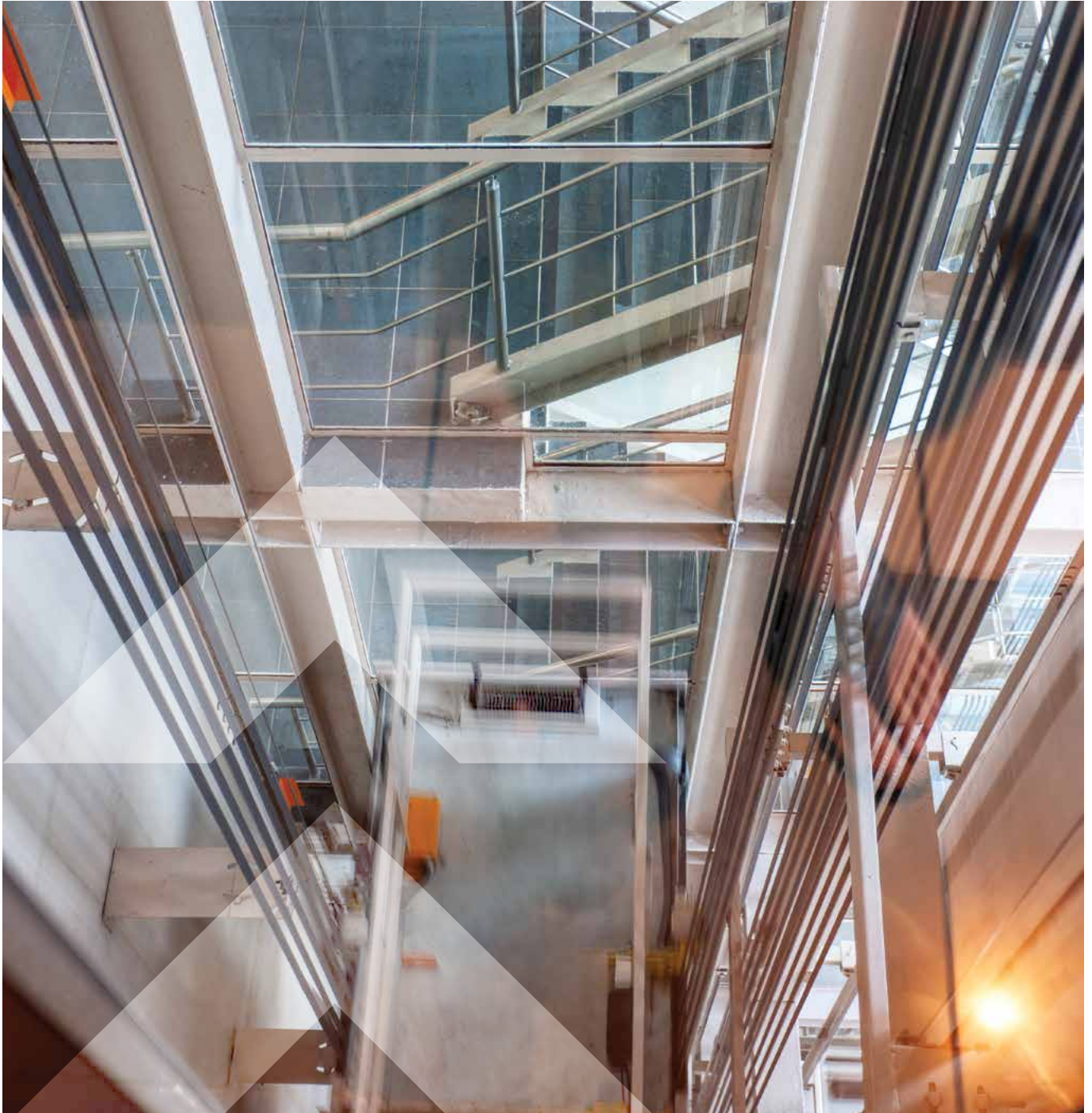


# lift Industry News

A UK-BASED MAGAZINE WITH A GLOBAL OUTLOOK FOR THE LIFT AND ESCALATOR INDUSTRY



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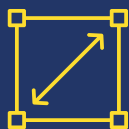
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ESCALATOR INDUSTRY

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# PAUL MASTERSON OVERVIEW



**For the spring edition, we welcome Paul Masterson, Managing Director at PIP Lift Service Limited.**

A very Happy New Year to you all, and welcome to the January 2026 edition of Lift Industry News. I am delighted to be the Guest Editor for an edition that has a big focus on Apprentices and celebrates National Apprenticeship Week (9-15 February).

At PIP we really believe in apprenticeships, and I am the 'proof of the pudding' as I started as an apprentice myself. We have trained 26 apprentices, and 19 are still working with us - you can read about one of them, Cameron Sparkes, on page 55.

My friend and industry colleague, Danny Garaway is also invested in apprenticeships, read about the rising stars at Target on page 49. And it's not just engineer apprenticeships in the VT business - Ellie Jackson at insurance specialists Robert Gerrard was also an apprentice and now she is mentoring and training other apprentices - her story is on page 52.

Some may be put off going down the apprentice route by the assessment process. Karen Slade at LEIA talks about reforms aimed at streamlining the process on page 46 and there are helpful links to videos on LEIA's YouTube channel.

Apprentices are our future, but we also look back in this issue, celebrating a real innovator in the VT industry, Mike Godwin. We pay tribute to his life on page 12.

I feel Mike would have been very interested in the plans Otis have for the future - do take a look at the interview with Enrique Miñarro Viseras, President, Otis EMEA and Aleš Korotvička, Vice President & General Manager, Otis UK & Nordics on page 28.

As a proud Londoner, I was very interested in the paper from Paul Clements of D2E in the Knowledge Bank on page 69. London's evolving skyline is shaped by a unique set of constraints which means we must think of VT as a fundamental piece of the building's DNA. London's tall buildings can be flexible for tenants, kind to the environment, and respectful of the city's heritage.

I am also very proud to be a Trustee of the Lift Industry Charity and would like to personally thank everyone in the industry who supports the charity in so many ways. Our dinner dance raised over £20,000 for the charity back in October 2025 - some great photos from Blacks' Productions on page 83.

Christmas may already seem far away, and the January blues may have set in - our furry four legged correspondent Ted has some good advice on dealing with SAD (Seasonal Affective Disorder) on page 80.

No January blues at PIP - apart from our logo! - we are looking forward to more exciting developments in this fast-moving industry we have the pleasure and privilege to work in.

**On behalf of Lift Industry News, I wish you a happy, healthy and successful 2026.**



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# lift Industry News

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THIS  
QUARTER

NATIONAL APPRENTICESHIP WEEK

I LOVE  
APPRENTICESHIPS  
#NAW2026

### WE CELEBRATE THE APPRENTICES IN OUR INDUSTRY

Vertical Transportation is an exciting, fast-growing industry that's at the leading-edge of engineering. An apprenticeship is a fantastic first step into our industry. It's a great mix of hands-on, one-to-one mentoring and structured learning about engineering and technology.

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## CALENDAR

# 2024

<b>February</b> 10 - 12	<b>Cairo Lifttech</b> February 10-12 <b>CAIRO, EGYPT</b>  	<b>September</b> 16 - 18 <b>17th Lift &amp; Escalator Symposium</b> September 16-18 <b>KETTERING, UK</b>  
<b>May</b> 06 - 09	<b>ELEVEX Konya 2026</b> May 6-9 <b>KONYA, TURKEY</b>  	<b>September</b> 21 - 23 <b>The Elevator Show Dubai</b> September 21-23 <b>DUBAI, UAE</b>  
<b>May</b> 20 - 23	<b>World Elevator &amp; Escalator Expo</b> May 20-23 <b>GUANGZHOU, CHINA</b>  	<b>October</b> 20 - 22 <b>Lift Expo Poland</b> October 20-22 <b>WARSAW, POLAND</b>  
<b>May</b> 27 - 28	<b>ELA General Assembly &amp; Conference</b> May 27-28 <b>ROTTERDAM, THE NETHERLANDS</b>  	<b>October</b> 28 - 30 <b>Lift Expo Italia</b> October 28-30 <b>MILAN, ITALY</b>  



19

November

Nordic Lift Expo

November 19

STOCKHOLM, SWEDEN




03 - 05

December

ISEE India

December 3-5

NEW DELHI, INDIA




06 - 09

May

Asansör

May 6-9

ISTANBUL, TURKEY




12 - 15

October

Interlift

October 12-15

NUREMBERG, GERMANY




17 - 20

November

GEE Global Elevator

November 17-20

MILAN, ITALY




# 2024

# CELEBRATING THE LIFE OF MIKE GODWIN



**Michael "Mike" Godwin, whose life revolved around lift engineering, passed away at age 95 on November 5 2025 while visiting his son William in Leeds. He had spent the last 40 years living in Cagnes-Sur-Mer on the French Riviera.**



Mike's career was filled with innovation and pioneering achievements in the vertical transportation (VT) industry. He began his career in 1968, setting up Lift Design Partnership in 1974 with long time colleague Dr Gina Barney, which merged with international engineering firm Lerch Bates in 1987.

His contributions included the first curved elevator, the first practical Rope-less Gearless Linear Motor with its Vertrak lift design, and the first computer-based group traffic control algorithm. He also introduced the graphic elevator remote-monitoring system, hall-call cancellation feature, computer simulator for lifts, Dot Matrix LED Position Indicators, and co-invented Lift Call Allocation – COCA. His creation of Remote Monitoring and the "Lifts In Service Indicator" (LISI) became a standard feature on elevators around the world.

In the 1970s, he wrote and specified a lift standard for the London Borough of Southwark, which was later adopted across the UK Housing Authority lifts. His work bridged continents; he championed Armor and GAL equipment for his landmark modernization project at BBC World Service HQ Bush House in 1981, helping GAL establish itself in the U.K.

Godwin is survived by his sons Jason and William (his eldest son Adrian died in 2019), three grandchildren and four great-grandchildren.

His long time colleague Dr Gina Barney talked about him in a paper she presented at the Lift & Escalator Symposium in 2017

*He is very important to my history. My first encounter with the lift industry was in January 1968, when Michael Godwin came to the University of Manchester Institute of Science and Technology (UMIST), where I was a Lecturer, seeking help with the stopping and levelling of Ward-Leonard drives. He was Technical Director of William Wadsworth, Bolton. Very innovative and intuitive, he was very much in advance of his time. It was he who suggested putting the call buttons on the landing. I do not know if he had heard of Leo Port but sometimes great minds are separated by 12,000 miles.*

*He and I set up Lift Design Partnership in 1974, which became Lerch Bates Europe. In 1990, when Michael retired, I remained Chairman/Chairman Emeritus until 2002.*

*Besides producing a radically new standardised specification for public housing lifts, his main technical innovation was Bush House. To this day he is interested in linear motor driven lifts. And this is how he met and employed Haider Al-Abadi for nineteen years, currently Prime Minister of Iraq. (Note: Haider al-Abadi served as prime Minister of Iraq from September 2014 to October 2018)*



### Two more tributes to Mike from well know names in the industry:

*I first came into contact with Mike when he had overseen a new control system at Bush House in London. I was a young engineer surveyor and responsible for undertaking the thorough examinations of the lifts at the time. I remember thinking that the control system was way ahead of its time, given that the industry wasn't very advanced electronically at the time and most control panels were still relay based. The LOPs included a small screen advising the estimated time of arrival of your lift, something that you don't see on today's lifts, yet alone lifts back in the late 1980's. The funny thing was that the lifts still had round guides, if I remember correctly, in stark contrast to the highly advanced control system. I had the pleasure of speaking to him but never actually meeting him, but enjoyed those conversations because he was so ahead of his time. His published works were often referenced by Dr Gina Barney, including in her early book "elevator traffic analysis design and control".*

*As a young naïve engineer I was lucky to have had the discussions I did with him and will remember them with great fondness. He made time for me. To some he was the stereotypical mad professor with eccentric ideas, to others he was a genius. I'd say he was a man with amazing thinking power who was brave enough to try out those new ideas. Simply irreplaceable.*

**Eurling Prof. David. A. Cooper MBE**  
BSc (Hons), MSc, MPhil, CEng, FCIBSE,  
FSOE, FBES, FCGI

*Michael Godwin was a legend in our industry. I spoke to Mike a number of times on the telephone, but never actually met him. Any lift engineer working in the North of England in the 1980s would however have known of him. His work at Wadsworth Lifts was his real legacy, even though his later research into remote monitoring of lifts and into linear motors pioneered innovative developments in those fields across the entire industry.*

*Wadsworth lifts were installed in to very intensive sites. The London Underground, hospitals throughout the land and some of the very worst vandal prone social housing installations. They were robust, reliable and simple. They have pretty much all been modernised now, but the basic mechanical components remain as a tribute to a great engineer.*

*During his time at the Lift Design Partnership Michael Godwin, along with Gina Barney's ideas, revolutionised lift modernisation and their specifications were both thorough and demanding.*

*First Adrian Godwin, then Gina Barney and now Michael Godwin, all now in the great machine room in the sky telling each other and us all "that's not the way to do it!"*

**Michael S Bottomley**  
BA (Hons) MCIBSE CEng



The biggest  
challenges come  
in small packages

# POINT OF VIEW

by Len Halsey

**In much of our discussions on all things lifts, we do tend to look to the latest developments in AI/IoT, remote monitoring, technical innovation and the implications of changes to codes and standards, not to mention ways of refining traffic analysis. This of course is mostly viewed through the lens of passenger lifts, including their various guises as firefighting, evacuation and goods/passenger lifts.**

However, there is one important sector where the product application is mainly unseen and not often thought about. Used extensively to provide level access in many situations, the humble platform lift provides a vital service for people with mobility impairment and those with prams/pushchairs and young children. Despite providing an easier means of access, they are often unseen and located away from central areas where they are unobtrusive and effectively out of the way.

While there is a wide market for platform lifts in retail, transport hubs and public buildings, where a standard market offering often fits the bill, it is where they are provided in prestigious settings such as high end hotels and office buildings that the greatest challenges arise. The standard designed platform lift is rarely an acceptable solution to the architect who sees it as 'heavy', obtrusive and out of keeping with the lobby design and architectural aspiration, especially if a fully enclosed shaft is needed with the necessary structural supports and interfaces.

Few words make my heart sink more than a statement from the architect along the lines of '....and we can have a specially designed platform lift in the lobby to cater for the differences in floor levels'. From bitter experience I know what's ahead and just how painful it is to arrive at a solution. The 'special design' generally covers every aspect of the visible finishes and operating features of the lift. Factor in possible full height enclosures, through car or adjacent opening arrangements with power operated doors and the design can quickly become both complex and technically challenging.

On the face of it, you can't argue that a bespoke platform lift in the main lobby complementing the architectural design is not an unreasonable aspiration. After all, these are areas of the building that make a statement and to which the architect and developer pay particular attention. Here the building makes an impression on tenants and visitors alike, expressing the grandeur of the space and making a bold statement about the type of tenants who take up residence.

However, the truth of the matter is that the UK platform lift market is both specialised and relatively small in terms of manufacturing capacity. Add to this the fact that most of the products sold are of a standard imported design, albeit with optional finishes, and it can be seen we essentially have pre-engineered solutions aimed at the wider market.

Needless to say, the design aspiration we are talking of here is a bespoke solution configured to fit neatly within the building and be as inconspicuous as possible. This is where architectural aspiration for a unique, slim line and unobtrusive design comes face to face with the reality of what is commercially available; and it is often clear the two are incompatible.

Here the scale of the challenge becomes clear. This is where we now head down the road of finding a supplier who can design and manufacture a one-off lift with specified materials and finishes. It must be said there are suppliers who can do this; however we are talking of a highly specialised sector within a relatively small market and the process of procurement, design and manufacture is often difficult, with manufacturers few in number and frequently busy with secured work.

When taking the bespoke route, two things need to be flagged immediately. Firstly, it is going to take considerable time to find a contractor, not to mention design and manufacture the equipment. Secondly, it is going to be a very expensive solution with what may well be a unique product containing many specially manufactured elements.

If you are successful in finding a contractor who is prepared to work with you, a further impediment is what are perceived as high-risk T&Cs. Most providers of platform lifts are smaller companies working within a commercial market that often accepts the supplier's own contractual terms. However, when compliance to the main contractor's T&Cs is required, this can often lead to the supplier being reluctant to take on what is seen as a substantial risk. This situation can stem from the main contractor seeking to apply the same T&Cs for the purchase of the platform lift as those used for the wider VT package, a one size fits all approach. The use of 'minor works' T&Cs or a purchase order aren't always available and so the contractor can often walk away from what is seen as a contract that could take the business down if things go wrong. Factor in the requirements for processes associated with drawing submissions, QA procedures, monthly reports, H&S, site meetings, etc. etc., which a small contractor often struggles to accommodate, and it is clear the smallest lift on the project is going to be the most difficult and time consuming to buy, design and manufacture.

A major issue often sits around the provision of power operated doors. As a principle, I have always advocated for powered doors. I think these provide for a dignified use of platform lifts, especially by those in wheelchairs, on crutches or using walking aids.

However, it is surprising how many people don't share this approach and focus more on appearances than the needs of the users. I do appreciate that power operated doors bring architectural compromise, especially with top drive systems where large boxed enclosures house the drive mechanism. A possible solution can be found with under driven door arrangements, but these can come with the need for structural recesses and in many cases the slab has been built long before the lift is procured. However, the lift is primarily for use by those with mobility impairment and every effort should be made to make their lives a little easier. In my view, automatic doors should be provided as a standard feature for all passenger carrying platform lifts.

While debating the merits of powered doors, a major hurdle in the design process is finding a non-standard reliable and robust door drive system capable of operating heavy glass doors. From my experience many suppliers find this difficult and look elsewhere for possible solutions. This may include systems found in supermarkets to open hinged access doors/barriers or in some cases, turnstile gate drives have provided an answer. Here, not only are we looking at a drive system that can operate heavy doors, but also interface to mechanical locks and electrical monitoring contacts for door position and locking, altogether something of an engineering challenge in itself.

While recognising the challenges of the door arrangement, we also find ourselves looking for slim line profiles for glass enclosures, minimal, if any, glazing frames for landing doors, discrete locations for landing call buttons, minimalist COP's and in many instances, suitable lighting to both car platforms and landing entrances.

Add to the mix the need for a remote space for a controller and possible hydraulic tank/pump unit together with associated service ducts and the scene is set for spending a lot of time and effort in reaching a solution. If you are unlucky enough to need an IP rated system then you really do have your work cut out!

One final point is that of compliance. Many products are designed to meet the requirements of the Machinery Directive, while others look to comply with BS EN 81-41. When looking at bespoke solutions it is important to establish the standard you are seeking to comply with from the very beginning, to ensure the design can be certified. A further point worth considering is a discussion with the inspecting body responsible for any on site witness testing and/or ongoing inspections, their buy in to the proposal is a good thing to have before the design is signed off for manufacture.

From my experiences, a bespoke platform lift can carry a significant cost per metre travelled and take a disproportionate amount of time and attention to manage, not to mention the frustration that can accompany the whole process. However, it does highlight the limitations of the market and what can easily be provided.

So, the next time you are confronted with this dilemma, what can you do? Perhaps try to persuade the architect/developer to take a standard range product; good luck with that.

**Alternatively, a ramp is a good starting point!**

#### POST SCRIPT

It has been my great privilege to have been invited to peer review the 2025 edition of CIBSE Guide D. In that process I would like to pay tribute to all the authors, fellow reviewers and the editors for their efforts in producing an outstanding document that covers every aspect of lift and escalator design and application. Guide D has over the years become the major point of reference for designers, consultants and those in our industry, both here and abroad. I would highly recommend it as essential reading for both the new and experienced practitioners of our trade.

#### BIOGRAPHY

*Len spent a major part of his career with Otis, holding senior technical and managerial positions in construction, modernisation and major projects before joining Canary Wharf Contractors in 1998. Working with vertical transportation contractors, consultants and interface trades Len was responsible for lift and escalator installations on major high rise developments before being appointed Vertical Transportation Design Manager in 2002.*

*Working with signature architects and major international VT consultancies, Len worked providing design solutions in complex high rise buildings and across the developments portfolio, including infrastructure, retail, residential and public transport projects. He was appointed Project Executive for Vertical Transportation Systems in 2015 and fully retired from Canary Wharf in 2023. He is now an independent consultant.*

*He is a former chair of the CIBSE Lifts Group*







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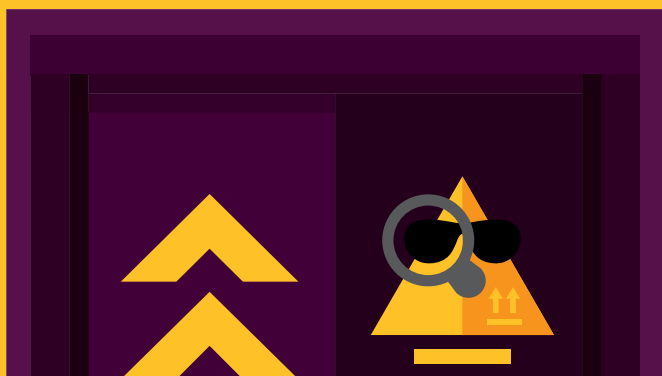


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# SAFETY FIRST



## LUBRICATION REVISITED

**You may recall a few articles ago I wrote about the lost art of lubrication and gave some examples of what could go wrong with a lack of lubrication. More recently I have been involved with a situation where it wasn't the level of the gearbox oil that was the problem, but the oil itself. What this led to was becoming acquainted with people far more knowledgeable on the subject than me and it became a fascinating learning curve. As they say, everyday is a school day.**

Managing gearbox lubrication involves choosing the right lubricant, maintaining the correct level and cleanliness, monitoring temperature and condition, and performing regular oil changes or grease application.

One of the outcomes was oil sampling to understand the amount of suspended solids contained within the oil itself as this is a good indicator of component wear. But you need data, and good data at that.

When was the oil put in the gearbox?

- Has the gearbox been topped up at any stage? If so with what and how much.
- What does the OEM recommend for the periodicity of oil replacement?

The last point also relates to usage.

You should not mix mineral and synthetic oil because it dilutes the synthetic oil's superior properties, potentially reducing performance and lifespan.

There is also a risk that mixing the two types will cause a change in the viscosity that may not be acceptable to the OEM and may block lubrication ports as a result.

Best practice is to ensure that only one type of oil is used and that it meets the OEM requirements.

You may also recall another previous article entitled "The meaningless tick". When you see a tick on a service report beside gearbox, what does that mean? Does it mean all is well? Does it mean the oil type is right? Does it mean the oil level is OK? Does it mean there are no leaks? Or does it simply mean the gearbox is physically there?

Back in 2011, Julia Munday wrote a great paper that was presented at the first Symposium about the future of the gearbox and as was rightly predicted, the use of gearboxes is in decline. However, for now at least, there are many lifts out there that still have them.



OEM advice varies and you need to check what is applicable to you, however in general, advice is as follows:

**Check Oil Level:** At least monthly, more often for continuous use, add oil if low. (Subject to my comments above, but also if low seek to find out why)

**Check for Contamination:** Look for dirt, water, or debris in sight glasses (where fitted)

**Temperature:** High temperatures significantly shorten oil life; use thermal guns to check.

**Oil Analysis:** Implement a sampling programme for extended operation. (This was implemented after the matter I became involved in and identified other gearboxes that were in trouble)

**Frequency of oil changes:** Follow manufacturer guidelines, which are generally based on hours/temperature.

**Inspect Seals:** Check seals and gaskets regularly for damage and/or oil loss.

I don't need to tell you that oil leakage onto the high speed shaft of a lift can cause brake performance to decline and eventually become ineffective. It is a matter of safety and why maintenance is required.

*Photo by Fulvio Ciccolo on Unsplash*

## BIOGRAPHY

### **Eurling Prof. David Cooper MBE**

*BSc (Hons), MSc, MPhil, CEng, FCIBSE, FSoVT, FSOE, FBES, FCGI,*

*David Cooper is the CEO of UK based lift consultants LECS (UK) Ltd. He has been in the lift & escalator industry since 1980 and is a well-known author and speaker. He holds a Master of Philosophy Degree following a 5-year research project into accidents on escalators, a Master of Science Degree in Lift Engineering as well as a Bachelor of Science Honours degree, Higher National Certificate and a Continuing Education Certificate in lift and escalator engineering. He is a co-author of "The Elevator & Escalator Micropedia" (1997) and "Elevator & Escalator Accident Investigation & Litigation". (2002 & 2005) as well as being a contributor to a number of other books including five editions of CIBSE Guide D. He is a regular columnist in trade journals worldwide including Elevation, Elevator World, Elevatori and Lift Industry News. He has presented at a number of industry seminars worldwide including in Thessaloniki, Munich, Shanghai, San Francisco, Melbourne, Zurich, Barcelona and Vienna as well as numerous presentations within the UK.*

*He is also a Founding Trustee and Chairman of the UK's Lift Industry Charity which assists industry members and/or their families after an accident at work. In 2012 David was awarded the silver medal by CIBSE for services to the Institution.*

*David also chairs the Charity that runs the Lift Symposium and is an Honorary Visiting Professor at The University of Northampton and The University of East London. He also sits on the Board of CIBSE. In 2021 he was awarded the Sir Moir Lockheed Award by the SOE for 30 years of dedication to safety in the lift & escalator industry.*

*In 2023 David received an MBE in the Kings Birthday Honours list for services to lift & escalator engineering.*







# BEHIND THE SCENES AT LEIA

## HIGHLIGHTS OF 2025

2025 was another busy year for LEIA, marked by the appointment of Karis Walker as President and Andrew Renwick as Vice-President. Both continue in their roles for a second year, and we look forward to building on this work in the year ahead.

### The year of recalibration

Launched in January, this year-long initiative brought staff and members together to shape LEIA's support and services. Through focus groups at council meetings and regional visits, the team gathered member feedback on current challenges, needs and priorities to ensure LEIA continues to provide relevant leadership, guidance and support.

### First Education and Training Seminar held

The seminar focused on organisational capability and individual competence under the Building Safety Act. It was open to members and non-members.

Rachel Swales from Pickerings Lifts and Kate Howat, Orona, introduced the revised LEIA Competency Plan (LCP), designed to define means of demonstrating basic competence for those working in field roles on relevant equipment. It's applicable to any personnel working in installation and maintenance and repairs irrespective of whether they are employed by a LEIA member, a non-member or are sub-contractors.

Vin Jukes from L.I.T.S and Karen Slade highlighted the role of apprenticeships in addressing skills gaps and updated attendees on the revised Level 3 Lift and Escalator Engineering Apprenticeship Standard (ST0252 v1.2).



### Late payments consultation

In autumn, LEIA responded to the government's consultation on tackling late payments, an issue that costs the UK economy £11 billion a year and causes 38 business closures daily. The consultation sought views on proposed measures to reduce late, long and disputed B2B payments. Outcomes are expected early this year.

### Contribution to CIBSE Guide D

Published in September, the new CIBSE Guide D includes significant contributions from LEIA. Micky Grover-White authored Part 16 on upgrading existing lifts and contributed to Part 11 on access. LEIA MD Nick Mellor authored Parts 6 and 12 on firefighter/evacuation lifts and lift electrical systems and also served as one of four Technical Editors on upgrading lift systems.



### Safety seminar opens doors to non-members

For the first time, the LEIA Safety Seminar was opened to both members and non-members. Delegates gathered in Northampton for a productive discussion around mental health and wellbeing, escalator safety, Net Zero challenges, occupational health and lone working.

### Apprenticeship changes webinars

Following the Department for Education's announcement regarding changes to apprenticeship assessments, LEIA Assessment held a series of educational webinars for employers and training providers in autumn. For a full update, see page 46.

### CEN TC10 Plenary

Nick Mellor and Micky Grover-White hosted the CEN TC10 Plenary in London in November, bringing together the European Technical Committee responsible for developing and maintaining European standards for lifts, escalators, and moving walks. The plenary meetings are where the committee gathers to discuss the progress and future of its standardisation work, including recent decisions to extend the deadline for the EN ISO 8100-1 and 2 standards.



## LOOKING AHEAD – OUR PRIORITIES FOR 2026

As this issue goes to press, LEIA is appointing a new Managing Director as Nick Mellor steps down. Nick will continue to provide guidance and continuity to the management team and the incoming MD. This transition reflects his wish to step back from full-time leadership while ensuring a smooth handover.

**The LEIA team are working on several key projects this year. These include:**

### New site safety app

Micky Grover-White is developing a new site safety app to replace the current paper-based Site Safety Manual. The app will make key safety guidance easier to access and use on site, ensuring information is always up to date and readily available. The app will be available on both Apple and Android devices and will be launched later this year.

### New learning management system

Since joining LEIA last year, Rosanna Williamson has been developing LEIA's distance learning training provision, including the introduction of a new learning management system to support and enhance member learning. Keep your eyes peeled for a roll-out later in the year.

### Lift & Escalator Symposium

Following last year's sold-out event, LEIA will once again be supporting the Lift & Escalator Symposium when it returns to Kettering in September.

### LEIA events

Members will have access to five events throughout the year, focusing on education and training, safety, contract and legal matters and technical standards.

### End point assessment and apprenticeship reforms

More changes are expected, and Karen Slade will be working to keep employers, training providers and stakeholders updated. See page 46 for more detail.

### Welcome to the latest LEIA members

Welcome to Mitsubishi Electric Europe B.V., LiftOut Ltd, RJ Lifts Group Ltd, Unite Lift Services and Saltire Lift Services – who all joined LEIA during 2025.

**LEIA Distance Learning enrolment dates:**  
May – closes 15th April.

September – closes 15th August.

January 2027 – closes 15th December.

**LEIA seminar**  
4th March – Quality & Technical Seminar – BS5655-11 Lift Modernisation, Northampton – members only

12th March – Contracts & Legal Seminar – Contract payment clauses – the dos and don'ts, London – members only

29th April – Education & Training Seminar, London – open to members and non-members

23rd September – Safety Seminar, London – open to members and non-members

11th November – Quality & Technical Seminar, Northampton – members only



**SASSI**  
LIFT SYSTEMS

# *A SMARTer Way Forward...*

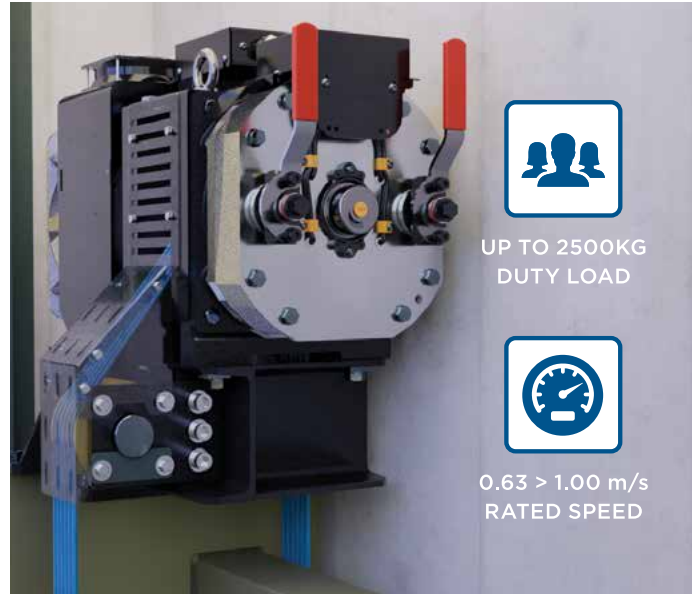
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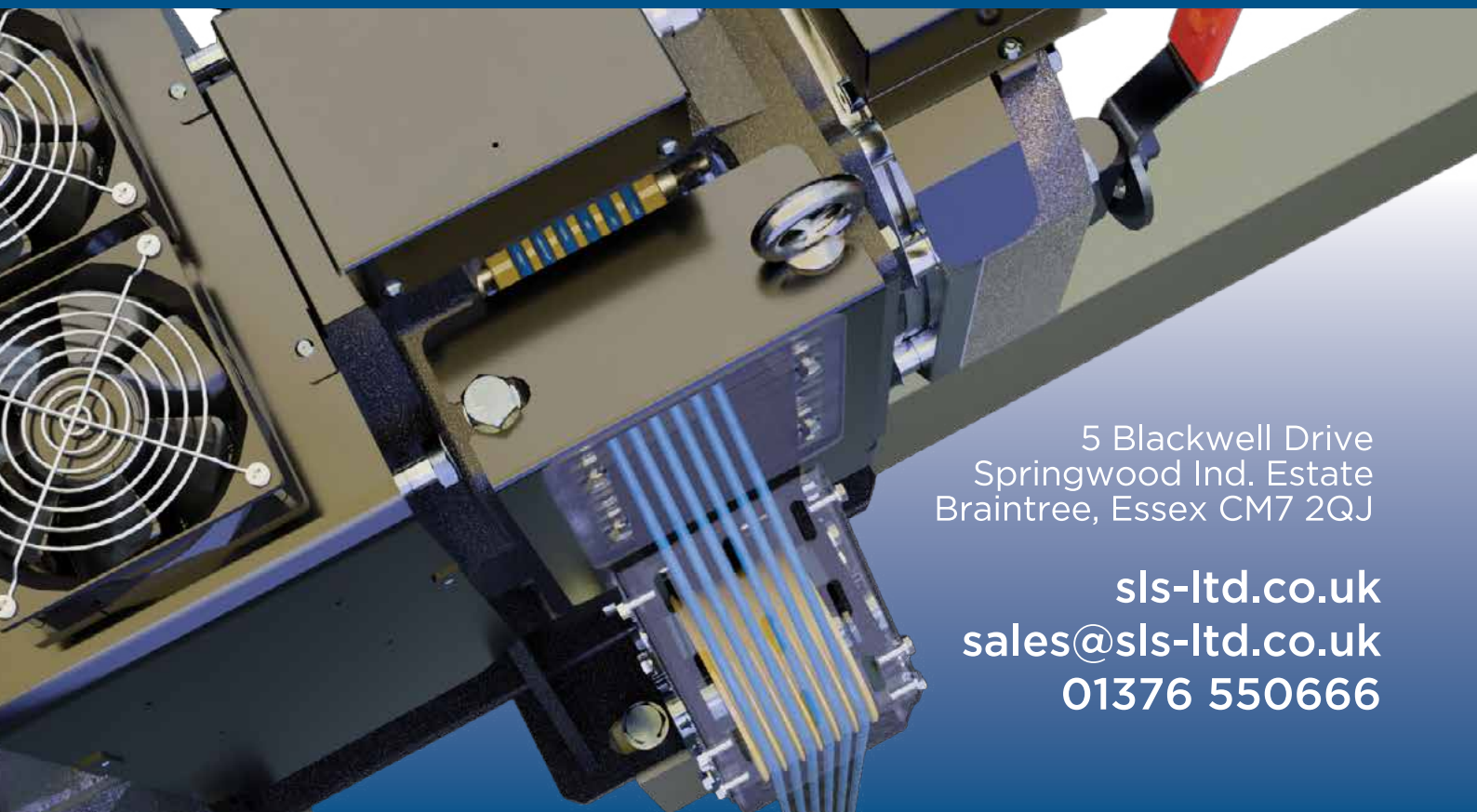
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# THE SOCIETY OF VERTICAL TRANSPORTATION

Global shifts in building safety standards and focus on sustainability mean that professional registration for those working in the VT sector is more important than ever before and can be gained by joining the SoVT.

A society committed to advancing the vertical transportation industry.

Our industry involves with a wide range of stakeholders: clients, architects, structural engineers, fire engineer, M&E engineers, security consultants, sustainability consultants, lift consultants, main contractors, insurance inspectors and users.

It is an industry full of often surprisingly complex engineering challenges; lifts are really important and are so much more than a "box on a rope".

The SoVT provides us with an excellent vehicle to formally evidence and promote our specialist expertise, recognising the importance of VT and being proud of our contribution.

It is there to support VT professionals at every stage – from students to industry leaders – and provides opportunities for recognition, development, and connection across the global built environment.

There is a place for everyone, regardless of experience and knowledge, the key is matching your experience and knowledge with the competencies.

No matter where you are in your professional journey, SoVT membership empowers you to lead, learn, and excel in your field.

Not sure what is the correct membership route for you? The SoVT has this easy to follow membership finder:

<https://www.cibse.org/get-involved/societies/society-of-vertical-transportation-sovt/join-sovt/sovt-membership-finder/>

To find out more about applying for SoVT membership, scan the QR code below.

## GUIDE TO MEMBERSHIP

Download: SoVT Guide to Membership

<https://bit.ly/3KGjpGw>





The SoVT is here to support your journey, raise standards, and connect you with a global community of vertical transportation professionals.

Increase your technical skills through content tailored to VT professionals.

Stay connected with VT industry news and consultations.

Access to SoVT events, workshops, and conferences that bring you closer to the industry's cutting edge and offer invaluable learning and networking opportunities, along with the opportunity to attend CIBSE events.

Create and maintain your own professional network.

Demonstrate your competence and credibility through post nominals. (letters after your name!)

Wherever you are in the world, and whatever your role in moving people through buildings, SoVT is your platform for growth and professional identity in a rapidly evolving sector.

## The future of vertical transportation is moving faster than ever.

According to the recent analysis from Research and Markets (<https://lnkd.in/e2SV8CXX>), the UK Elevators & Escalators Market is set to grow from 8,218 units in 2024 to 9,874 units by 2030 – representing annual growth of 3.11%.

### What's driving this growth?

- Modernisation – Upgrades for energy efficiency, advanced controls, and digital monitoring.
- Smart technology - AI-driven solutions enhancing safety, efficiency, and user experience in public and private transportation systems.
- Sustainability & accessibility – Eco-friendly solutions and inclusive design for everyone.

At SoVT we bring together professionals driving these changes, sharing technical knowledge, standards updates, and innovations through events and community discussions.

If you're part of the vertical transportation industry or have an interest in this sector - SoVT is your professional home.

**Become a member of SoVT today and join the community driving the future of lifts, escalators, and beyond.**

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# CIBSE VISIT TO CHINA



**Panos Balalas, PR and Communications Manager at CIBSE reports on how CIBSE strengthens international collaboration and supports emerging engineers on China delegation trip**

CIBSE President Elect & CEO of LECS (UK) Ltd, Dave Cooper MBE, alongside CEO Ruth Carter, recently led a high-profile delegation visit to China, accompanied by members of the CIBSE Hong Kong Region committee. The visit reflects CIBSE's ongoing commitment to supporting members internationally, fostering professional development and sharing best practice in building services engineering across global markets. During the visit, the delegation engaged with government bodies, industry leaders, engineering institutions and CIBSE members through a series of meetings, technical sessions and knowledge-sharing activities.



The trip included a visit to the Zhuhai GREE factory in Guangdong province, where the delegation explored advanced manufacturing processes and emerging building technologies, highlighting opportunities for collaboration in sustainable engineering solutions.

In Hong Kong, CIBSE hosted a reception at the British Consulate, attended by officials, industry leaders, and guests. Discussions focused on global initiatives, innovation, and the future of building performance, with CIBSE highlighting its role in driving sustainability and knowledge exchange across the built environment.





The delegation met with the Electrical and Mechanical Services Department (EMSD), where Director Raymond Poon and Deputy Director PC Chan, alongside committee members, presented developments in energy efficiency and green technologies.

Discussions covered engineering standards, talent retention, and the positive role of AI in enhancing engineering performance. This engagement strengthened an already valued relationship and reinforced a shared commitment to a sustainable future.

The delegation also met with key regional bodies, including the Guangdong Provincial Association for Science and Technology (GPAST), the Architectural Services Department (ArchSD), and the Property Management Services Authority (PMSA). Topics ranged from mutual recognition of members and best-practice sharing to talent development, energy efficiency, and smart building technologies.

Dave Cooper MBE played a central role throughout the visit, sharing his personal journey from apprentice to CIBSE President Elect, and leading sessions on innovation, including a lecture at Chongqing University's Sustainability Department for the Built Environment (SuDBE). His discussion focused on the role of AI in predicting and preventing accidents in the built environment, sparking debate among postgraduate students and reinforcing the importance of supporting emerging engineers.

Engagements with the Hong Kong Institution of Engineers (HKIE) and the CIBSE Hong Kong Young Engineers Network (YEN) provided further opportunities to inspire the next generation of professionals. Delegates discussed career pathways, emerging technologies, and strategies to address skills gaps, highlighting the region's readiness to embrace innovation.

The delegation also visited Macau, where CIBSE signed a formal Memorandum of Understanding (MoU) with the Macau Institution of Engineers. This partnership strengthens collaboration, supports professional development and promotes knowledge exchange across the region.

The visit concluded with participation in the CIBSE Hong Kong Joint Symposium 2025, themed 'Revealing smart, resilient, and sustainable built environment: Innovating wellbeing and decarbonisation from design to operation'. The event brought together local and international experts to explore innovations in building design, resilience, and occupant wellbeing, further highlighting CIBSE's role in driving sector-wide knowledge sharing.

Through this delegation, CIBSE reinforced its commitment to professional excellence, sustainability and the global development of building services engineering. Dave Cooper's leadership and engagement throughout the visit emphasised the institution's focus on supporting emerging engineers, fostering collaboration and advancing innovation internationally.

**CIBSE looks forward to continuing these partnerships and expanding opportunities for professional engagement and collaboration across China and beyond.**

# THE INTERVIEW



Enrique Miñarro Viseras,  
President, Otis EMEA

The world's largest manufacturer of lifts, escalators and moving walkways, Otis has an incredible reputation that dates back to 1852 when founder, Elisha Otis, invented the first reliable safety lift. With a rich and innovative history, we wanted to find out more about this global powerhouse, so we caught up with Enrique Miñarro Viseras and Aleš Korotvička.

**Let's wind the clock back! Can you give share a little of the history of Otis – where are your roots compared to where you are now?**

**Enrique:** It's challenging to condense over 172 years of Otis history – but our story is remarkably consistent over the years. It's a history of quality service customers can rely on, and innovation that's driven pioneering advances in the industry and ultimately changed urban infrastructure around the world. We've developed and invested in new technologies that have helped the world grow taller, smarter and faster. That drive to be future-ready continues in areas such as smart, connected equipment, which enables predictive maintenance and improves uptime, and systems that work seamlessly with autonomous service robots.

Today Otis moves 2.4 billion people every day and maintains approximately 2.4 million customer units worldwide – the industry's largest Service portfolio – and we are just as deeply committed to supporting our customers' needs as we have been since our humble beginning.

We remain committed to and driven by our values – our Otis Absolutes – Safety, Ethics and Quality. They are at our core and drive our actions, every single day.

**As a company with a global outlook, how do you ensure each region is recognised? Is there anything you do differently over here in the UK?**

**Enrique:** We are primarily a service company, so although we are in over 200 countries and territories – we work locally through our operating territories and the people who focus on customers every day.

**Aleš:** We are uniquely positioned to meet the evolving needs of the UK market, and we are very committed to it. We have focused on having the right people in the right places so we are close to all our customers, making us more agile and responsive to meet their needs.



Aleš Korotvička, Vice President  
& General Manager, Otis  
UK & Nordics.





It's not so much what we do differently from other Otis territories – it's the breadth of solutions tailored for UK customers that make it a great place to be. On London's Elizabeth line for example, Otis is proud to support around 800,000 passenger journeys daily with our escalators and expert engineers who keep London moving.

In stadiums across the UK, Otis delivers a seamless experience for fans. Take Murrayfield Stadium in Edinburgh, for instance, home to the Scottish National Rugby team, with up to 67,000 attendees per event. Our six, state-of-the-art elevator systems and expert service help deliver a smooth experience for fans.

We are also very proud to serve the healthcare sector. In NHS Wales for example, Otis maintains 450 units, and at University Hospital Wales – the country's largest hospital – a major modernisation project is underway, supporting critical infrastructure and patient care. At the Midland Metropolitan Hospital in Birmingham, our team has integrated elevators and service robots to deliver vital supplies around the hospital.

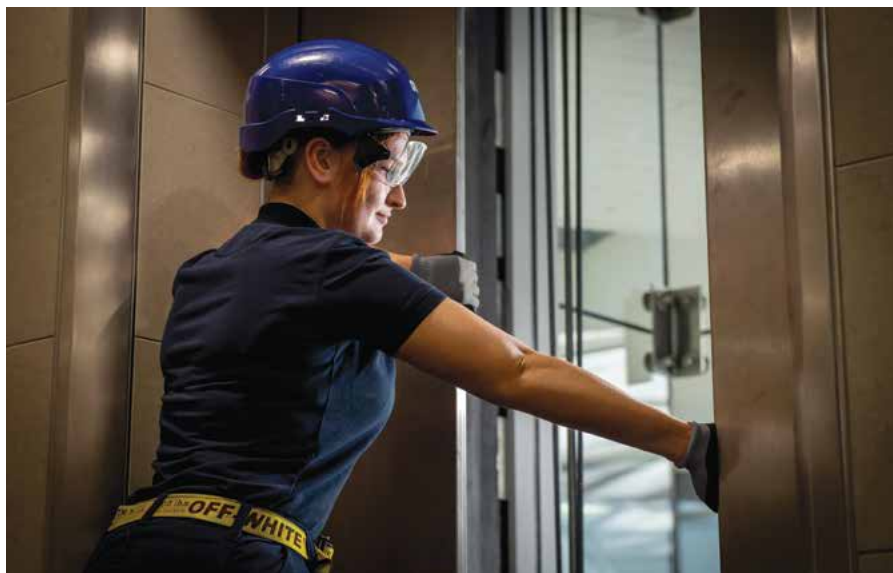
Otis remains at the heart of building and sustaining vibrant communities across the UK and we are continually listening to our customers and adapting to their evolving needs.

**With a widening skills gap, how are you demonstrating your commitment to equipping and encouraging the future workforce of lift engineers?**

Aleš: We want to encourage people to build a fulfilling career in our industry: giving people the opportunity to build skills and experience is key.

In the UK, Otis has two early careers pathways – apprenticeships and traineeships – and we currently employ 49 lift apprentices and 31 lift and escalator trainees (trainees are usually more experienced workers than apprentices, often with existing transferrable skills from other industries). We also support adult learners undertaking National Vocational Qualification Level 3 Qualifications and Credit Framework (NVQ 3 QCF) or Level 4 QCF in Lift/ Escalator Installation, Maintenance and Testing. If you know someone who's interested, help start them on their career journey at our special apprentice webpage - <https://www.otis.com/en/uk/careers/apprentice>.

To support learning and development, Otis UK has a dedicated training centre in Leicester, with classrooms, and lift and escalator equipment for practical training onsite.



**Can you tell us more about the Made to Move Communities™ Programme? What do you aim to achieve with it and what is this year's focus?**

**Enrique:** We believe in advancing STEM and leadership skills to help build the next generation of talent. Otis's Made to Move Communities is a global student challenge, inspiring creative, STEM-based solutions to real-world mobility issues. This is the sixth year it's run: and more than 200 students from 25 schools in 18 countries and territories will take part, alongside more than 150 Otis mentors.

This year, the theme is to design mobility solutions that support people and communities during natural disasters – we've all seen the devastating impact these have on families and communities.

**Aleš:** It's inspiring to witness the enthusiasm, creativity and commitment the students display as they explore how real-world challenges affect movement in and around their communities and develop innovative solutions.

Last year, in the UK, we worked with an incredible London school, Linden Lodge. A team of its remarkable students were placed second in the EMEA heat, developing an app called Walkway which helps visually impaired people navigate cities safely and independently. Their creativity is a powerful example of inclusive innovation.

We have already started working with a fantastic group of students from Caroline Chisholm School in Northamptonshire as we prepare for next year's challenge. The theme – *"mobility solutions that support communities and first responders before, during, and after natural disasters"* – is both timely and vital. The students are already engaged in researching this important topic. I am eager to see the innovative solutions they will create.

**How do you ensure your workforce are empowered and enthused to innovate?**

**Enrique:** We seek to attract, develop and retain the best talent in the market – fundamental to building our next-generation workforce, improving performance, sustaining innovation and industry leadership, and delivering on our mission to be a world-class, customer-centric, service-oriented company.

Innovation is core to our history and central to our strategy and future success, and we continue to invest in our research and development and strategic initiatives. So, we seek ideas, encourage innovation and empower our colleagues through experiences that are aligned with our business strategy and contribute to our broader success.



Ultimately, modernisation is an investment in the future, offering improved safety, reliability, energy efficiency and customer experience.

Secondly, and this is a trend that's very closely linked to equipment modernisation, is the increasing longevity of aging populations around the world. According to the World Health Organization, the number of people aged 60 and older worldwide is projected to increase from 1.1 billion in 2023 to 1.4 billion by 2030. The demand for safer, smarter and more accessible and connected mobility solutions is becoming even more critical:

Otis is reimagining these mobility systems through smart connected technology solutions, predictive maintenance, and transformative designs to keep people moving.

**Aleš:** We're passionate about making mobility more accessible for everyone who uses our services.

We also put a big focus on minimising disruption during the modernisation process – nobody wants their elevators out of action for long.

Modernisation is also key to making sure buildings stay up to date and keep their appeal. Building managers and owners are turning to our latest aesthetic components, like new elevator fixtures, cab materials, and lighting designs, to really boost the passenger experience.

We offer tools like Otis® Create, so customers can choose how to personalise their elevator cabs. We're making cab aesthetics more dynamic and customisable – smart lighting, sound, even scent – and with the latest connectivity and IoT technologies that are standard with our products.

## Tell us more about your specialism in urbanisation. What are your plans for development in this area?

**Enrique:** Population growth and rapid urbanisation have increased urban density: the U.N. says nearly 70% of the population – 6.7 billion of us – will live in cities by 2050, compared to about 55% today. Cities are becoming taller, driving demand for vertical mobility solutions that are faster and smarter.

Artificial Intelligence is at the forefront of Otis's ongoing transformation, powering smarter and more responsive vertical mobility solutions. By integrating AI into our operations, Otis enables predictive maintenance for elevators and escalators, dramatically improving equipment uptime. For example, our connected units leverage AI-driven analytics to predict issues before they arise, for a seamless service.

Compass Infinity™, our most advanced Compass dispatching product yet, uses AI and machine learning algorithms to take dispatching to the next level. AI technology can tune multiple sets of dispatching parameters to

accommodate customer preferences during critical traffic periods. The technology can significantly improve dispatching performance during peak hours.

## Are there any emerging global trends that excite you?

**Enrique:** Firstly, modernisation. As of 2025, there are an estimated 22 million elevators operating around the world – around 8 million are 15 to 20 years old, and ready for modernisation.

Modernising elevators is an effective way to enhance buildings with the latest technologies and improve passenger safety and experience. It can also optimise energy consumption when introducing regenerative drive technology, minimise unplanned disruptions and mitigate extended shutdowns due to obsolete parts or spare parts shortages. It plays a crucial role in enhancing accessibility for all building users – upgrading to meet the latest accessibility standards and empowering people to move independently.





READ MORE ABOUT OTIS

<https://www.otis.com/en/uk>

### Can you tell us about some case studies that you're proud of around modernisation?

**Aleš:** There are so many to choose from in the UK, but one we are particularly proud of is the recently completed modernisation project by Mace at 10 Gresham Street in London. It aims to be one of London's most sustainable office buildings – targeting BREEAM Outstanding, WELL Platinum, and EPC B, with carbon levels 67% below RIBA 2030 Carbon Target. An original Otis project constructed in 2003, we've just modernised the elevators with Gen2® elevator systems, the Otis Compass 360® destination management system, EMS Panorama™ 2.0 elevator management system and eView™ in-car displays.

### What's next for Otis?

**Aleš:** Our approach is on deep collaboration and the forging of stronger partnerships, enabling our dedicated team to deliver tailored solutions that address the specific challenges and ambitions of each customer. By listening closely to our customers and understanding their goals, we can provide an experience that is seamless and supportive of their long-term vision. We are perfectly positioned for future growth in the UK, and I am excited to see it unfold.

Product wise, we're delighted to launch our new Gen 3™ product range in the UK soon. Alongside our digitally native Gen360™ platform, the Gen3 range will offer eight, premium connected solutions. Each product is powered by Otis' renowned expertise, its proven signature technologies, and connected service solutions, ensuring reliability and efficiency for a distinguished level of service.

**Enrique:** Our course continues on the same path – driving innovation, helping customers meet their goals, expanding our smart connected solutions, integrating digital technologies, enhancing the passenger experience and meeting our strong commitment to excellent customer service.

A huge thank you to Aleš and Enrique for sharing some brilliant insights to Otis, their projects and plans for the future – very exciting, we can't wait to see some of those new developments in action.



A man and a woman are standing in a modern glass elevator. The man, on the left, is wearing a blue and white striped sweater and grey trousers. The woman, on the right, is wearing a blue denim shirt and dark jeans. They are both smiling and looking at each other. The elevator has large glass panels and a metal frame.

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# INTERLIFT 2025



**In September 2025 the entire lift industry gathered in Nuremberg to present innovations, products and solutions to an international audience of experts.**

We asked our colleague from Lift Journal, the publishers of the trade fair newspaper and LIFTLex – the technical dictionary for the lift industry, to tell us all about Interlift.

*A commented report by Ulrike Lotze*

Although the history of Interlift began in Munich in 1988, Augsburg had been the "Lift City" since 1991. There were good reasons for the move to Nuremberg: a larger exhibition centre, better infrastructure, and a larger city with a wider range of hotels and restaurants.

At the opening, the two managing directors of Interlift organizer AFAG once again emphasized the challenge of the move: "It was like open-heart surgery," explained Thilo Könicke. His cousin Henning Könicke used the opening event to thank the exhibitors and employees: "You supported us in this move from Augsburg to Nuremberg. Thank you all very much, dear lift family. Without you, it would not have been so easy."

The outgoing Interlift project manager Joachim Kalsdorf gave a similarly positive assessment of the trade fair: "The discussions with the exhibitors were extremely positive. The move from Augsburg to Nuremberg went very well. Everyone welcomes the new exhibition centre."

This positive assessment was also shared by the trade fair's technical partner. "The infrastructure in Nuremberg is so much better. The lift industry is a medium-sized industry, and I think that fits very well with the city of Nuremberg, which is large but not too large," summarized Achim Hütter, CEO of the Association for Lift Technology (VFA Interlift).



# interlift

## Record number of visitors in Nuremberg

The high number of visitors was particularly remarkable for the premiere at the new location: more than 25,000 came to Nuremberg from over 100 countries, significantly more than in 2019. The previous record was 21,000 visitors. Germany accounted for the largest group of visitors. Spain took second place in the country ranking for the first time.

The trade fair organizers also registered strong interest from Italy, the Netherlands, Great Britain, China, and Turkey. Given the increasing number of national trade fairs, AFAG is likely to be particularly pleased with one result of the visitor survey: 68 percent of those interviewed stated that they only visit Interlift and no other trade fair with a similar theme in order to find out about the latest developments in the lift sector.

## Turkey was the second largest exhibiting nation

Around 516 exhibitors from 48 countries were represented in Nuremberg this time. Two years ago, there were 502 exhibitors from 38 countries. In 2025, most of them came from Germany, followed by Turkey in second place – “even though this country has two lift trade fairs of its own,” as Kalsdorf emphasized at a press conference ahead of Interlift. Numerous exhibitors travelled from China, Italy, India, Greece, and Great Britain. Spain was also represented with more exhibitors than in previous years.

Visitors were positive about the space, as Interlift in Nuremberg had over 50,000 square meters available, which eased the flow of visitors compared to Augsburg and made participation more relaxed. The exhibitors also clearly took advantage of the larger space available. Thilo Könicke pointed out in advance that, contrary to the general trend at trade fairs, the stand space at interlift had grown from 21,500 square meters (2023) to 24,000 square meters (2025).

## Ten percent of visitors at the VFA Forum


At the closing press conference on Friday, Achim Hütter also expressed his satisfaction with the lecture forum that the VFA organizes at every interlift: “It was a very international and high-calibre forum.” Almost 2,000 visitors took part over the four days, roughly the same number as in 2023. “I think you can call it a success when almost ten percent of the trade fair visitors also come to our forum.” Of course, the rows of chairs were most densely filled during the two presentations on ISO 8100-1/2 and the outlook for the global market for lifts and escalators.

At the end of the first Interlift in the new “Lift City,” exhibitors and visitors were extremely satisfied with the new location. The suggestions for improvement are marginal. It would be desirable for all exhibitors to be printed in the hall plans of the trade fair guide next time – many still found it difficult to find their way around the new site with its 50,000 square meters and six halls. However, in view of the challenging economic situation, another result of the exhibitor survey is more important: 80 percent rated the business results of the trade fair as “very good,” “good,” or “satisfactory.” This will probably motivate many exhibitors to return in two years.



The next Interlift will take place from **October 12 to 15, 2027-in Nuremberg** again, of course.

# THE STATS



25,000+ VISITORS  
100+ COUNTRIES  
500 EXHIBITORS  
43 COUNTRIES  
6 HALLS  
50,000 M2







# WHY SIM DATA IS KEY TO SAFER, SMARTER LIFT OPERATIONS

**Chaim Grunfeld,  
Co-Founder of SIMINLIFTS  
looks at the benefits of  
SIM-enabled connectivity**

People rarely stop to think about lifts. They simply step in, press a button, and expect a smooth ride. Behind the scenes, however, there are a growing number of engineers and systems keeping elevators safe and reliable – and sim cards play a far greater role in this than many first imagine. What started out as a simple means to ensure emergency communications is quietly evolving into a failsafe scaffolding for smarter, safer, more responsive lift operations, helping transform the entire lift industry.

## **FROM PHONE LINES TO LIFELINES**

Until recently, lifts depended on traditional phone lines for emergency calls. As landlines gradually disappear ahead of the 2027 retirement of the public switched telephone network, however, digital cellular networks now sit at the heart of lift industry compliance, providing an essential lifeline to both operators and passengers when alarm buttons are pressed.

Unlike consumer sims, the cards used in lifts are engineered with resilience in mind. Designed to work 24/7, with the best roaming across multiple networks if one signal fails, lift sims guarantee that trapped lift travellers can call for help, eliminating significant statutory and safety risks. In other words, sim cards are about so much more than replacing old landline technologies with something more modern. They're key to building new, reliable foundations for modern lift operations to thrive and build on.

### **MORE THAN A CALL BUTTON**

The benefits of sim-enabled connectivity already extend far beyond emergency calls, with real-time monitoring allowing lifts to send daily logs and error codes to operators, for example. This gives operators a clear picture of system health, without needing to wait for anything to break, interrupting service.

Likewise, if a fault develops, systems can now notify technicians straight away, cutting downtime and reducing disruption. Remote intervention is also becoming a possibility, with operators able to open doors to free passengers or identify a lift's exact location to speed up rescue – all from a distance. These functions make lift management more proactive, efficient, and cost-effective for operators, with many in use or development today.

### **WHAT'S NEXT FOR SIM DATA**

The lift sim journey is only just getting started, with new, multi-roam networks not only providing continuity but also unlocking entirely new possibilities moving forward.

In emergency settings, high-speed video supported by sim plus telephony connections will soon allow responders to see inside the cabin remotely, distinguishing between genuine entrapments and false alarms, for instance. Meanwhile, with more bandwidth emerging in lift sims, it will soon become possible to transmit more detailed data, helping engineers pinpoint problems without needing to travel to site.

The rise of e-sim technology is significant here, potentially allowing operators to provision, switch, and manage connectivity remotely, without swapping physical cards. When this time comes, it will be necessary to work with companies that offer a dedicated lift sim management portal to maintain complete, remote control. For fleets spread across multiple sites and networks, this could transform the way lift connectivity is managed.

### **SECURITY AND TRUST**

Of course, with greater connectivity comes greater responsibility. Each lift that's connected will effectively become part of the wider Internet of Things (IoT), making cybersecurity and privacy tantamount to physical safety.

Operators must ensure that the data pathway is encrypted, that sim use is monitored consistently in real-time to prevent fraud, and that the operational tech controlling lifts themselves remain separate from the connected sims and systems that collect and communicate data. Centralised sim management platforms will prove invaluable here, giving lift companies complete visibility over their portfolio of connections, with all potential risks accounted for in one, easy-to-view place.

Trust is equally vital, with passengers being reassured that data is only being used to keep them safe.

### **SMALL SIM, BIG FUTURE**

It's remarkable how much might hinge on something as small as a sim, whether you're looking to adopt emerging remote management and alert technologies or simply maintain reliable communication via existing multi-roam technology. This simple lifeline opens up possibilities as varied as faster rescues, smarter compliance, and – in the near future – predictive maintenance.

As technology progresses, the sim's role will only grow, with data-driven insights promising a future where lifts are constantly monitored, analysed, and optimised in real-time thanks to lift sim management portals and data. By getting the foundations right with exceptional sims and intuitive platforms now, companies can set themselves up for the next generation of safe, reliable, intelligent vertical transport to come.

*Photo by JERO SenneGs on Unsplash.*

# The Lift and Escalator Library

»[www.liftescalatorlibrary.org](http://www.liftescalatorlibrary.org)«

Is an online library for the lift (elevator) and escalator industry.

It provides free access to an extensive collection of papers made available to support education and research.



An Initiative Of The Lift  
& Escalator Symposium  
Educational Trust

Registered Charity No: 1170947



# MAKE YOUR VALUE KNOWN

Michael Craddock,  
Marketing  
Manager at Shorts  
shares the vision  
behind the Lift  
Professional brand

## **When we first started talking about Lift Professional, it wasn't about clothing. It was about people.**

I've worked in the lift industry for 11 years, and I've always admired the people who make it what it is. The engineers who are out in all weather, the technicians who solve complex faults under pressure, the project managers who keep everything moving, and the support teams who make sure it all comes together. It's a skilled, demanding, and often unseen profession. And that's exactly why Lift Professional exists.

## **The spark that started it all**

The idea began during the pandemic. I remember sitting in my loft, trying to work through another day of lockdown, while the temperature outside climbed well past 30 degrees. It was a strange, quiet time; the world had slowed down, but lifts still needed to run.

While most people were at home, lift engineers were out there keeping hospitals, care homes, and essential buildings working safely. I found myself thinking how little recognition they got for it. These were people who kept society moving when everything else had stopped, and most of the public never even knew their names.

That thought stuck with me. Lift Professional grew from that feeling of the need to recognise the people behind the work, to celebrate a community that deserves to be seen and appreciated.

## **More than clothing**

From the beginning, I knew this wasn't going to be just another brand. Lift Professional needed to represent something bigger: the standards, pride, and precision that define our industry.

In the lift industry, reliability and quality matter. You can't cut corners when safety and trust are on the line. I wanted those same values to be built into everything we make. Whether it's a heavy-duty hoodie for the job or a t-shirt that carries a message of pride, every piece is designed to reflect the people who wear it, professionals who take care in what they do and stand by their work.

**Lift Professional is about more than what you wear. It's about what it stands for: skill, respect, and pride in a job done properly.**

## **A shared identity**

The lift industry is home to talented, hardworking individuals who often go unnoticed. Yet there's a strong sense of pride among us. An unspoken understanding that what we do matters.

Lift Professional gives that pride something to show. It connects people across different roles, from engineers on-site to those in the office who keep projects on track. When you see someone wearing Lift Professional, you know they're part of that same world. It's a small symbol, but it carries significant meaning.

## **Make Your Value Known**

Our tagline, Make Your Value Known, sums up what the brand is really about. It's a reminder that the work you do, the standards you hold, and the pride you take in your craft all have value.

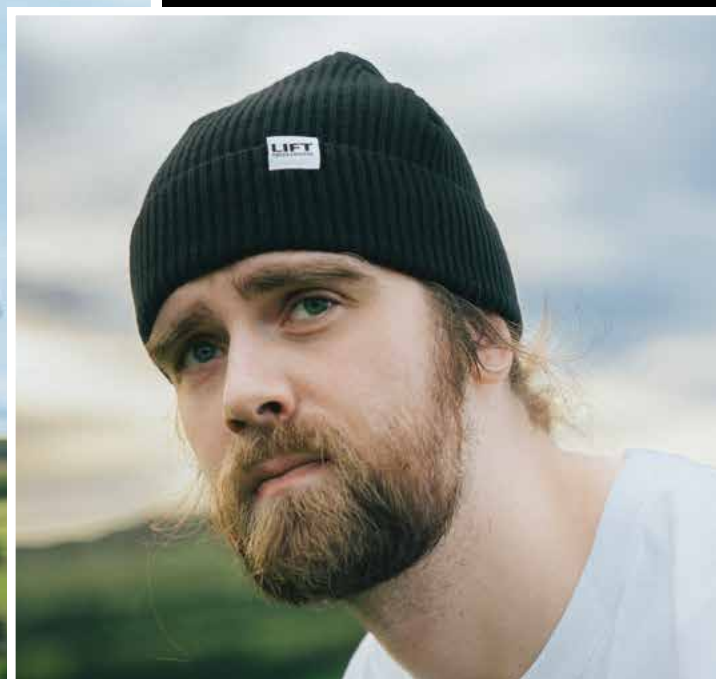
For me, Lift Professional isn't just a project or a logo. It's a thank-you to the people who keep life moving — often without anyone noticing.

If that sounds like you, I hope you'll join us. Be proud of what you do. Make Your Value Known.



# LIFT<sup>®</sup>

PROFESSIONAL



**CLOTHING/ WORKWEAR/ TOOLKITS & EQUIPMENT**

**Made For You.**  
**Not Your Toolbox.**

Our range of Lift Professional casual wear is now available at [www.liftprofessional.co.uk](http://www.liftprofessional.co.uk).

DISCOVER MORE



[www.liftprofessional.co.uk](http://www.liftprofessional.co.uk)

**MAKE YOUR VALUE KNOWN.**

# Simplify Lift Emergency Communications

## Install Faster, Manage Smarter, Rest Easy.

Tired of complex installations and compliance checks?  
Our emergency comms solution is quick to install and  
effortless to manage, from day one.

**Stay compliant, connected and  
fully in control with our digital  
tools and cloud platform.**



DCP Evo



AVIRE App



AVIRE HUB

- ✓ **Minimal disruption** with quick & simple installation
- ✓ **Fewer site visits** through remote monitoring
- ✓ **Hassle-free compliance** with automated 3-day test call tracking
- ✓ **Complete peace of mind** with TLS-encrypted security

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 **MEMCO**  
by AVIRE

# MASS MIGRATION OF LIFT ALARM CONNECTIONS: PREMIER INN CASE STUDY



Additionally, copper lines carry their own power, meaning they continue to operate during mains outages, a critical consideration given that power failures are statistically correlated with increased trapped passenger incidents.

Digital lines, in contrast, require mains power with battery back-up, introducing a new layer of risk unless mitigated by design.

Operationally, the challenge was compounded by the scale and diversity of the estate. With numerous lifts maintained by different contractors and an incomplete asset register of telephone lines, maintenance issues were often misdiagnosed and lines were inadvertently cancelled or reallocated, leading to unnecessary delays and costs.

As the UK analogue telephone network nears retirement, lift owners and duty holders face one of the most significant infrastructure transitions in decades.

For *Premier Inn*, with over 1,100 passenger lifts across more than 570 sites in the UK, Republic of Ireland, Isle of Man and Channel Islands, replacing ageing PSTN-based lift alarm connections was a strategic imperative to maintain safety, compliance and operational continuity well ahead of the January 2027 analogue switch-off deadline.

## Technical Risks of Analogue Withdrawal

The nationwide PSTN withdrawal posed two principal technical challenges for lift emergency communications: analogue signalling support and power resilience. Traditional autodiallers rely on DTMF signalling over copper lines, whereas many digital telephone services struggle to support such legacy signalling reliably. This creates a risk that emergency lift alarms may fail to connect when needed.



### Selecting a Reliable Digital Platform

Premier Inn engaged VerticA Consulting, a specialist consultancy with extensive lift industry experience, to assess solutions capable of meeting these technical and operational requirements. After rigorous evaluation, **MEMCO by AVIRE's SENTINEL** Service was selected for its ability to satisfy the full set of criteria defined by the project team.

The SENTINEL Service replaced fixed copper lines with a 4G VoLTE gateway using roaming SIM connectivity to secure the strongest available mobile network signal. Integrated battery back-up provided up to four hours of continuity in the event of a mains power failure, while fully supporting analogue signalling requirements. This ensured that lift alarm calls continued to function reliably across mobile networks, even during outages.

Beyond connectivity, SENTINEL introduced enhanced management capability. Continuous remote monitoring and diagnostic reporting provided real-time oversight of all connections, while a complete digital asset register gave Premier Inn unprecedented visibility and control of its lift alarm estate. Proactive alerts enabled rapid identification and resolution of potential issues before they escalated. The service was delivered under a fixed-fee model, enabling predictable budgeting without unforeseen ongoing costs.

### Coordination and Deployment at Scale

Delivering the programme required coordination across six lift maintenance contractors. Preparatory work included creating a definitive list of all lifts requiring alarm upgrades and aligning installation standards across all parties. VerticA Consulting provided project management and specification oversight, ensuring consistency regardless of site type or location.

The migration was executed methodically, with new gateways installed, signal quality verified, and connections monitored before final handover. Operational benefits were realised early, with remote diagnostics reducing unnecessary site visits and improving contractor efficiency. Cost savings were achieved compared with alternative digital line and UPS solutions, while the digital register enabled confident decommissioning of legacy lines without uncertainty.

### Operational Insight and Collaboration

In addition to the immediate technical outcomes, the migration delivered valuable insight into the condition and performance of the existing lift alarm estate. Proactive monitoring identified misbehaving autodiallers that had previously generated excessive false alarms, allowing engineers to address these issues and reduce wasted maintenance activity.

The project also strengthened collaboration between Premier Inn, its lift contractors, VerticA Consulting and MEMCO. Clearly defined responsibilities and improved reporting structures enhanced accountability and delivery efficiency across the supply chain.

*"This project is a testament to what true collaboration can achieve. By working seamlessly across suppliers, contractors, consultants and the client team, we were able to overcome complex challenges and deliver expectation — all without disrupting ongoing operations, the team from AVIRE took the challenge and delivered as promised."*

**Chris Holmes, Technical Director, VerticA Consulting Limited**

### A Benchmark for Future Digital Transitions

With the migration now nearing completion, Premier Inn operates one of the UK's largest fully managed digital lift alarm estates. The organisation has mitigated the risks associated with the analogue switch-off while gaining improved resilience, enhanced visibility and more predictable operating costs. Ongoing support from VerticA Consulting and MEMCO ensures continued monitoring, battery replacement and proactive maintenance insight.

*"Digital transformation isn't just about replacing one technology with another. It's about improving reliability, visibility and safety while reducing administrative burden for the client."*

**Matthew Davies, Business Development Manager – Digital & Services, MEMCO by AVIRE**

For lift owners, consultants and maintenance providers preparing for the analogue switch-off, this project provides a proven framework for delivering safe, compliant and scalable digital lift alarm migration. To learn more about how a similar approach could be applied to your estate, contact **MEMCO by AVIRE** for expert guidance and support.

### About the Project Partners

**AVIRE** is a global manufacturer and service provider of lift safety and communication solutions, supporting the industry with reliable, compliant technologies designed for modern building environments.

**VerticA Consulting** is an independent lift and escalator consultancy specialising in technical advisory, project management and strategic asset planning for complex lift portfolios.



# SHINING A LIGHT ON APPRENTICES



With National Apprenticeship Week (NAW) approaching between 9-15 February we are celebrating the apprentices in our industry.

We talk to apprentices at Target, PIP and Robert Gerrard about their own experience, get the inside track from Karen Slade at LEIA, head to Interlift with Sophie, apprentice at LECS and Jools Black helps us with some training hints & tips.

Vertical Transportation is an exciting, fast-growing industry that's at the leading-edge of engineering. There are over 300,000 lifts and escalators in the UK moving four million people and countless tonnes of goods every day.

An apprenticeship is a fantastic first step into our industry. It's a great mix of hands-on, one-to-one mentoring and structured learning about engineering and technology. Plus, it's paid, so you earn as you learn.

There are many different types of businesses in our industry. Some big multi-nationals, some smaller specialists. They each offer a unique apprenticeship experience. LEIA can help you find the employer that best fits you, so take the time to learn about them, it could help you land your apprenticeship.

<https://liftcareers.co.uk/employers>

National Apprenticeship Week (NAW) is a week-long celebration that brings together businesses and apprentices across the country to shine a light on the positive impact that apprenticeships and skills make to individuals, businesses and the wider economy.

Since 2020, over 1.6 million apprentices have started their apprenticeship journey in a wide range of industries, from health to digital, to engineering and beyond.

In the financial year 2023/2024, young people under the age of 25 accounted for more than half of all apprenticeship starts.

#### From August 2025,

The government introduced foundation apprenticeships to give young people new routes into good jobs. These will help young people learn job skills and develop confidence, with the chance to move on to more advanced apprenticeships later.

NAW 2026 is scheduled for **February 9-15** under the theme "**Skills for Life**".

#### FIND OUT MORE HERE:

<https://naw.appawards.co.uk/>

# APPRENTICESHIP ASSESSMENT REFORMS UPDATE— KAREN SLADE, HEAD OF END-POINT ASSESSMENT

During National Apprenticeship week at the beginning of 2025, The Department for Education (DfE) announced a series of reforms aimed at streamlining the apprenticeship assessment process. There have been further consultations with regulators such as Ofqual and the government body Skills England with Awarding Organisations on what these changes will look like in practice.

As these changes have the potential to significantly affect employers and training providers across the lift and escalator industry, LEIA has been actively engaged in these consultations and with our stakeholders to ensure that our sector voice is heard, so that we can make the transition as smooth as possible.

## CONFIRMED CHANGES

The key confirmed elements of the reforms include:

- Assessment plans will be shorter and less prescriptive; this provides Awarding Organisations such as LEIA with an opportunity to work closer with the sector to develop relevant assessments.
- Where appropriate, on-programme assessments designed by the Awarding Organisation but delivered by approved training providers will be permissible to increase productivity and reduce duplication.
- A minimum of 40% of the assessments will still be delivered by the Awarding Organisation to uphold the element of independence which has been so highly valued by employers.

- The removal of behaviours from the assessment plan in favour of allowing employers to confirm their apprentices have achieved these prior to completion.

There have been changes to the management of apprenticeships within government, with the Department for Education moving responsibility of apprenticeships to the Department for Work and Pensions. The purpose of this move is to better integrate skills training with the labour market and employment support.

New terminology has also been adopted, “to reflect the reform principles and changes to apprenticeship assessment, notably that assessment can take place at any stage of the apprenticeship, not just at the end.”

### The new terminology for revised assessment is as follows:

- 'Apprenticeship assessment' has replaced 'end-point assessment'.
- 'Assessment organisation' has replaced 'end-point assessment' organisation although Ofqual use the term Awarding Organisation for all that are regulated and this is the term LEIA has decided to adopt.
- 'Gateway to completion' has replaced 'gateway'.
- 'Assessment' throughout the government guidance now refers to assessment which may take place either during the apprenticeship or towards the end and which contributes towards the final grade.

### IMPLICATIONS FOR EMPLOYERS AND PROVIDERS

The reforms are intended to create a more streamlined system with faster turnaround times, helping apprentices to complete and progress into skilled roles more quickly. Providers may also see new opportunities if they choose to take on a greater share of assessment delivery.

For Awarding Organisations such as LEIA, the reforms could enable a broader role across apprenticeship levels and related sectors. However, this places a level of responsibility back with employers who will now be tasked with signing off their employees' behaviours. It could also mean that assessments vary across the industry, depending on the Awarding Organisation.

### WHAT DOES THE CENTRE ASSESSED MODEL LOOK LIKE? Under these proposed changes, a new Centre Assessed model will be introduced. This means:

- Training providers will need to become 'centres' of LEIA and will need to apply for this, regardless of their history and experience.
- Training providers need to comply with the Centre approval requirements, which will have an added layer of due diligence.
- They will need to demonstrate how they will internally quality assure their assessments.

### CHALLENGES TO CONSIDER

With greater provider involvement comes the need for additional resource and infrastructure. Centres taking on more assessment responsibility may require investment in staff training, systems, and quality assurance processes. There will also be costs associated with centre approval and external quality assurance.

There are concerns around consistency of assessments for apprentices across different Awarding Organisations, and Centres, however LEIA wishes to reassure employers that we will still oversee the assessment process. All assessments whether carried out by Centres, or directly by our own assessment team will be subject to strict quality assurance.

### THE ROLE OF APPRENTICES IN OUR INDUSTRY

Within the lift and escalator industry, apprentices are vital to bring new talent into the sector.

### LEIA currently assesses the following standards:

- Level 3 Lift and Escalator Engineering (ST0252)

- Level 2 Stairlift, Platform Lift, Service Lift Electromechanic (ST0251)
- Level 3 Lifting Equipment Technician (ST0872)
- Level 4 Engineer Surveyor (ST0847)

### WHERE NEXT?

The gap between an assessment only Awarding Organisation and a full Awarding Organisation is now being narrowed. We would urge providers and employers to consider their wider needs and possible opportunities as we consider whether we can support the sector further with a wider role in qualification design and skills development.

Ofqual have now published the outcome of their consultation so there is a better idea on the direction of travel but there are still some areas requiring clarification in early 2026.

If you missed our information and consultation events in October, you can view them via our [You Tube channel](#).

### APPRENTICESHIP REFORMS

<https://youtu.be/RgRuOTHRdYA>

### LEIA AWARDING

<https://www.youtube.com/watch?v=aUllvGtdfD0>

Get in touch if you would like to discuss these changes further.



# Target Lifts



0845 301 1534



info@targetlifts.co.uk



ALWAYS AIMING HIGHER



**STUCK**  
in a  
**LIFT**



# RISING UP: MEET THE TARGET LIFTS APPRENTICES TAKING THE INDUSTRY TO NEW HEIGHTS



**As National Apprenticeship Week shines a light on future talent, Target Lifts is celebrating the next generation of engineers already making their mark. We sat down with Director Danny Garaway, Compliance Manager Alan Buckingham and three of Target's rising stars to hear how the company is lifting careers from day one.**

**Danny:** *I was fortunate enough to be an apprentice, and I know this is a fantastic industry that offers amazing opportunities across so many roles. I want to give people the same opportunities I had – it's as simple as that.*

*We've welcomed nine apprentices so far, and while most of them are still progressing, our very first apprentice, Rhys, has completed his full apprenticeship, achieved his qualifications and is now a repair engineer, with an apprentice of his own. We couldn't be prouder of him.*

*All our apprentices are given a wide view of the different elements of the company, with an opportunity to gain experience in each department. This covers the service, repair and project teams, so we can help them find the area where they'll thrive.*

There's a wealth of support that is available to apprentices who are working towards a range of qualifications including NVQs and BTECs. Alongside this formal training, Target ensures their apprentices are supported with hands-on mentoring, regular check-ins and a culture where no question is ever too small to ask.

**Alan:** *We've set up an apprentice WhatsApp group for the engineers so that they can voice any concerns, and we have monthly feedback forms so they can speak openly if they feel that they are struggling in a certain sector or there are any weaknesses they'd like to focus on. Recently we had feedback that some feel that they are lacking knowledge of electrical drawings, so we're providing some in-house training sessions with some of our experienced engineers, passing that knowledge down to them. We really encourage them to speak up and help shape their own journeys.*

With a range of disciplines across the industry, apprentices have the opportunity to explore their strengths and understand what interests them most, with firm guidance from Danny.

**Danny:** *Our apprentices have a broad overview, so they can decide where they want to direct their career. They have a choice of service and repair or full installation apprenticeships. And I always encourage them to ask questions – even if they sound stupid!*

*Our apprentices are encouraged to follow three simple rules:*

- 1. Turn up on time – get your backside out of bed!*
- 2. Never let your engineer down – do your best, ask questions and do what's asked of you.*
- 3. Put your mobile phone down – no distractions.*

*Ultimately, our goal is to look after our people, and then they look after us – train them well, offer them support and guidance and they'll stay with us for their careers, where we can continue to nurture and train them, giving them all the opportunities they want to grow, develop and have a rewarding career.*

Luke, Dillon and Macie are all apprentices at Target Lifts and gave us an insight to their background and experience so far.

With Luke and Dillon coming fresh off the back of their GCSEs, and Macie having tried jobs in catering and cleaning, they're all now finding out just what a career in the lift industry looks like.



**Luke:** Before I joined, I didn't know all the different alleys to go down, and how to get there. Being an apprentice, I've been able to see service, repair and projects, with an oversight of them all, as well as being in the office and seeing how calls are taken and that side as well.



**Dillon:** The best thing about being an apprentice here is that everyone is happy to offer advice and help guide me in the right direction to help me progress with my qualifications and knowledge of the industry itself. Having that support is brilliant.



**Macie:** Being able to have a job and gain a qualification at the same time is amazing. Having time onsite, doing an actual job, and then learning the theory at the same time – the practical alongside the learning – is great.

With eyes firmly fixed on their futures, the three apprentices shared their aspirations and where they'd like their careers to take them, with an apprenticeship as the launchpad.

**Luke:** I've wanted to be an engineer for some time, and Danny's a great role model for seeing where a career in lifts can go. I'd like to continue, learn more and maybe move into consultancy one day.

**Dillon:** I'm happy being an engineer for the rest of my life! But once I get to know the industry, I'd like to start my own company – maybe one day it'll be bigger and better than Danny's!

**Macie:** I'd like to be able to do this job, and explore the world. There are so many places this job could be done, there are lifts all around the world and I'd like to use my skills and experience living in a different country.

With a clear drive to forge their own paths within the lift industry, there's a definite benefit to investing in these apprentices, helping to fill the skills gap and drive the industry forward with fresh thinking and innovation.

**Danny:** I love the ambition in these apprentices. You've got to work hard to achieve anything, but to be ambitious is the most important thing for me. An apprenticeship scheme can open your eyes to the opportunities and see the whole range of careers within the industry.

**A huge thank you to Target Lifts for sharing their apprenticeship experiences. To find out more about Target Lifts, visit [www.targetlifts.co.uk](http://www.targetlifts.co.uk)**

# LECS APPRENTICE SOPHIE BROWN AT INTERLIFT



LECs were delighted to send their apprentice, Sophie Brown, to Germany to experience Interlift, one of the world's biggest exhibitions for lift and escalator technology.



Sophie, who graduated from the University of Northampton's Lift and Escalator Technology Foundation last year, headed to Interlift following a two-week placement with Ascendant Lifts, Manchester. It was the perfect opportunity for her to see how the theory she's been learning applies in real-world settings and to get a glimpse of where the industry is heading.

At Interlift, Sophie spent her time exploring the exhibition halls, discovering the latest innovations, and meeting professionals from across the globe — all passionate about the future of lift and escalator technology.



**Sophie said:** *"It has been such an exciting time for me. I had a really great experience on my placement, and the visit to Interlift was incredible. I met so many people and saw some fascinating new technologies on show."*

**John Bentley, director, LECS UK said:** *"At LECS UK we're passionate about developing the next generation of lift and escalator professionals. Supporting our apprentices as they gain hands-on experience and broaden their industry knowledge is a big part of what we do — and this month, that journey took one of our apprentices overseas. Experiences like these are invaluable for budding engineers in this sector."*

*"We're proud of Sophie's enthusiasm and commitment to her professional development as she continues to pursue her NVQ3 (leading to NVQ4) onsite learning path."*



# ELLIE JACKSON, ROBERT GERRARD

## FROM MAKE UP BRUSHES TO MOTOR ROOMS: ELLIE'S APPRENTICESHIP JOURNEY



There are many opportunities that come from completing an apprenticeship. We spoke to Ellie Jackson, Sales Development Manager at Robert Gerrard, insurance broker for the lift industry, about her journey from apprenticeship to today.

### A LEAP OF FAITH

With a qualification from the London College of Fashion, Ellie Jackson worked successfully in hair and make up for TV and film until COVID shut her industry down overnight. Inspired to reach out to her friends for advice, she was open to a range of new challenges. Ellie discovered a long-time friend's mum was looking for an apprentice and decided to take a chance, without knowing anything about the industry.





**Ellie:** *I thought, "what does Amber's mum do?!", I had no idea - your parents' job isn't a hot topic of conversation at primary school! She told me that she was an insurance broker, but I still had no idea what the apprenticeship was all about or what the role entailed. I went for the interview, and got the job - I was their first apprentice. It was a complete leap of faith, I had no idea what I was doing to begin with! Very soon I realised this was meant to be, and I created a five-year development plan which allowed me to progress really quickly.*

Successfully completing a 12 month apprenticeship, Ellie received her Certificate In Insurance and was promoted to an Account Executive, managing her own clients, which then followed with promotions through to Senior Account Executive and then to Team Leader. Ellie then was given the opportunity to take on a second apprenticeship.

**Ellie:** *I started a second apprenticeship called 'Leading Lights'. This was a leadership apprenticeship to enhance my leadership skills, which I did alongside completing my Diploma in insurance. This in turn led to another promotion at the beginning of 2025 to Sales Development Manager, as I managed strategic initiatives and launched our Lift Plan scheme into Europe.*

With an incredible story of her four-year journey, Ellie started with no knowledge of insurance or the lift industry, taking a chance on that first step as an apprentice. Robert Gerrard have now had seven apprentices, with their eyes on recruiting another soon.

## LIFTING OTHERS UP

Ellie has now started the Pipeline Club, mentoring and training other apprentices and junior members of the team, using the skills she has gained to help others become good brokers. She has also been asked to share her story with a major industry publication – the Insurance Times – at their event in January 2026.

**Ellie:** *I've been so fortunate to be able to have all of these opportunities, I get to travel all over the country as well, visiting clients, and I get to attend a lot of fun events. I was recently nominated as the Young Insurance Woman of the Year, which was amazing.*

With apprentices firmly in her gaze, Ellie is keen to encourage both potential apprentices and businesses to explore the schemes and their benefits.

**Ellie:** *To potential apprentices, don't be afraid to take a chance. That's something I did – I just said yes, even though I felt out of my comfort zone, I just gave it a go. Often in those years, it's the best time to make a mistake, and you'll learn so much from that. To businesses that don't have an apprentice, I would say, just try it, because it really could transform your business. And you never know, you may find someone really talented that just might not have been given an opportunity yet.*

**Thank you so much to Ellie for sharing her apprenticeship journey with us – an incredibly inspiring story!**

# INVESTING IN THE FUTURE: PIP'S COMMITMENT TO APPRENTICESHIPS

With 26 apprentices having been through the scheme at PIP, and 19 still working for them, there's a real support for apprenticeships across the business. Managing Director, Paul Masterson, has worked to develop the scheme over the last 11 years.

## BUILDING A PATHWAY FOR TALENT

*Paul: I'm the 'proof of the pudding', having started as an apprentice, and it's something that I totally believe in, so I wanted to give the same opportunity within PIP. We started with a more informal scheme, with a few different students, but it needed some structure, so I met with our local college and worked with them to formalise the scheme and make sure we got the very best. This last 11 years has been fantastic – it's all about working together and talking to the college to make sure we get the best talent to nurture and develop.*

With 11 years under their belt, PIP has finessed the process to give all parties the best experience, right from the first contact. PIP and the college work together to ensure the students are supported throughout, across a range of roles.

*Paul: The college has an event where we can see the types of skills the students have. We then start with offering a week's work experience so we can get to know them, give them a window into the industry and then we can both decide if it's something they want to pursue. Through the apprenticeship, there are always going to be challenges – ones that the college sees, and different ones that we see, and this is why it's so important to have a great level of communication with the college, so we can support every student from every angle.*

*Our main focus has been on engineering apprentices, because there's been a shortage of quality engineers coming through, so we get them on board, train them in the PIP method and then they can decide if they want to work on the service or installation side. Once they've got the skills, we'd like to look to developing some of them into office based roles – project planners etc.*

## THE IMPORTANCE OF FRESH ENTHUSIASM

A new intake of apprentices brings with it a new dynamic to the office, along with a mutual commitment to invest in each other, which Paul understands is vital to the success of the scheme.

*Paul: Youth brings enthusiasm! The best thing about having apprentices is the commitment for our future, which is vital – we know that we're growing our own, to build our business with new engineers, new supervisors, new sales people who have been trained and have grown here. We're committing to these people and they're committing to us – they get the practical training, the skills and the offsite college training, coupled with teenage enthusiasm, which is super for our office. We've seen that the formula works – our two original apprentices are still working for us, Billy as a senior lift installation engineer, and Harry set up his own subcontract company, and he works for us as a subcontractor.*



### CAMERON'S JOURNEY FROM APPRENTICE TO ENGINEER

One of PIP's apprentices, Cameron Sparkes, finished his apprenticeship and is now working as a repair engineer. We did a quick-fire Q&A with him to find out more about his journey.

#### What led you to an apprenticeship?

**Cameron:** *I always knew I wanted an apprenticeship. I felt it was a good idea to earn while I learn the job. My engineering teacher at college was on the apprenticeship team and would often inform us, either in the workshop or the classroom, about upcoming opportunities certain companies were offering. PIP LIFT SERVICE offered a week's work experience in the summer of 2021 and I haven't looked back since.*

#### What was the best part of it?

**Cameron:** *The best part about the apprenticeship would have to be learning on the job. I enjoyed working with top technicians and seeing some different and difficult breakdowns that engineers had to encounter.*

#### What qualifications did you come out with and where are you now?

**Cameron:** *I came out of the apprenticeship with an NVQ L3 in lift maintenance, and I am now working on the repair team.*

#### Can you give us an insight to your role now?

**Cameron:** *I really enjoy working on repairs, replacing faulty equipment, upgrading lifts that do not comply with criteria, going from job to job and carrying out upgrades to lifts. It's perfect for me and is exactly the job I wanted when I first started as an apprentice. Most of the work I do is fitting new communication systems, lights (in lift car and shaft), replacing guide shoe liners/rollers, detector edges and plenty more. I have recently completed my first control panel change in October. This was a Shorts panel, and was a good one to start on. I learned a lot about myself from undertaking this project and picked up new skills during the process.*

**Thank you to Paul and Cameron for giving us a great insight to PIP and their apprentices.**

Empowering  
Apprentices  
Through Essential  
Behavioural Skills

# MAKING A DIFFERENCE IN TRAINING APPRENTICES

Jools Black is a respected and familiar figure within our industry, renowned for her unwavering passion for customer service. However, her dedication extends even further - she also delivers a highly regarded workshop designed to equip apprentices with behavioural skills that last a lifetime.

## The Importance of Behavioural Skills in Apprenticeships

Apprenticeships are much more than technical instruction. They are a formative experience, shaping not only the apprentices' professional abilities but also their identity and how they represent both themselves and the organisations they work for. Developing a strong professional persona is an integral part of their journey.

## Focusing on Real-World Skills

Just Jools Coaching specialises in empowering apprentices with the skills necessary to succeed in real-world business environments. The workshop is carefully structured to focus on practical aspects such as effective communication, conflict resolution, business etiquette, and delivering excellent customer service. These are not merely "soft skills" — they are essential skills that form the foundation of professional success.



## Transformative Impact on Apprentices

Through these workshops, apprentices are transformed into confident professionals who take pride in representing their companies. The positive impact is evident in the feedback from organisations such as PIP Lifts, Jackson Lifts, and Target, who have seen their apprentices flourish.

### ONE TESTIMONIAL HIGHLIGHTS THE VALUE OF THE WORKSHOPS:

"The apprentices said that they found the workshop a real help in their own personal life, not just for work. This is all I have ever wanted to give in my Workshops, support to everyone on their journey."

## Workshop Topics include:

- Communication skills
- Answering the phone and navigating a call
- Email etiquette - treating emails as professional documents
- Handling challenges in person, on the phone, and by email
- Customer service -the frontline of business success



For further details, including pricing and availability, please email Jools at

[info@justjoolscoaching.co.uk](mailto:info@justjoolscoaching.co.uk)



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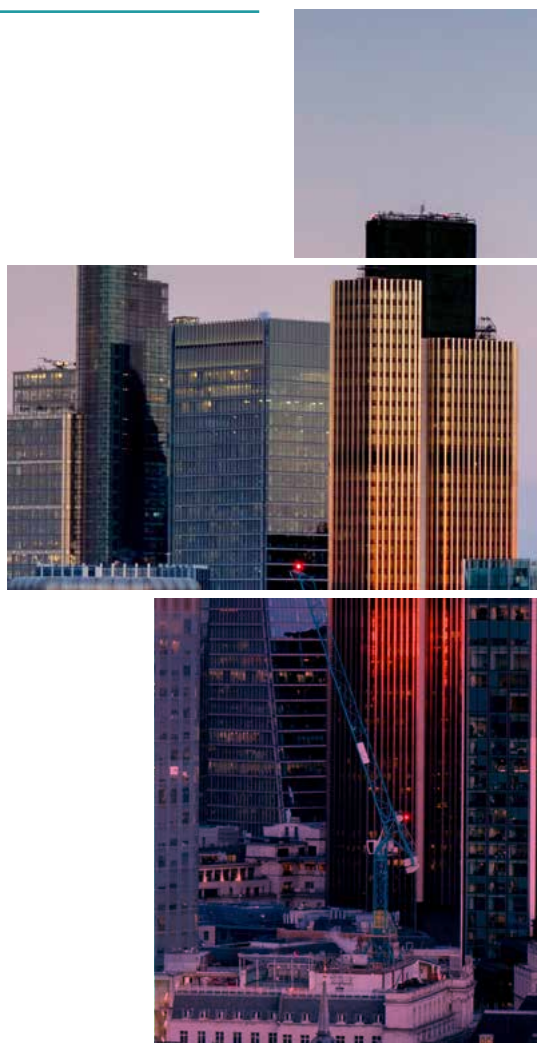


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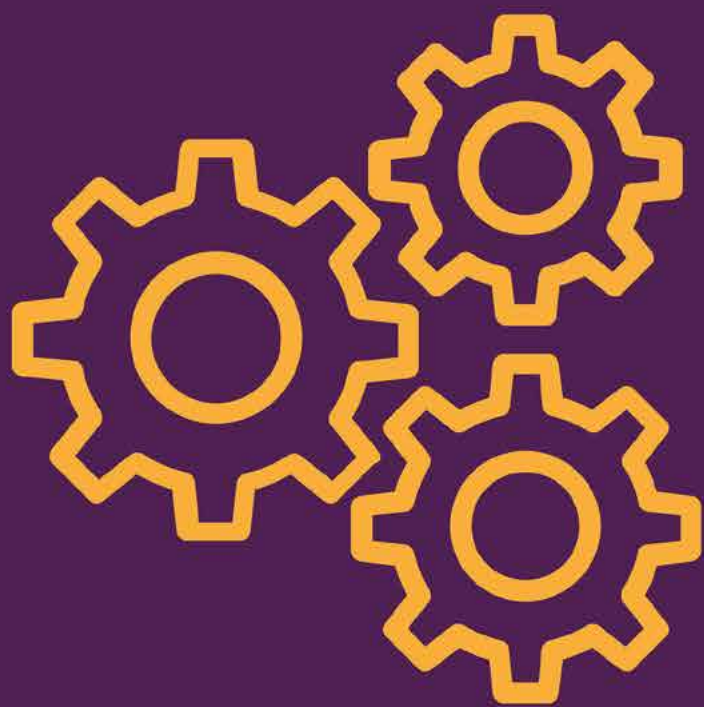


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# THE KNOWLEDGE BANK



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**Keywords:** Artificial Intelligence, Elevator systems, Dispatching, Preventive maintenance, Expert design, System modelling

**Abstract:** Artificial Intelligence (AI) is playing an increasingly significant role in the lift industry, offering the potential to enhance efficiency, reliability, and passenger experience. This paper examines the application of AI across five core areas: dispatching, preventive maintenance, traffic pattern recognition, expert design, and system modelling.

In addition to reviewing existing research and practical implementations, it explores potential future developments, considering how AI could reshape the operational landscape of vertical transportation.

The ethical implications of AI adoption are also discussed, with particular attention to privacy concerns, workforce impacts, and the challenge of balancing parameter optimisation. This paper highlights the transformative potential of AI within the lift industry while emphasising the importance of ethical and sustainable implementation.

# ARTIFICIAL INTELLIGENCE IN LIFT SYSTEMS

## 1. INTRODUCTION

### 1.1. BACKGROUND

For thousands of years, humans have been automating work. Automation is the use of technology to perform tasks with minimal human intervention. Historically, the work being automated was routine manual labour that did not require intelligence. Artificial intelligence (AI) refers to machines' ability to perform tasks typically associated with human intelligence.

AI has impacted many industries and will continue to do so in the next few decades, changing how people work. One of the industries that has been and will continue to be impacted is the vertical transportation industry. There are a few areas in which researchers have attempted to apply AI in this industry with varying success.

### 1.2. FORMS OF AI

#### 1.2.1. KNOWLEDGE-BASED SYSTEM

A KBS is a computer system that uses logical reasoning and knowledge to solve problems. The system uses a repository of facts, rules and procedures, and an inference engine that applies the rules to make decisions.

#### 1.2.2. FUZZY LOGIC

FL is a computational approach to dealing with uncertainty. Unlike the well-defined knowledge of a KBS, FL deals with uncertain or changing knowledge. FL works by converting crisp input values into fuzzy values between 0 and 1. Rules are then applied to the fuzzy inputs and a fuzzy output is generated. The fuzzy output is converted back to a crisp value which will determine an action.

#### 1.2.3. ARTIFICIAL NEURAL NETWORKS

ANNs work by passing inputs through a set of artificial synapses and neurons with associated weighting to find an output. Based on the output, the weighting is changed to improve its accuracy. Unlike FL, ANNs use machine learning based on training data to improve.

#### 1.2.4. GENETIC ALGORITHMS

GAs also use machine learning, but instead of simulating a brain, they simulate biological evolution. An initial population of random solutions all try to solve the same problem; those that do better are used to create the next generation of solutions. Each generation makes slight random adjustments to the most successful solutions from the previous generation. Over multiple generations, better solutions are created.



## 2. LITERATURE REVIEW

This literature review summarises the existing research on using Artificial intelligence in lift systems.

### 2.1. DISPATCHING

Dispatching is the process of allocating lifts to calls. While simple rules can be used for dispatching, AI can potentially improve performance. [1]

Researchers first started looking at applying AI to lift dispatching in the early 90s when Deven and Chengdong [2] proposed using Fuzzy Logic (FL) to optimise multiple parameters when assigning cars to calls. Two years later [3] implemented and verified this approach in simulation.

A few years after that, researchers began investigating Artificial Neural Networks (ANN) for lift dispatching [4]. As ANN technology advanced, so too did its use in lift-dispatching [5] [6] [7].

Researchers have also experimented with using Genetic Algorithms (GA) to dispatch in more complicated lift systems, such as systems with double-deck lifts [8] [9] [10].

Basagoiti, et al. [11] proposed using data about past traffic flow to predict future traffic and thus improve the dispatcher. This study was based on simulated passengers and was not implemented in a real system.

Peters [1] published a paper discussing existing AI research on dispatching and evaluated which aspects of AI were most useful for a dispatcher. Peters implemented AI logic into a dispatcher which worked in both simulation and in real-world lift systems. This AI logic was carried forward to 'The Global Dispatcher' [12], which is a single dispatching algorithm capable of dispatching complex lift systems such as double-deck and two cars per shaft.

### 2.2. PREVENTIVE MAINTENANCE

As with all physical machinery, lifts must be regularly maintained to prevent failure during peak usage. All potential break points must be tested as just one break point could cause the system to fail. If monitoring systems could predict failures before they occur and accurately identify damaged components, maintenance could become less frequent and more targeted.

Researchers started discussing AI in preventive maintenance in the early 1990s [13] but little progress was made due to the complexity of the hardware needed to monitor a moving lift car and feed data back to a central computer. As other technologies such as IOT, big data, cloud computing and sensor fusion began to emerge, preventative maintenance became a practical possibility from the 2010s onwards. [14] [15] [16].

Kaczmarczyk et al. [17] developed an AI model that used vibration data to detect and classify damage in lift doors. The model used ANN with supervised learning and consistently demonstrated a 97.9% accuracy in damage classification. The following year, the same authors published a paper specifically on roller-bearing damage [18]. While the 2022 model classified existing damage, the 2023 model could also predict damage during the early stages, facilitating preventive maintenance. Data-driven preventive maintenance using this technology could transform the way that service personnel do their job, as Smith [19] predicts.

Most research on preventive maintenance has used vibration data but some researchers have explored the use of other sensors to monitor component health. Seyyedi et al. [20] used high-speed cameras to gather data about lift rope fatigue. The researchers trained an AI image processing system to classify different types of broken wires. Four cameras, each covering a 90-degree rope segment, continuously took pictures and sent them to a computer with an AI image processing module.

Sensor fusion is the process of reducing uncertainty by combining data from multiple sources [21]. Smans [22] suggested fusing data from optical sensors, accelerometers and barometric pressure sensors to detect failures in lift doors. By combining data from these diverse sensors, Smans demonstrated that the accuracy and reliability of door failure detection improved significantly compared to using single-sensor methods.

### 2.3. TRAFFIC PATTERN RECOGNITION

A car call does not always correspond to one passenger, as groups of people going to the same floor might only register one call. Accurately measuring passenger traffic can improve dispatching and preventive maintenance logic.

Siikonen & Kaakinen [23] discuss using carload, calls and time of day to estimate the passenger flow. Siikonen wrote a further paper explaining how the system works using FL and how it can improve dispatching [24]. So, et al. [25] proposed a similar idea using ANN which they implemented in a Hong Kong building. However, its accuracy was less than 35% due to the training not being comprehensive enough.

Guidotti [26] described the use of AI to process data from infra-red beams in the lift doors which counts passengers in and out of a lift. This gathers information about passengers by processing data from a light curtain, a technology already essential for safety. The accuracy of the information can be improved when processed in conjunction with accelerometer data from the lift. This data-gathering method is less intrusive than a camera as the scanned image doesn't show people in sufficient detail to identify them.

The I-S-P (Inverse Stops to Passengers) method [27] predicts the number of passengers based on the number of stops and can be used to estimate the building's traffic flow. The I-S-P method can use traditional methods such as a rearranged form of the uppeak calculation or the Monte Carlo Simulation as described by Al-Sharif et al. [28]. The I-S-P method can also use AI by training a model with simulation data. Al-Sharif et al. [29] demonstrated that a regression model can be trained to do an I-S-P analysis. However, further research is needed to demonstrate that the AI I-S-P method offers improvements when compared to the traditional I-S-P method.

### 2.4. EXPERT DESIGN

An essential step in building design is determining what sort of lift system is needed to lift a building with a given population and number of floors. This historically required an expert in traffic analysis.

An expert system is a computer system designed to model the knowledge of human experts. An expert design system is an expert system which designs lift systems. ISO 8100 – 32 [30] and CIBSE Guide D [31] each provide a set of rules, based on practices from industry experts, which can be used to design a lift system.

Prowse, et al. [32] describe an approach to lift system design using KBS. They also suggested a solution using an ANN.

Peters & Dean [33] used CIBSE guidance in a KBS to create an expert system which designs buildings to the CIBSE specification. Peters & Dean suggested in this paper's conclusion that applying fuzzy rules is an alternative to investigate in the future.

### 2.5. SYSTEM MODELLING

Some attempts to use AI in the lift industry have been more successful than others. Sometimes, this is because the technology doesn't yet exist to make it work, and sometimes, it is because the problem doesn't lend itself to an AI solution.

Tolosana, et al. [34] applied ANN to lift system modelling. A model was trained on simulation data and could predict the round-trip time. The study demonstrated that under narrow constraints, there was a correlation between the simulated results and the ANN results. Although there was a correlation, there was too much variance between the ANN model and the simulation to rely on the ANN model for building design.

## 3. FUTURE DEVELOPMENT

The previous section of the paper investigated existing concrete research on the use of AI in lift systems. Instead, this section speculates on the trajectory of the lift industry based on current trends.

### 3.1. DISPATCHING

Dispatching systems are likely to use more sophisticated machine learning algorithms to adapt dynamically to complex passenger behaviours and building-specific traffic patterns.

Historical traffic data coupled with real-time analysis from multiple IoT sensors on the lift car will enable dispatchers to make better decisions. Predictive dispatching that anticipates demand spikes or reduces bottlenecks as well as passenger-specific dispatching which accounts for accessibility needs or priority handling can improve passenger satisfaction.

AI systems may be used to optimise the dispatcher for energy efficiency, balancing operational costs with environmental sustainability. Providing the dispatcher with real-time data about the energy consumption of the lift could help to improve dispatcher decisions over time.

### 3.2. PREVENTIVE MAINTENANCE

As sensors become more reliable and AI tools grow more adept at identifying faults, preventive maintenance is expected to become increasingly accurate, precise and timely. Technologies such as advanced vibration analysis, high-speed image recognition, and sensor fusion will play a key role in detecting faults early and classifying damage with greater precision. When combined with real-time operational data, these insights will allow future systems to anticipate failures and understand their potential ripple effects, enabling proactive and targeted interventions. A scalable IoT ecosystem will support this by continuously gathering and processing sensor data, ensuring that issues are identified and addressed in real time. AI systems could also recommend cost-effective maintenance schedules based on component wear rates and usage patterns, reducing downtime and resource wastage.

### 3.3. TRAFFIC PATTERN RECOGNITION

Intelligent dispatching and preventive maintenance sensors will collect vast amounts of data. AI may be able to process this data, achieving near-perfect accuracy in counting passengers and predicting flow. Future systems might use historical traffic data and contextual data, such as weather, public holidays or events, to predict passenger demand more accurately. These predictions can feed into dispatching algorithms, ensuring lifts operate at peak efficiency while minimising passenger waiting times and energy consumption.

### 3.4. EXPERT DESIGN

Expert design systems currently use a KBS and a set of uppeak calculations to design a lift system based on a basic building design. Some authors have suggested using more advanced AI models such as FL or ANN. However, these advanced models are less transparent and less accountable for the design decisions they make.

So long as expert design systems rely on uppeak calculations, it will not be possible to use expert design for advanced buildings, such as those with a mixed traffic flow. The inclusion of general analysis calculations or simulations in an expert design system would have a greater impact on the utility of such a system.

### 3.5. SYSTEM MODELLING

Some elements of system modelling can be improved with AI. The improvements to traffic pattern recognition can be used to create more realistic simulated passengers in traffic analysis. As dispatchers improve in real-world lift systems due to AI enhancements, the dispatchers in simulations will also need to improve to accurately model real-world systems.

Other elements, such as ideal lift kinematics, are best performed by computational logic and will remain in the domain of predictable maths equations.

## 4. IMPLICATIONS, RISKS AND ETHICS OF AI IN LIFT SYSTEMS

### 4.1. DISPATCHING

#### 4.1.1. IMPACT ON OPERATORS

When lifts were first invented, they were operated by trained employees. Passengers would tell their operator which floor they wanted, and the operator would take them there. By the 1970s, automated lifts had replaced the role of lift operators, and the job became redundant.

Improvements to lift dispatching algorithms can now happen without losing any jobs. The lift operation jobs no longer exist so improvements can be made without the ethical consideration of job redundancy.

## 4.1.2. OPTIMISATION

### 4.1.2.1. BACKGROUND

A dispatcher needs to balance various parameters when dispatching lifts to floors and allocating passengers to lift cars. Each decision a dispatcher makes will have an impact on the following parameters.

### 4.1.2.2. JOURNEY TIME

The quicker an employee gets to their desk, the more work gets done and the more profits the organisation can make. Therefore, the priority should be to minimise the time between an employee pressing the call button and the lift arriving at the employee's destination.

### 4.1.2.3. WAITING TIME

Passengers are more satisfied when they are in the lift and moving somewhere than when they are waiting for the lift, according to Bird et al. [35]. This means that when a dispatcher sacrifices journey time to reduce waiting times, passengers are happier.

### 4.1.2.4. TRAVEL TIME

All research into the correlation between travel time and passenger satisfaction was conducted before the Covid-19 pandemic. As a result, we do not yet know if the pandemic has changed societal expectations and passenger preferences with concerns about enclosed spaces leading to a shift in priority from travel time to waiting time. In such a scenario, passengers may have preferred lower lift occupancy, even if it resulted in longer waiting times.

### 4.1.2.5. ACCESSIBILITY

Door dwell times can be reduced to reduce waiting and travel times. Lower dwell times mean the lift spends less time stopping at each floor. On the other hand, reduced dwell time makes the lift less accessible for those with impaired mobility who need longer to get to the lift.

### 4.1.2.6. ENERGY

As the impact of the impending environmental crisis becomes more visible, organisations will have to be seen as making a difference. One way to reduce a building's energy consumption is to use a dispatcher that minimises the energy consumption of the lift system.

### 4.1.2.7. MONEY

Some building providers have started offering premium prioritisation where clients who pay more get a better lift service. Under this system, when a premium passenger calls the lift, the dispatcher will prioritise getting that passenger to their destination over serving other passengers in the system. Although this would be good for the premium clients, this would increase journey times for the other passengers and would increase the average journey time for the building.

### 4.1.2.8. DECISIONS

A dispatcher could minimise waiting times by always sending the nearest car to collect each passenger, but this decision is likely to increase journey time. Conversely, a dispatcher could assign a car per passenger which would reduce journey time, but this decision would increase waiting time. Making the decision to reduce door dwell time might reduce both journey and waiting times, but it is likely to make the system less accessible to some passengers.

The AI logic used in the dispatcher can help balance each decision to meet target outcomes, but AI cannot assess which parameters are more important. Prioritising parameters is an ethical dilemma that should be agreed upon by humans for the AI to obey, not the other way around.

## 4.2. PREVENTIVE MAINTENANCE

AI can predict and categorise failures in lift systems, enabling intelligent preventive maintenance. Preventive maintenance can be done during off-peak periods, meaning more lifts will be in service during peak usage. Over time, this will reduce the need for system redundancy, so fewer lifts will be needed in new buildings, which could positively impact cost and carbon emissions.



## 4.2.1. MONITORING SYSTEMS

### 4.2.1.1. IMAGE-BASED PASSENGER RECOGNITION

AI image recognition has grown massively in the past decade, but ethical concerns are also growing.

AI can now accurately count the number of humans in an image, differentiating between humans, bags, dogs, pushchairs and anything else that might end up in a lift. AI has even reached the point of object permanence, the understanding that if a person goes out of view and comes back into view, they are still the same person. Camera-based analysis can provide more accurate data about traffic flow than can be provided by a weight-based analysis.

On the other hand, having a camera in the lift car will leave some passengers concerned about their personal privacy, especially if the footage is analysed in the cloud by a third party. One of the best ways to ensure object permanence is to use facial recognition. Companies that already track users' actions online for targeted advertisements could use this data to improve their digital user profiles. In the hands of an authoritarian government, facial recognition data could be used for invasive surveillance and control of citizens.

One solution is to use 'fog computing' by analysing the footage close to the source and only uploading the traffic data with no footage or details about specific passengers. This justification might be enough for some, but others would still be concerned by any form of camera in their lift car.

Another solution is to use less detailed data such as the readings from a light curtain over time. This data can be used to generate a 2D map of a person which can be used for passenger counting but it is harder to use this kind of data to count people when their 2D map is irregular. This can happen for a variety of reasons, such as if a person is in a wheelchair or carrying a pushchair or shopping trolley.

### 4.2.1.2. ACCELEROMETER-BASED FAILURE RECOGNITION

Using a supervised ANN, a model can be trained to recognise damaged components based on the frequency and intensity of vibration data. This model can detect damage, locate the damage, classify the type of damage, assess the extent of the damage, and predict the residual life before the damage becomes critical. Most lift installation faults occur in the doors, so identifying door damage is the priority. Eventually, an array of accelerometers could monitor the entire system.

If this is monitored accurately, the data can be used to aid preventive maintenance. When preventive maintenance is assisted by AI data analysis, this is known as data-driven preventive maintenance and could have a massive impact on the whole industry.

The data gathered from monitoring lift health could be used to improve lift simulation. If a simulation could provide an approximate maintenance frequency with and without data-driven preventive maintenance, it would help building providers calculate whether the additional sensor costs are worth the investment.

## 4.2.2. IMPACT ON TECHNICIANS

Preventive maintenance is when a lift is inspected or serviced even if it is not out of service. This means lifts will spend less time out of service during peak usage times as servicing can be scheduled for off-peak times. Currently, technicians are given a list of lifts to be inspected (looked at) or serviced (actively changed) and will do these maintenance visits at a regular frequency. Technicians must have the skills, parts and tools to assess, adjust or replace anything that is wrong.

With data-driven preventive maintenance, fewer manual inspections must be carried out, as the lift is constantly being inspected by the automatic sensors. AI monitors and analyses the wear on each component in real-time, so replacements only occur when needed instead of regularly replacing components. Technicians will be given a list of tasks to perform on each lift, along with which parts and tools will be needed for the job.

#### 4.2.2.1. ADVANTAGES

As a result of data-driven preventive maintenance, lifts will require less manual inspection and will spend less time out of service. Technicians will have more time to focus on fixing the problems as they will spend less time doing unnecessary regular inspections and servicing. This also means that fewer technicians are needed to maintain the same number of lifts thus reducing maintenance costs.

#### 4.2.2.2. DISADVANTAGES

The financial savings from reducing the frequency of routine maintenance must be weighed against the upfront and ongoing costs of installing and managing the necessary sensors and processors. These sensors need to be installed on the lift, a process that may require specialised technical expertise. Furthermore, the data collected must be analysed in real time and stored securely in a format that is both accessible and reliable, typically using internet-based systems. This shift introduces new demands in terms of infrastructure and cybersecurity, which can increase the overall complexity and cost of the maintenance ecosystem.

A potential downside of adopting data-driven preventive maintenance is the shift in required skills for technicians. While fewer manual inspections mean some traditional technician roles might become redundant, the new system demands technicians become proficient in computer use, data interpretation, and accurately following detailed digital instructions. Technicians accustomed to traditional hands-on roles might find this transition challenging, highlighting a clear need for retraining and reskilling programs. Additionally, reliance on AI guidance may inadvertently lead to deskilling if technicians lose the ability to troubleshoot independently should the technology fail or overlook issues. [36]

#### 4.3. EXPERT DESIGN

Lift consultants currently use ISO guidance, calculations and simulations to design lift systems that suit the building. An expert design system would do this automatically but lift consultancy is not at risk from the expert system. A lift consultant's skill is knowing what the results of an analysis mean and feeding back to an architect or structural engineer what changes need to be made. An expert design system will improve the reliability and consistency within the lift consultancy industry as all consultants will be applying the same logical rules.

In the early days of any complex expert system, experts will disagree with some edge case decisions the system produces. Feedback from expert lift consultants is essential for improving an expert system's decision-making process.

#### 5. CONCLUSION

AI will impact the lift industry and change the way work is done. This does not necessarily mean fewer jobs, but it will mean different jobs.

In some cases, AI will remove the tedious aspects of the job allowing humans to focus on the complex aspects, such as with lift consultants. In other cases, AI will remove the skilful element leaving humans to do the muscle work, such as with technicians. Without appropriate governance, more data and analytics could result in unethical surveillance or advertising. As dispatching becomes more powerful, prioritising parameters becomes an ethical dilemma. This dilemma could be handed to the building manager by giving them the power to change prioritisation. However, one could argue that manufacturers should take responsibility for the dispatcher and not allow building owners to put money before the environment.

The industry has an ethical responsibility to care for its workers and passengers as well as the environment. As AI pervades the industry, those responsible for making the decisions should put the interests of people over the interests of profit.

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#### PAUL CLEMENTS

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**Abstract:** The design of vertical transportation (VT) systems in London's tall buildings faces unique challenges, particularly in ensuring flexibility for future building uses, enhancing the public realm, meeting ambitious sustainability targets, and providing security for occupants.

This paper explores how VT systems must be designed not only to accommodate current needs, but also to adapt to changing functions while ensuring coordination with multiple other disciplines.

This paper investigates how both new developments and modernization projects face significant challenges surrounding VT systems, emphasizing the importance of coordination between design teams. Ensuring VT systems are fit for their intended purpose and adaptable to future demands requires a multidisciplinary approach that integrates architectural, structural, and vertical transport solutions. Particular attention is given to the complexities of meeting sustainability targets, working within structural constraints, and preserving the London View Management Framework (LVMF) 2012, directed by the Secretary of State for Communities and Local Government and managed by the

# FUTURE-PROOFING VERTICAL TRANSPORT IN LONDON'S TALL BUILDINGS – BALANCING FLEXIBILITY, HERITAGE, AND PUBLIC REALM INTEGRATION

Mayor of London's office, such as those involving St. Paul's Cathedral.<sup>1</sup>

Advancements in VT technology are allowing for lower overruns, reduced machine room heights, and shallower pits, which are highlighting greater flexibility in system design. These innovations allow for the efficient use of space, while minimizing the environmental impacts such as pit excavations, helping to meet ambitious sustainability goals and reduce embodied carbon.<sup>2</sup>

This paper examines how flexible, secure, and sustainable VT systems can be designed in both new builds and modernized structures. It highlights how coordinated design efforts ensure that VT systems not only meet current needs, but also support the future evolution of buildings and the public realm they inhabit.

## 1. INTRODUCTION

London's evolving skyline is shaped by a unique set of constraints and aspirations. Strict view-protection laws preserve sightlines to historic landmarks (e.g. St. Paul's Cathedral, Parliament Square).<sup>1</sup> forcing designers to taper or tilt towers (as seen in the examples of the **Cheese Grater** and **The Shard**) to comply. At the same time, high land values mean that rental revenue per square foot is among the world's highest<sup>4</sup>; thus, every square meter of net lettable area counts. In this context, vertical transportation—often consuming 25–50 percent of a floor plate<sup>5</sup>—must be conceived from the ground up as an integral, multi-disciplinary element of design.

This paper explores how London's VT design balances global best practice with local constraints—focusing on flexibility, sustainability, early coordination, and user experience.

## PLANNING AND HERITAGE CONSTRAINTS IN LONDON

London's planning framework imposes rigorous limitations on building form, directly affecting VT design. Since the 2000s, legally protected viewing corridors ensure that key vistas of St. Paul's, the Palace of Westminster and the Tower of London remain unobstructed by new towers (see Figure 1).<sup>2</sup> Architects have responded with slender, stepped or angled cores. For VT, this means that shafts and overruns must be tucked within narrow footprints or incrementally set back—adding complexity to shaft layouts and often dictating irregular core shapes (see Figure 2).



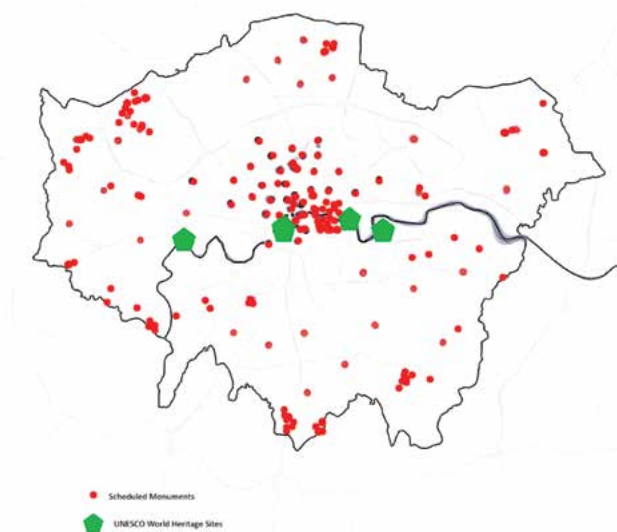
**Figure 1. Protected views of London.**  
Source: The Times<sup>2</sup>, redrawn by Paul Clements



**Figure 2. Hill House, London.** © APT Architects | WAX Architectural Visualizations | Landsec

Additionally, London's Historic Core zones and United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage buffer areas restrict tower volumes and heights (see Figure 3).<sup>6</sup> New skyscrapers must provide public access or benefits (e.g. improved open spaces or transit links) in exchange for additional height, affecting ground-level design.

Tower height is further limited by London City Airport's flight paths. Even in designated high-rise zones, heights rarely exceed 300 meters. This intersects with some of the world's highest office rents (often over £100/sq ft or US\$1,367/m<sup>2</sup>), making net lettable area a key driver. Every square meter lost to inefficient VT has a direct financial impact. Efficient core layouts can save up to 30 percent in shaft area—an outcome only possible through early design coordination and advanced VT solutions.<sup>5</sup>

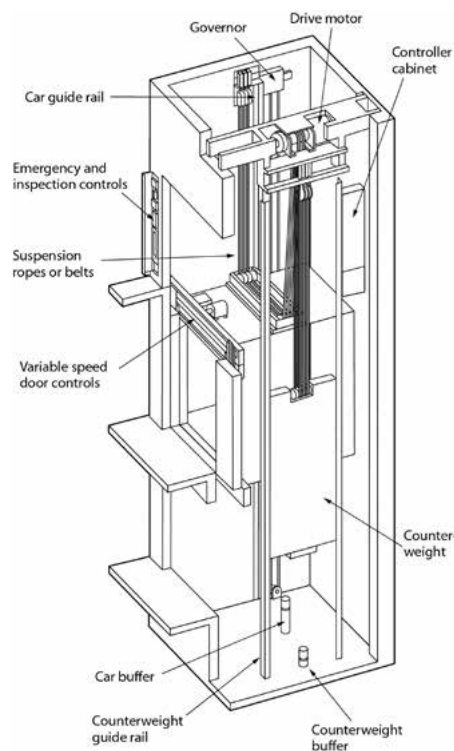


**Figure 3. Listed buildings , scheduled monuments and World Heritage Sites.**  
Source: Historic England <sup>8</sup>; redrawn by Paul Clements

London planners are also encouraging the reuse and vertical extension of existing buildings to reduce embodied carbon and preserve heritage assets.<sup>7</sup> While positive for sustainability, these projects often face VT challenges—older cores may lack the strength or space for modern equipment. Vertical transport consultants must find ways to modernize within tight physical constraints.

### SPATIAL EFFICIENCY AND CORE OPTIMIZATION

Given the premium on core space, London design teams exploit every opportunity to shrink shaft size and machine rooms. A major advance is the machine-room-less (MRL) elevator, pioneered by Otis in 1990 with their Sky Linear product and released commercially by KONE in 1996 with its EcoDisc technology. Instead of a separate machine room above the top floor, MRL systems keep the hoisting machinery within the shaft itself. This innovation “eliminated the need for the ‘hump’ on the building.”<sup>5</sup> By reclaiming this volume as additional plant space or even occupiable space, MRLs can effectively add an extra floor where height is limited (see Figure 4).



**Figure 4. MRL layout.** © Chartered Institute of Building Services Engineers (CIBSE)

MRL systems, paired with high-efficiency motors and regenerative drives, have reduced elevator energy use by up to 80 percent supporting carbon reduction targets.<sup>10</sup> Another spatial innovation is stacking cars vertically within a shaft. Double-deck (DD) elevators have two cabs attached, one above the other, sharing a single shaft. Each stop serves two adjacent floors. This doubles throughput per shaft, allowing fewer shafts for a given capacity. Some London developments, notably **The Broadgate Tower**, **Heron Tower (Salesforce Tower)**, and **22 Bishopsgate** have DD elevators as the primary passenger elevators.

The TKE TWIN system offers a related approach: two independent, counterweight cars operate in one shaft, one above the other (see Figure 5). Unlike double-deck cabs, each TWIN car serves all floors, but sophisticated controls prevent collisions. Introduced in 2003, TWIN achieved up to 40 percent core footprint reduction by replacing two shafts with one.<sup>5</sup> However, TWIN requires bespoke floor layouts and has only one supplier, so adoption has been modest. Nevertheless, it exemplifies how creative VT solutions can relax core demands.



**Figure 5. TWIN Elevator system shaft layout. © TK Elevator**

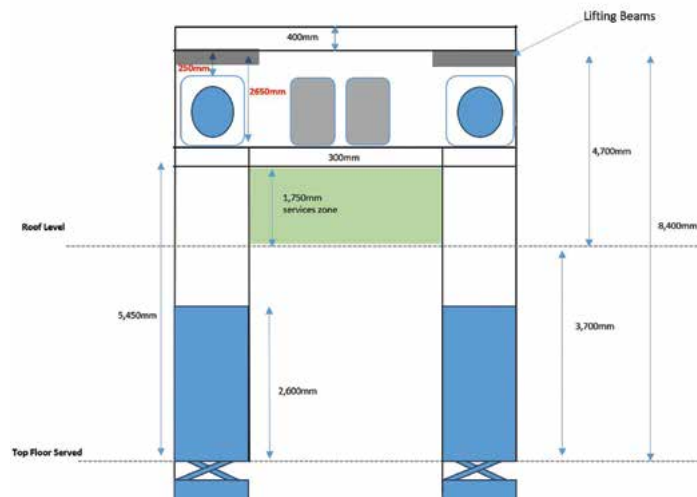
KONE's UltraRope, a carbon-fiber hoisting material, reduces equipment weight by up to 80 percent and also has a high coefficient of friction, meaning the drive sheaves can have smaller diameters, enabling smaller machines and more compact equipment—ideal for tight London cores (see Figure 6).<sup>9</sup>



**Figure 6. KONE UltraRope is made of carbon fiber, reducing cable weight by up to 80 percent. © KONE**



Beyond equipment choice, shaft/machinery space and therefore, overall building height is saved by aggressive engineering: minimal pit depths, shallow machine-room slabs (sometimes only ~250-milimeter clearance between machinery and ceiling slabs where lifting beams are arranged to the side of machines), and even recessing deflection pulleys into the machine room floor can all significantly help where building heights are restrained. All of which must be carefully engineered with maintenance, repairs and replacements in mind (see Figure 7).



**Figure 7. Machine room section, with lifting beams to side and minimal headroom. © Paul Clements**

In London basements—already crowded by underground tunnels (known locally as the Tube), sub-structures and services—having tall buildings with faster elevators (due to constrained core spaces) often means pushing pits deeper. This trade-off is carefully modeled by structural engineers, while cost and program delays are weighed up against slower, larger cores. In short, London’s spatial economy forces VT suppliers and design teams to custom-engineer elevators for each project, squeezing out inefficiencies wherever possible.

### VERTICAL TRANSPORT IN “GROUNDSCRAPER”: LOW-RISE, HIGH-AREA STRATEGIES

While much of the focus in London’s tall-building transport strategy has centered on skyscrapers, the emerging typology of “Groundscraper” presents a different but equally complex VT challenge. These horizontally oriented mega- structures can match or even exceed the usable floor area of a tower (see Figure 8).



**Figure 8. Machine room section with lifting beams to side and minimal headroom’s  
© Orms Architects | Castleforge & Gamuda**

Unlike skyscrapers that require high-speed, high-rise elevator technologies and complex zoning strategies, groundscrapers benefit from lower-tech, MRL elevator systems. The absence of a machine room allows for greater flexibility in the core layout, and the wider footprint of each floor enables the addition of more shafts without sacrificing lettable area—improving passenger distribution and reducing walking distances.

As groundscrapers grow in popularity, particularly in heritage-sensitive areas of London where height is restricted, they represent a distinct strand of VT innovation: one that emphasizes distribution over height, redundancy over speed, and accessibility over vertical performance. These projects challenge conventional notions of core efficiency by demanding flexibility and lateral coordination across expansive floor plates—making early-stage, spatially responsive VT design just as critical as in supertall towers.

### MAXIMIZING FLEXIBILITY THROUGH TENANT SCENARIO PLANNING

Flexibility is now a priority in vertical transport planning for London's commercial towers. Traditionally, high-rise buildings were designed for multi-tenant use, with The British Council for Offices (BCO) and The Chartered Institute of Building Services Engineers (CIBSE) Guide D standards shaping VT systems.<sup>10</sup> However, many new developments are being designed or adapted for anchor tenants occupying most or all of the building.

This shift demands that VT consultants simulate a broad range of occupancy scenarios—often from pre-concept stage—well before any tenants are secured. Systems must accommodate both fragmented leasing with staggered peak demands, and full-building occupation with private lobbies, secure zones, catering areas, and changing facilities. These vastly different use cases impact the number of lifts and performance requirements, which must be planned alongside core sizing and architectural massing.

Importantly, flexibility is not just a leasing strategy—it is increasingly a risk-mitigation measure. In a market where tenant requirements shift rapidly and anchor tenants may enter negotiations post-topping-out, vertical transport systems that are too rigid can become liabilities, forcing expensive redesigns, retrofits or a reduction in property value. The result is a new emphasis on future-proofed VT infrastructure that can adapt to differing tenant demands.

### SUSTAINABLE VERTICAL TRANSPORTATION

Tall buildings must lead on sustainability, and vertical transport is a key piece of that puzzle. Elevators are energy-intensive (motors, lighting, HVAC of machinery spaces) and also contribute to embodied carbon through materials and construction. Designers mitigate these impacts in several ways:

- **Efficient Drives and Regeneration:** Modern elevators use variable-voltage drives and regenerative braking to convert excess kinetic energy back into building power. Leading manufacturers claim that new elevator drives can regenerate a substantial fraction of energy. Combined with efficient motors and LED lighting, some systems can reduce total elevator energy use by ~75–80 percent relative to a legacy geared system.<sup>5</sup>
- **Smart Controls:** AI-based destination control systems improve traffic flow by grouping passengers and reducing stops. Studies show such smart controls can boost handling capacity by 20–30 percent.<sup>5</sup> In practice, this means fewer cars can carry the same traffic, saving energy and core area. Today's "AI elevators" learn peak patterns and adapt in real time.
- **Carbon-Aware Design:** Designers and developers are increasingly focused on reducing embodied carbon and promoting the reuse and reclamation of construction and architectural material. This includes the use of reclaimed steel guide rails and steel products manufactured via electric arc furnaces (EAF), which are gaining popularity due to their significantly lower embodied carbon compared to conventional blast furnace methods. Designers are also specifying lower-carbon concrete mixes for lift shafts—though this may reduce long-term durability due to altered binding properties—and are working to minimize shaft volumes overall to reduce the quantity of concrete and steel required. The embodied carbon of a tall building rises sharply if it has "vanity" height or unnecessarily deep basements, since these require extra material. By keeping cores lean (through MRL, double deck, TWIN, etc.) the structural carbon penalty is reduced. An AECOM study stresses that tall towers naturally incur higher carbon due to their height and pumping energy needs, so any core-saving measure has outsized benefits.<sup>3</sup>

- **EPDs and Whole Life Carbon:** Environmental Product Declarations (EPDs) are a typical requirement for any tower in London now to provide estimated breakdowns of the embodied carbon of VT Systems. This is then converted to a project specific EPD following practical completion. While reducing embodied carbon in materials and operational carbon through energy-efficient systems remains central to sustainable vertical transport design, this approach captures only part of the environmental impact. Whole Life Carbon (WLC) tracking ensures emissions are considered from manufacture through disposal (A1–C4).<sup>11</sup>
- **Lift Finishes:** Modular cab finishes that are light and durable enable lifts to flex between passenger, goods, firefighting, and evacuation uses, supporting both circular design and safety.
- **Renewable Integration:** Some tall buildings tie elevators into on-site renewables. At 22 Bishopsgate, 100 percent of the building's electricity comes from renewable sources.<sup>12</sup>
- **Digital Infrastructure and Maintainability in VT Systems:** Sustainability increasingly depends on how lifts are monitored and maintained. Modern systems require resilient power and data cabling, as well as mobile signal repeaters for cloud diagnostics and predictive maintenance. Without digital readiness, faults go undetected, and service is disrupted.<sup>10</sup> Maintainability is no longer just a mechanical issue, but a digital one, and designers must ensure that lift shafts are technologically enabled to support long- term service reliability.

In summary, sustainable vertical transport strategies aim to reduce both embodied and operational carbon through efficient core planning, space-saving lift technologies, regenerative drives, smart control systems, and low- carbon material choices. A whole-life carbon (WLC) approach—capturing emissions from cradle to grave— provides a more accurate picture of VT's environmental impact. Increasingly, digital infrastructure within lift shafts, including power resilience and connectivity for predictive maintenance, plays a key role in supporting long-term serviceability and lifecycle efficiency.

## TECHNOLOGICAL INNOVATIONS IN ELEVATOR DESIGN

While MRL and double-deck systems have been around for decades, today's innovation lies in how these systems are integrated, digitized, and adapted to changing needs. We now see a new wave of VT technologies including ropeless systems, IoT-linked AI controls, ultra-light carbon hoisting materials, and subscription-based service models that bring software-like agility to physical systems:

- **Ropeless and Multi-Directional Elevators:** CTBUH research has highlighted “circulating, ropeless multi-car systems” (i.e., TKE's MULTI system) as potentially transformational.<sup>13</sup> With no ropes, elevator cars can travel horizontally between shafts and form continuous loops. This allows one set of cars to serve multiple shaft locations, separating loading floors and dramatically shrinking service space. For instance, cabins can share a single circuit: upward—and downward-travel paths loop around, with off-board loading decks on different floors.<sup>13</sup> The result is a significant reduction in total shaft volume. In theory, a ropeless loop could replace several conventional lift banks, increasing flexibility in building circulation. Though not yet installed in a live building, early tests have demonstrated the principle.<sup>13</sup> London's constrained sites would welcome any system that saves core space, making ropeless concepts very attractive for future development.
- **Learning from Electric Vehicles (EVs):** Otis is developing battery-powered, self-propelled elevator vehicles operating on guided tracks—a system similar to EVs using magnetic or hub motors (see Figure 9). These systems promise ropeless movement, modular maintenance, and zero hoistway downtime. As buildings increasingly integrate electric vehicle charging, energy storage, and smart grid connectivity, there's potential for shared infrastructure between building mobility systems and EV energy networks, reinforcing the case for fully electrified, digitally connected vertical transport.



**Figure 9. Otis ropeless elevator concept. © Otis Elevator Company**

- **Artificial Intelligence and Predictive Control:** Elevator suppliers are looking to leverage big data and machine learning. On a day-to-day basis, AI/ML algorithms predict traffic patterns of building use and pre-position cars to minimize wait times. Sensors on call panels and turnstiles feed cloud-based analytics that continuously refine dispatch rules. Another innovation is touchless controls: smartphone-based apps using NFC/QR codes allow tenants to call elevators without using shared buttons,<sup>10</sup> improving health, safety, and convenience. All these developments underscore a shift from static elevator banks to integrated "mobility platforms." Destination-control itself is an AI task: by knowing each passenger's destination upfront, the system groups riders optimally.

Perhaps the future lies not just in new technology, but in rethinking old ones. Could a modern-day paternoster redefine vertical circulation in high-traffic buildings? Or could we return full-circle to water-powered lifts, updated with digital control systems for a zero-carbon operation?

### **FIRE SAFETY AND EVACUATION REQUIREMENTS**

Recent changes in fire-safety codes have added new constraints to VT design. Britain's BS 9999 and the newly published BS 9991:2024 regulations treat elevators as part of the evacuation strategy. They are increasingly mandated for emergency egress, especially for people with reduced mobility. Specifically, BS 9991:2024 states that "buildings provided with passenger lift (Elevator) access to an upper or lower level should also be provided with a means of using lifts for a means of escape."<sup>14</sup> At a minimum, one evacuation-capable elevator is now expected per stair core.

These requirements have significant design implications. Depending on the application, an evacuation elevator can typically be larger (to accommodate stretchers or wheelchairs) and fire-protected, with clear power supply separation. Double-deck cars in a building should be arranged to allow ground-level evacuation—often calling for deeper pits and higher motor capacities. Moreover, London's subterranean challenges (Tube tunnels, high groundwater) often limit pit excavation depth. This means that design teams must carefully coordinate to ensure that deeper pits can be achieved, and where this is not possible, gain permission from the London Fire Brigade and Building Control Officer to have a transfer floor, where evacuating passengers change from the top deck to the lower deck of the elevator car, with step-free access.

In summary, life-safety rules now explicitly pull vertical transport from the ground up into safety design. Meeting these rules requires close planning: elevator consultants, architects, structural engineers and fire specialists must work together from the concept design stage to allocate shafts and plan evacuation routes. When done right, the result is a VT system that can serve on-demand evacuation in addition to normal traffic, a critical requirement for any tall building.



## CASE STUDIES: EXEMPLARY VT DESIGN

**The Shard.** (310 meters, 72 stories) demonstrates how VT can be integrated within a complex mixed-use tower while responding to London's planning constraints. Its 44 KONE elevators—single- and double-deck—serve diverse functions, from office to hospitality.<sup>15</sup> The project's approval marked a rare case where a protected view corridor was reinterpreted, showing how early collaboration with planners can align tall building ambitions with heritage sensitivity.

**22 Bishopsgate.** At 278 meters, 22 Bishopsgate is London's tallest office tower and a benchmark for high-performance VT. It features 53 Otis lifts, including 26 double-deck cars—the highest DD count in Europe—some reaching speeds of 8 m/s. CompassPlus destination control and SkyBuild lifts supported both construction and long-term efficiency.<sup>12</sup> Despite its scale, the project fully complied with view protection policies, showing that VT systems can be embedded in tall forms without breaching London's skyline rules.

**Undisclosed London Development.** A recent example of precision vertical transport engineering aligned with London's strict protected view policies is an ongoing redevelopment. Located in the City's Eastern Cluster, the project sits directly beneath a key protected vista—London View Management Framework (LVMF) 15B.1, which frames St. Paul's Cathedral from the General Wolfe statue in Greenwich Park. To prevent any breach of this sensitive sightline, the design team committed to maintaining the exact roofline height of a background tower, ensuring a consistent silhouette when viewed from the prescribed viewpoint. This constraint placed significant pressure on VT planning, as the available headroom for overruns and machine rooms was critically limited. In response, the VT consultants (D2E) worked with elevator contractors and the design team to provide a five-shaft solution capable of TWIN or double-deck elevators, with engineered compact equipment and minimal overrun clearances. This solution has enabled the development to continue without compromising the protected skyline or VT performance—a demonstration of how early-stage VT innovation is essential to navigating London's planning constraints.

**75 London Wall.** The redevelopment of 75 London Wall exemplifies a new generation of flexible groundscraper office buildings that prioritize adaptability in both architecture and vertical transportation, boasting a main passenger group of 16 MRL KONE elevators. Led by developers Castleforge in a joint venture (JV) with Gamuda, the project has been carefully designed to function seamlessly as either a multi-tenant commercial hub or an anchor-tenanted headquarters. This dual functionality required an exceptionally robust vertical transport strategy. The VT consultants (D2E) were tasked with modeling over 50 tenant scenarios during early RIBA stages to ensure that the elevator system would remain compliant with BCO standards late into the Stage 4 design, under a wide range of occupancy profiles. Scenarios ranged from fragmented floor-by-floor leasing with separate arrival lobbies to consolidated tenancy with exclusive vertical access zones and high-density traffic. The resulting elevator strategy incorporates scalable core layouts, programmable destination control, and spatial allowances for future reconfiguration—all designed to accommodate changes without structural intervention. This level of planning not only mitigates commercial risk but also exemplifies a growing trend in London developments: creating VT systems that are as agile and future-proof as the flexible workspaces they serve.

## CONCLUSION

As London's skyline grows, vertical transport is evolving from a detail into a defining design element. Heritage protection, tight sites, and high rents make the VT solution a strategic priority "from the ground up." This paper has shown that achieving efficient VT systems under these pressures requires a blend of strategies: spatial optimization (MRL, double-deck systems to reduce shaft area), sustainability (regenerative drives, high-efficiency motors, etc.), technological innovation (ropeless elevators, AI dispatch, sensor-based controls), and holistic planning (integrating VT with structure, services, and fire safety from day one).

Key lessons emerge: first, space is money in London—every floor area saved boosts revenue. Second, stringent planning and codes now treat elevators as part of the public realm and safety systems, so VT cannot be an afterthought. Finally, successful projects always involve early collaboration: architects, developers and elevator engineers working together to model and refine layouts before groundwork. Looking ahead, the most future-proof towers will be those that embrace the elevator as a system, aligned with urban integration. For example, elevators might share data with transit apps or contribute to on-site energy systems. By thinking of VT as a fundamental piece of the building's DNA, London's tall buildings can be flexible for tenants, kind to the environment, and respectful of the city's heritage.

So, what's next for VT design? Perhaps the paternoster 2.0? Or a new generation of water-powered lifts? Or battery-powered elevators running on the same grid as EVs?

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## BIOGRAPHY

Paul started his career in D2E as a Graduate Engineer. He has been with D2E since 2014 and has experience largely in the commercial and leisure sector, working on multiple portfolios across the UK while providing project assurance for lift replacement and modernization projects. In 2020, Paul moved from the Asset Team into the Design Team and has since worked on various key developments within D2E, predominantly in London. He achieved a Masters in Lift Engineering at the University of Northampton and has achieved Chartered Engineer status (CEng) with Chartered Institution of Building Services Engineers (CIBSE).



# The **Lift Industry** Mental Health Charter

## The Lift Industry Mental Health Charter

is an initiative which is focused on bringing together the lift industry to support mental health.

This includes all lift companies, lift consultants and lift suppliers across the lift industry and their employees. Working together to

support the people within the industry with their mental health will make the industry a safer and more supportive place to work.

1 in 5 have suicidal thoughts over the course of a lifetime

1 in 6 experience common mental health problems every week

1 in 4 experience mental health problems every year



Clear your mind,  
You're not alone  
Find help here!



[www.liftmentalhealthcharter.com](http://www.liftmentalhealthcharter.com)



# TED BARKS

## WITH THE LIFT INDUSTRY MENTAL HEALTH CHARTER

### Ted Barks about SAD and how to get through the SAD season

**I often feel sad when I am left on my own, when my dinner does not arrive on time or when I am told 'no Ted do not chase that cat'...**



But I have learned that being a bit disappointed that my life doesn't go the way I prescribe it is very different from suffering from seasonal affective disorder - or SAD

SAD is a type of depression that occurs at a particular time of year, most commonly during the autumn and winter months when daylight hours are shorter.

It is also known as seasonal depression and can have an impact on your mood, sleep, appetite, and energy levels, affecting all aspects of your life, from work to your relationships and social life.

People with SAD may experience symptoms such as persistent low mood, irritability, loss of interest in everyday activities, and changes in sleep and appetite patterns.

You may feel completely different than you did in the summer months. You are not alone...

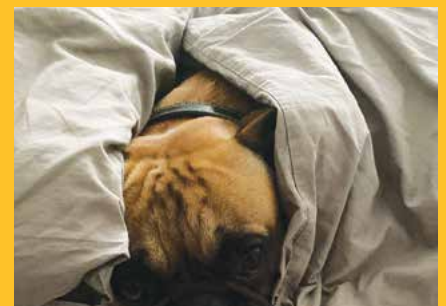
*"It's thought the winter blues, or seasonal affective disorder (SAD), affects around 2 million people in the UK and more than 12 million people across northern Europe. It can affect people of any age, including children."*  
**(NHS Inform)**

Here comes the science... The exact cause of SAD is not fully understood but according to the Seasonal Affective Disorder Association (SADA) it is believed to be caused by a biochemical imbalance in the hypothalamus (a region of the brain) as a result of shorter daylight hours and lack of sunlight during the winter.

**If the hypothalamus isn't working properly, this may affect the**

- production of melatonin – melatonin is a hormone that makes you feel sleepy; in people with SAD, the body may produce it in higher-than-normal levels
- production of serotonin – serotonin is a hormone that affects your mood, appetite and sleep; a lack of sunlight may lead to lower serotonin levels, which is linked to feelings of depression
- body's internal clock (circadian rhythm) – your body uses sunlight to time various important functions, such as when you wake up, so lower light levels during the winter may disrupt your body clock and lead to symptoms of SAD

And we dogs have a hypothalamus too so we can get the winter blues and feel more lethargic – so you see, it is not that I am lazy and like any excuse to stay in a warm bed.





**So what can we do to alleviate the symptoms of SAD?**

### Get outside

Spend as much time as possible outside in natural daylight, especially at midday and on brighter days. Take regular walks during work or lunch breaks, even if it's just around the block.



### Let your light shine

When working, sit near windows whenever possible or even take your work outside if you can.



### Consider the 5 Ways to Wellbeing

The Five Ways to Wellbeing are a set of evidence-based public mental health messages aimed at improving the mental health and wellbeing of the whole population.

They were developed by NEF (New Economics Foundation) as the result of a commission by Foresight, the UK government's futures think-tank, as part of the Foresight Project on Mental Capital and Wellbeing.

### CONNECT

With the people around you. With family, friends, colleagues and neighbours. At home, work, school or in your local community. Think of these as the cornerstones of your life and invest time in developing them. Building these connections will support and enrich you every day.



### BE ACTIVE

Go for a walk or run. Step outside. Cycle. Play a game. Garden. Dance. Exercising makes you feel good. Most importantly, discover a physical activity you enjoy and one that suits your level of mobility and fitness



### TAKE NOTICE...

Be curious. Catch sight of the beautiful. Remark on the unusual. Notice the changing seasons. Savour the moment, whether you are walking to work, eating lunch or talking to friends. Be aware of the world around you and what you are feeling. Reflecting on your experiences will help you appreciate what matters to you.



### KEEP LEARNING

Try something new. Rediscover an old interest. Sign up for that course. Take on a different responsibility at work. Fix a bike. Learn to play an instrument or how to cook your favourite food. Set a challenge you will enjoy achieving. Learning new things will make you more confident as well as being fun.



### GIVE

Do something nice for a friend, or a stranger. Thank someone. Smile. Volunteer your time. Join a community group. Look out, as well as in. Seeing yourself, and your happiness, linked to the wider community can be incredibly rewarding and creates connections with the people around you.



## Can we help...

Are you employed in the Lift industry?

Have you, or someone you know, had a works related accident?

Did you know there is financial help available?



# The UK Lift Industry Charity

Run by Lift People for Lift People

**The UK Lift Industry Charity Mission...** The relief of financial hardship and provision of appropriate support where required to industry colleagues and their families who have been injured whilst working or employed within the industry.

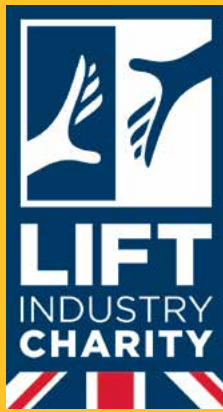
The Charity has made numerous donations to individuals and the families of individuals who have been injured or sadly killed, whilst working in the Industry. We are continually looking for opportunities where we can assist.

**Thank you to all our sponsors**

Charity Registration No. 1119434







# SUPPORTING THE LIFT INDUSTRY CHARITY



**A spectacular celebration of community, generosity, and glamour was attended by over 160 of the great and the good of the industry**

Another hugely successful dinner dance was held in support of the Lift Industry Charity in October last year at the Marriott Delta in Waltham Abbey. Despite many guests preparing to travel to Interlift the next day, the dedication to having a big night out was impressive!

Returning as host, Steve Wall was better than ever — his infectious energy, sharp wit, and effortless charm set the perfect tone for an evening of laughter and celebration.

A standout moment of the night came during the charity auction, with fast and furious bidding for tickets to Abba Voyage, a trip on a Pullman train, a Cotswold cottage stay and a big cat experience to name a few of the lots.

The total raised surpassed all expectations - over £20,000 for The Lift Charity. This incredible total will go directly toward supporting families in need across the lift industry.

To everyone who attended, donated, and sponsored the event — thank you. Your generosity and enthusiasm made the evening not only possible but truly unforgettable. Together, we continue to lift lives.

**A BIG thank you to the team of Trustees that organised and made sure the night went so well – Jools Black, Dave Cooper, James Edge, Paul Masterson, Gemma Moore and Phil Rudd.**



Photos by Black's Productions.

## PIP DOES CHRISTMAS!

Six weeks later on November 29th we were well into the Christmas spirit at the PIP party - you may recognise some familiar faces! Games, singing and dancing ensured a memorable night - **thank you Paul and the team at PIP.**







Joining us all the way from Stuttgart, Germany, we're meeting Stefan Gerstenmeyer in central London, gazing up at the stunning blue glazing of the St Botolph building. Stefan has recently joined Peter's Research as CTO, and we wanted to find out more. We have 16 lifts to choose from, so...

# ELEVATOR PITCH

## DOORS CLOSING, GOING UP...

### TELL ME A BIT ABOUT YOUR NEW ROLE – WHAT DOES IT ENTAIL?

I'm Chief Technical Officer, so I'm responsible for all the technical stuff; the technology and roadmap for future development.

### WHAT DOES YOUR CAREER JOURNEY LOOK LIKE? WHERE DID YOU START AND WHAT HAS LED YOU TO THIS ROLE?

I started as an apprentice electrical technician with TK Elevator at the age of 16. It was great as I could reach it by bike, unlike some of the other big companies! Then I worked in the factory, testing lift controllers before they were shipped, but I decided I needed to learn something

more, so I went to university and studied information technology, before coming back to TKE in the development department. I was given more responsibility and ended up as Global Head of Traffic and Group Control Development. In that time, I also successfully studied for a PhD. I spent 27 years at TKE before taking a couple of years working in the medical devices industry. And now I'm back in the lift industry!

### WHAT IS THE HIGHLIGHT OF YOUR JOB?

I love to solve complex technical problems together with colleagues. I also love that I get to cover a wide range of topics. It's not just about technical concepts, it's about processes and business-related tasks as well as strategy.

Working for a small company that employs around 10 people is also very different from working for a company that employs 50,000 worldwide, so that's very interesting too. It's an opportunity to learn new things, bring my experience and knowledge and combine it with those who are here.

### CAN YOU TELL US ABOUT A FAVOURITE MOMENT FROM YOUR CAREER SO FAR?

I'm very proud of my PhD – I didn't actually want to do it, but with encouragement I decided to go for it and I'm glad I did. I'm also proud of building a successful team for a traffic and crew control project at TKE, undertaking research and development.



### WHAT DO YOU ENJOY DOING OUTSIDE OF WORK?

I love being outside, and I also play guitar in a band. In the past, when my hair was a little longer and I was a little younger, on more than one occasion I was told I have a resemblance to Luke Skywalker, so my nickname was Master Luke. When I did an internship in the US, some students made the same comment, and, as there were many other Stefans, they called me Luke for six months!

### WHAT IS THE BEST THING ABOUT LIVING IN GERMANY?

As well as playing music, I also love hiking in the mountains, being in nature. I love the different landscapes we have here, from the mountains and hills to the sea, lakes and forests. The temperature is great, not too hot in summer, not too cold in winter, it's perfect.

### WHAT IS YOUR NEW YEAR'S RESOLUTION FOR 2026?

Now I work from home a lot, I need to make sure I get enough exercise.

### WHERE'S THE BEST PLACE YOU'VE EVER VISITED?

Whenever I'm at the top of a mountain, at the peak, with a great view – that is the best place.

### IF YOU COULD HAVE A SUPERPOWER, WHAT WOULD IT BE?

I'm perfectly happy with the limitations we have – no superpowers for me!

### AND FINALLY, IF YOU HAD TO CHOOSE YOUR FAVOURITE LIFT, ANYWHERE IN THE WORLD, WHICH ONE WOULD IT BE?

The lifts at the St Botolph building in London. It has a 16 car, twin lift group with eight open shafts - the system allows two independent cars to run in the same shaft simultaneously. It also has an intelligent call system to assign passengers to the lift best suited to where they want to go, and you can see the cars moving up and down – it's very impressive. It also has some of my software in there, so it's a favourite of mine.

While we enjoy Stefan's software for a bit longer, there is also a dramatic atrium to admire, along with the striking blue glass exterior – definitely a landmark of London. Many thanks to Stefan, and all the best to him for the new role.

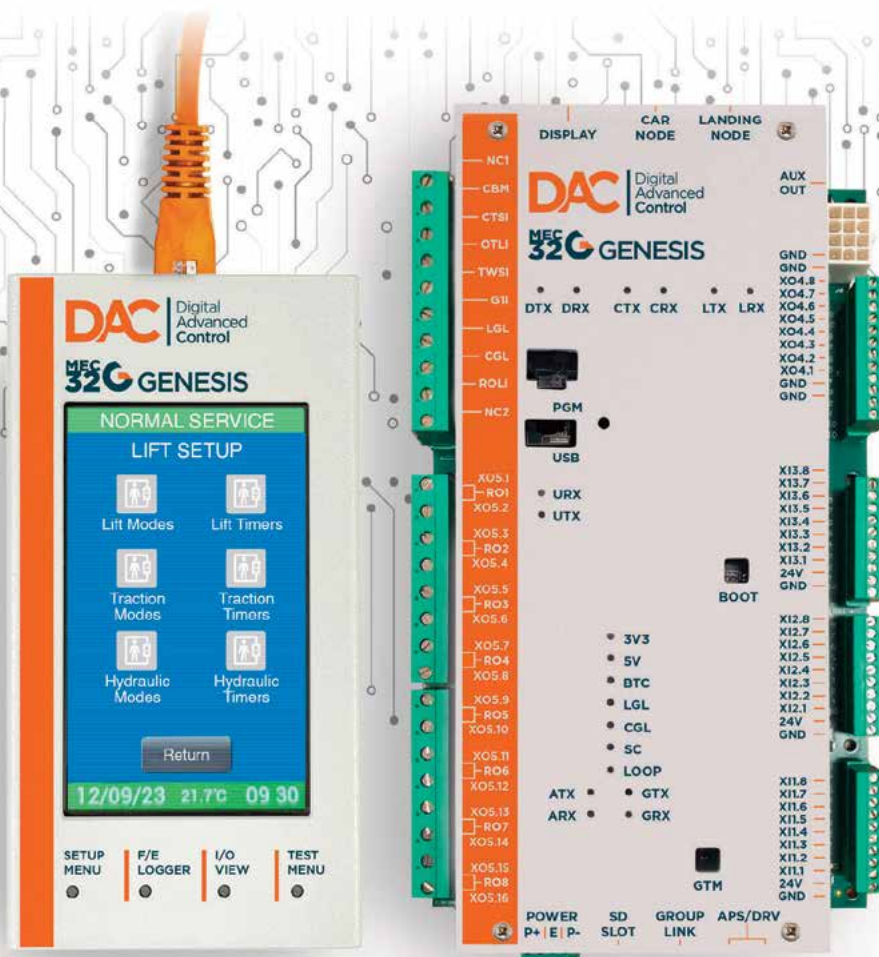
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