

Automation: a force for good?

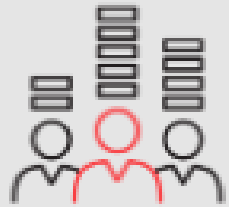
How automation is changing the gender mix in logistics

Kirsten Tisdale FCILT

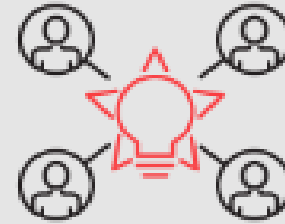
- > Why is diversity important to business?
- > What is the recent impact of automation in logistics?
- > What proportion of jobs might be automated?
- > What is 2040 likely to look like?
- > What's the likely impact on gender mix?
- > Cranfield project



Diversity matters because it's good for business



Talent



Innovation and
Group Performance




Reputation and
Responsibility



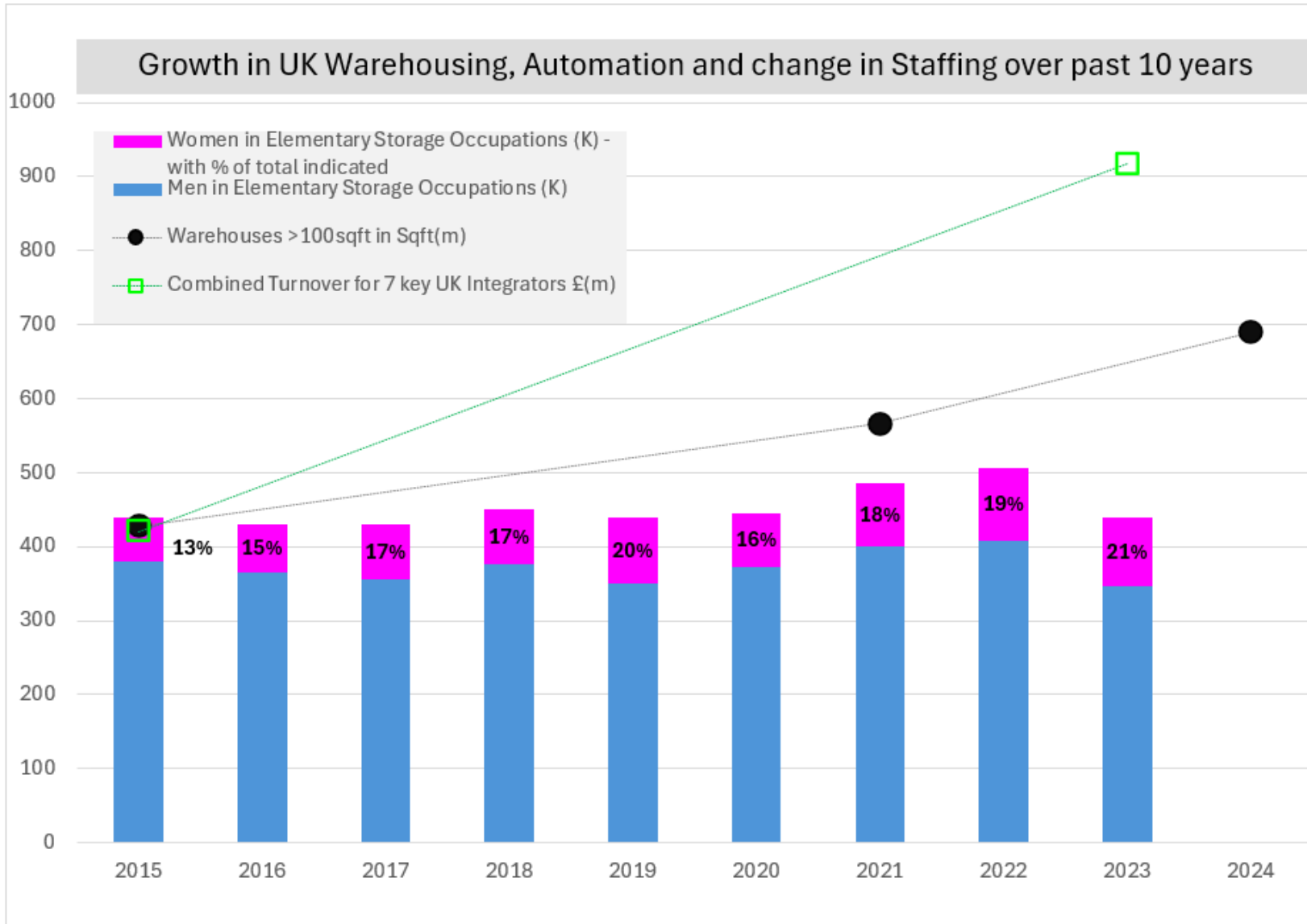
Financial
Performance

Source: Catalyst, *Quick Take: Why Diversity and Inclusion Matter* (2020).



**...and
automation
is important
because it's
a disruptor**

What is the recent impact of automation in logistics?



- > Note 1: Y Axis completely coincidental and fortuitous!
- > Note 2: These figures are NOT from directly comparable sources – regard them as indices
- > Note 3: Not all staff reductions are driven by automation - there's also been some downturn in the economy
- > Data from Nomis, UKWA/Savills Report & Companies House

Women in Logistics – recent conference locations



2023 hosted at GXO's Nestlé UK Digital Distribution Warehouse of the Future

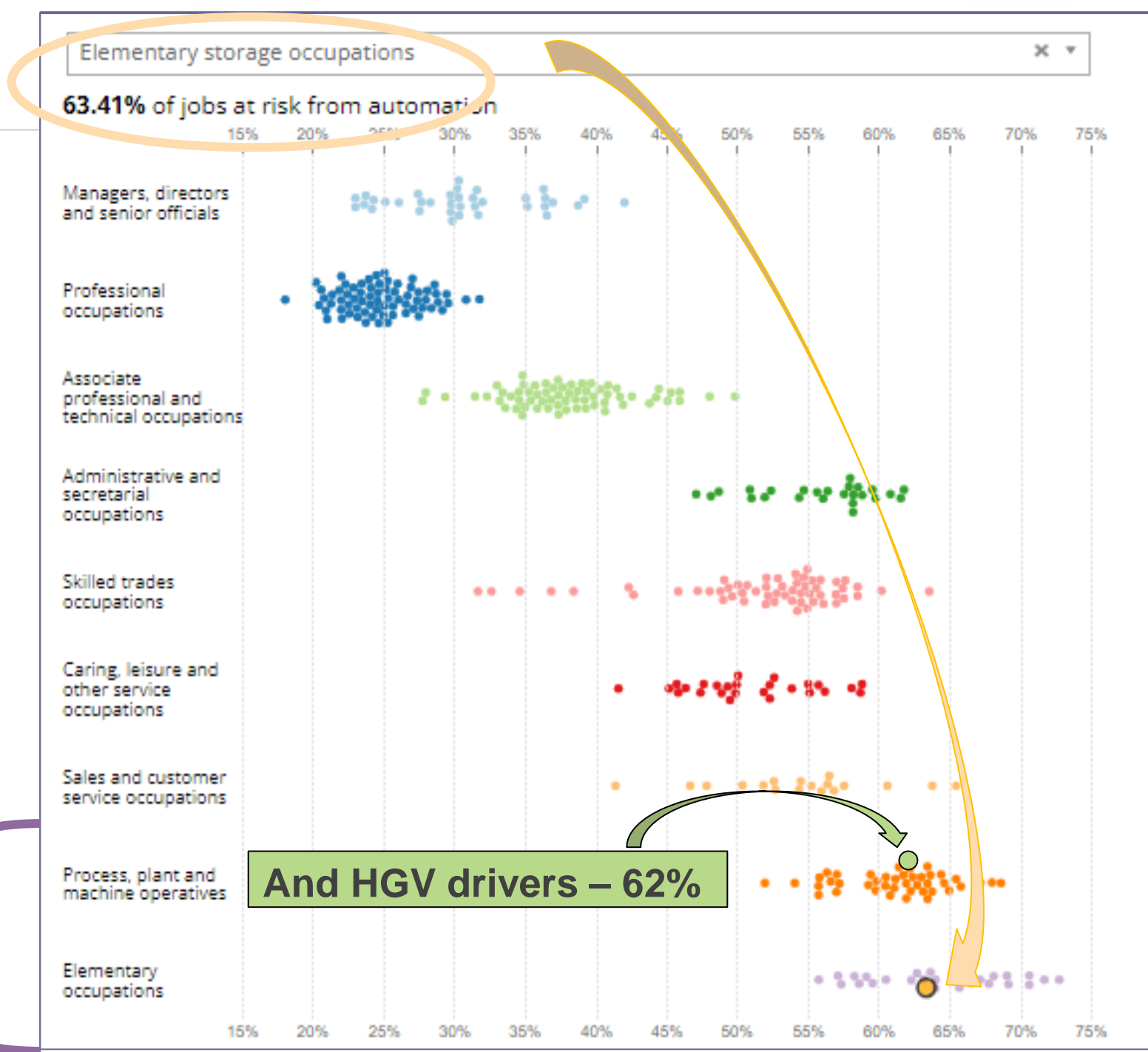
These photos were not deliberately taken as 'neutron bomb' shots with no (or very few) people!



2024 hosted by Active Ants on Brackmills Industrial Estate

Automation %

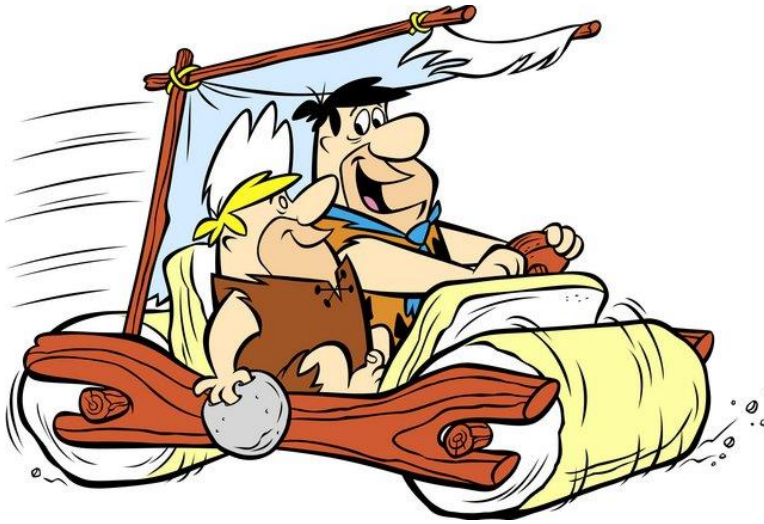
- > “Which occupations are at highest risk of being automated?” – the ONS published a piece in 2019 including this chart based on 2017
- > “Will robots really steal our jobs?” PwC said: “Female workers could be more affected by automation over the next decade, but male jobs could be more at risk in the longer term”
- > The last two main categories to the right represent only 16% of jobs across the UK, but approximately 75% of jobs in logistics



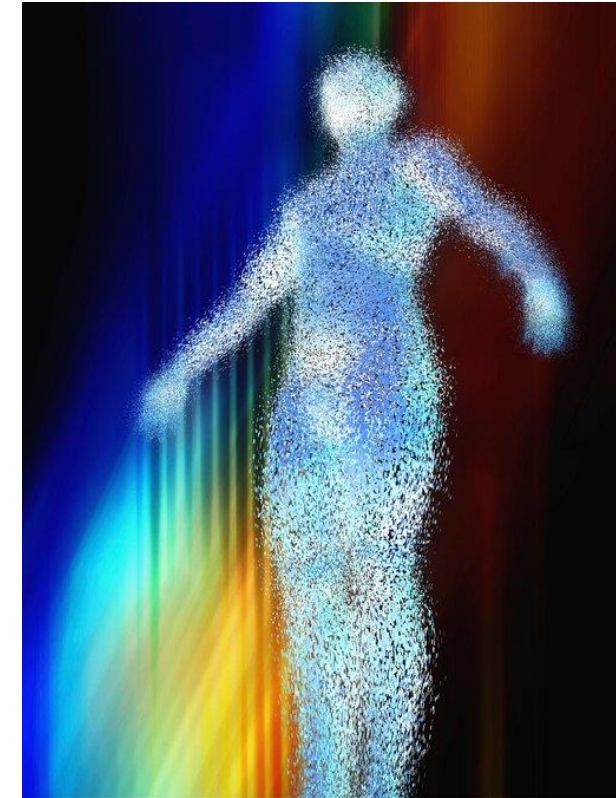
How far through the automation journey are we?



How the PwC report envisages the journey



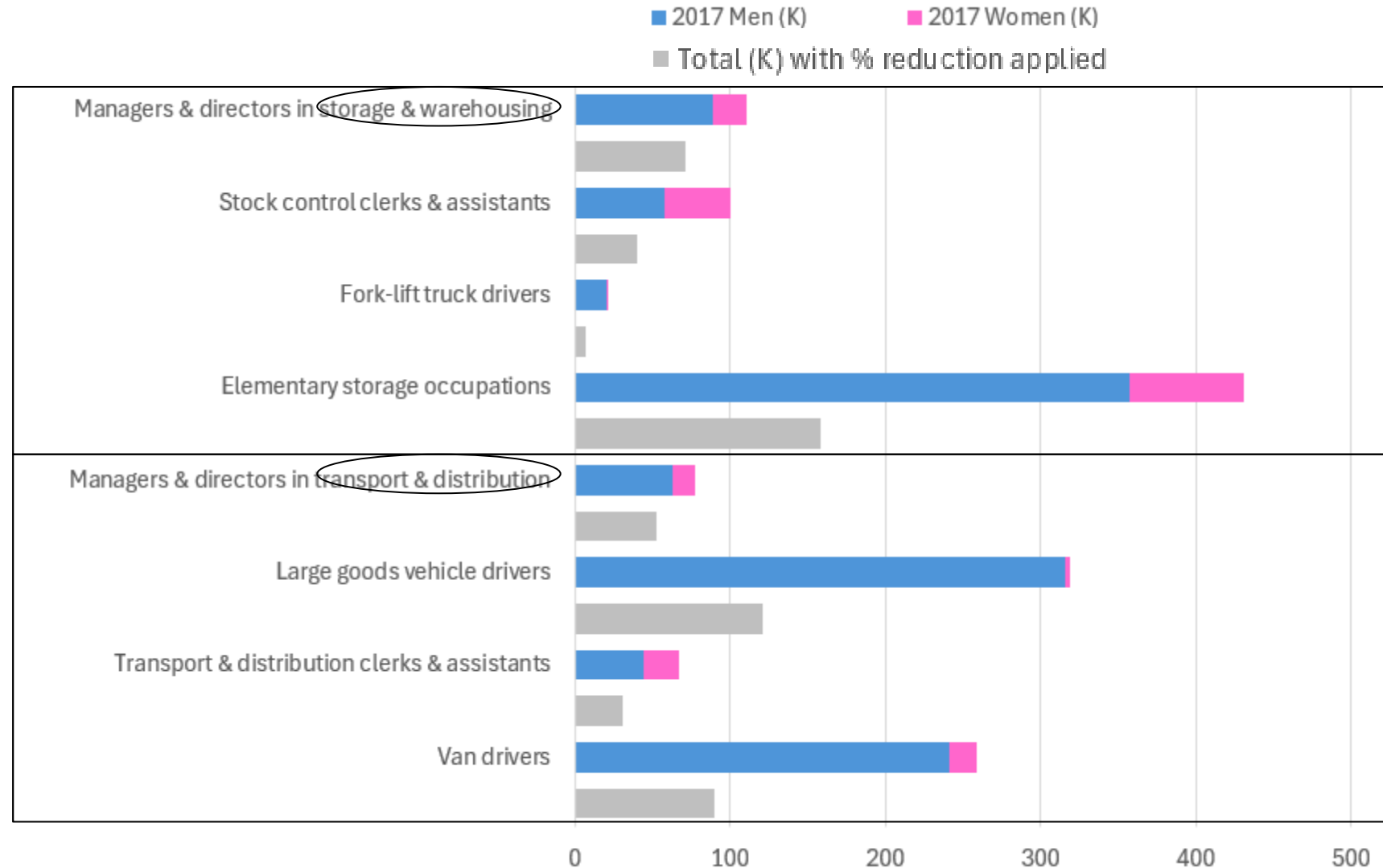
Waves	Description and impact
Wave 1: Algorithmic wave (to early 2020s)	Automation of simple computational tasks and analysis of structured data, affecting data-driven sectors such as financial services.
Wave 2: Augmentation wave (to late 2020s)	Dynamic interaction with technology for clerical support and decision making. Also includes robotic tasks in semi-controlled environments such as moving objects in warehouses.
Wave 3: Autonomous wave (to mid-2030s)	Automation of physical labour and manual dexterity, and problem solving in dynamic real-world situations that require responsive actions, such as in transport and construction.





What is the potential impact?

- > 2017 start point = latest ONS % automation base
- > NB Fork Truck Drivers in logistics = c25% in 2021
- > Grey = what if the ONS future automation % is applied to 2017 figures
- > **However**, say logistics grew at 4% pa across all existing roles, by 2040 the workforce would be about the same size as now...
- > ...but the mix and type of roles will have changed



What assumptions can we make about gender mix?



Automation often provides a tidy, clean & safe environment

Less heavy lifting, safety boots and broken nails

Other aspects will change the mix: age profile, part v full time, shifts, health...

Engineers - how many in logistics now? Role currently tends to be male-oriented

Potential jobs for young & low-educated men are at high risk of automation

STEM skills will be *vitaly* important – for everyone - men & women, young & old

My thanks to:

► **Dionne Redpath**,
Group Chief Operating Officer at Europa Worldwide Group, and

► **Nitin Deshmukh**,
Warehouse Manager at Schindler India

for their contributions to a LinkedIn discussion back in March around this topic

So, is automation a force for good for gender mix? We need to understand much more before we can say! And so...

Cranfield Project in 2025



“How automation is changing the demographic mix and pay in UK logistics”

- > Not just gender mix but also a range of other factors
- > This will be the subject of a Cranfield Supply Chain Management MSc thesis project
- > Starting Spring 2025, initiated & supported by Women in Logistics



You can help!

We need ...widely known **international brands** on board to make the project attractive to the student

...a variety of **companies prepared to be interviewed and surveyed** next summer

...a **small amount of financial support** to pay UK-based travel etc for the student

Interested? **Contact me** – ask me for a business card today or via LinkedIn:
www.linkedin.com/in/kirstentisdale



You can contact Kirsten: www.linkedin.com/in/kirstentisdale

Aricia Limited's website has a page devoted to diversity: <http://www.aricia.ltd.uk/diversity.aspx>

You can follow Women in Logistics UK: <https://www.linkedin.com/company/women-in-logistics-uk/>

And here is WiL's new website: <http://womeninlogistics.co.uk/>





- > Why is this topic important?
 - > Catalyst - impact of diversity on innovation, talent attraction, decision-making and financials – this link includes many further links to reports on latter: <https://www.catalyst.org/research/why-diversity-and-inclusion-matter/>
 - > Intel – talent attraction – p7 includes % hesitant to take a job in a company that doesn't have diverse leadership: <https://web.archive.org/web/20201003081450/https://newsroom.intel.com/wp-content/uploads/sites/11/2020/08/intel-inclusion-diversity-report.pdf>
 - > Kirsten, on the UKWA stand at Multimodal, talking to camera briefly (<1.5 minutes) prior to speaking later on behalf of Women in Logistics: <http://www.aricia.ltd.uk/Temp/KirstenTisdaleMM23Video.mp4>
- > Sources for graphs:
 - > Employment by occupation inc gender split: <https://www.nomisweb.co.uk/>
 - > Warehouses >100K sqft: https://www.savills.co.uk/research_articles/229130/358461-0#
 - > UK Integrator turnover: <https://www.gov.uk/get-information-about-a-company>
- > Reports on Automation:
 - > Which occupations are at highest risk of being automated?
<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/whichoccupationsareathighestriskofbeingautomated/2019-03-25>
 - > Will robots really steal our jobs?
<https://www.pwc.co.uk/economic-services/assets/international-impact-of-automation-feb-2018.pdf>