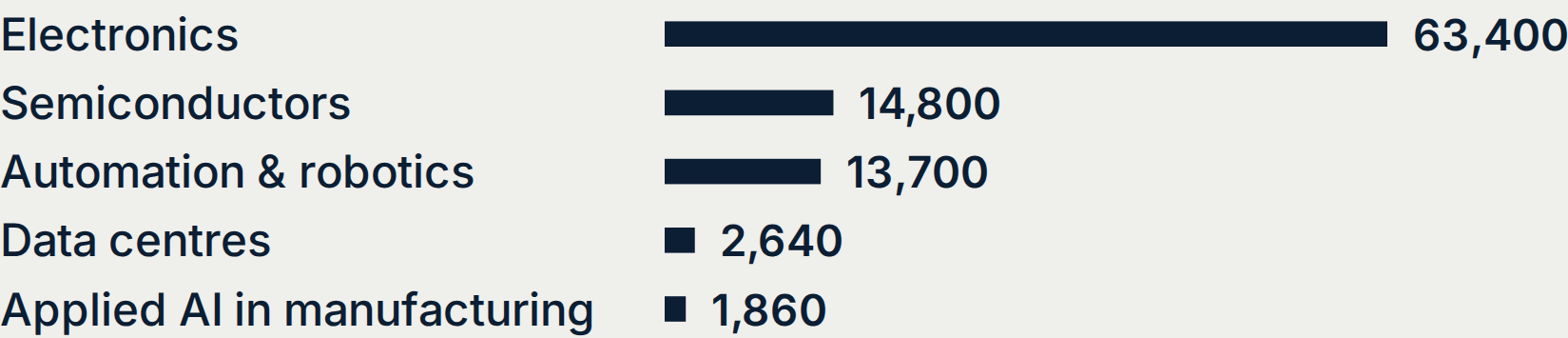


About 96,400 engineers, only about 7,200 at senior level.

5 SECTORS



3 TIERS

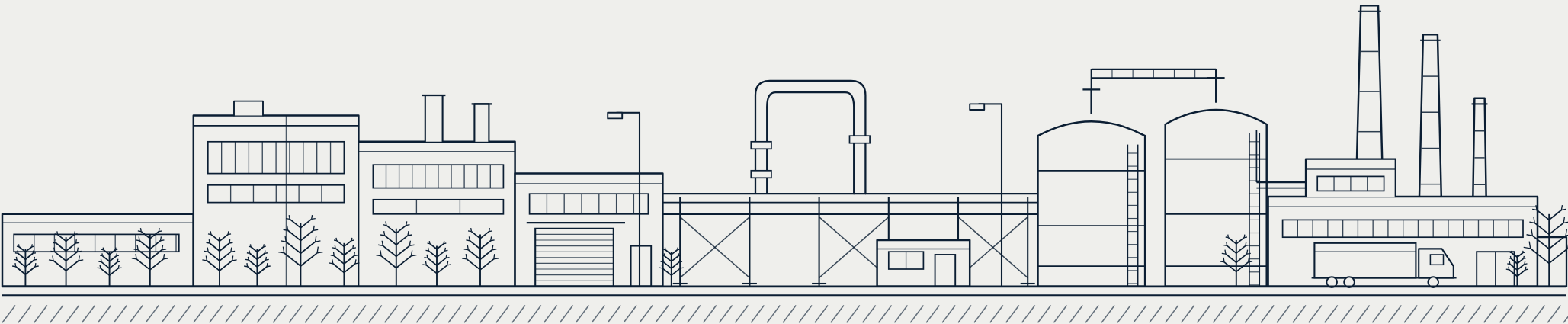
ENTRY · 56,600
Executes a defined process

MIDDLE · 32,616
Owns one step of the process

SENIOR · 7,184
Owns a whole line, process or product area

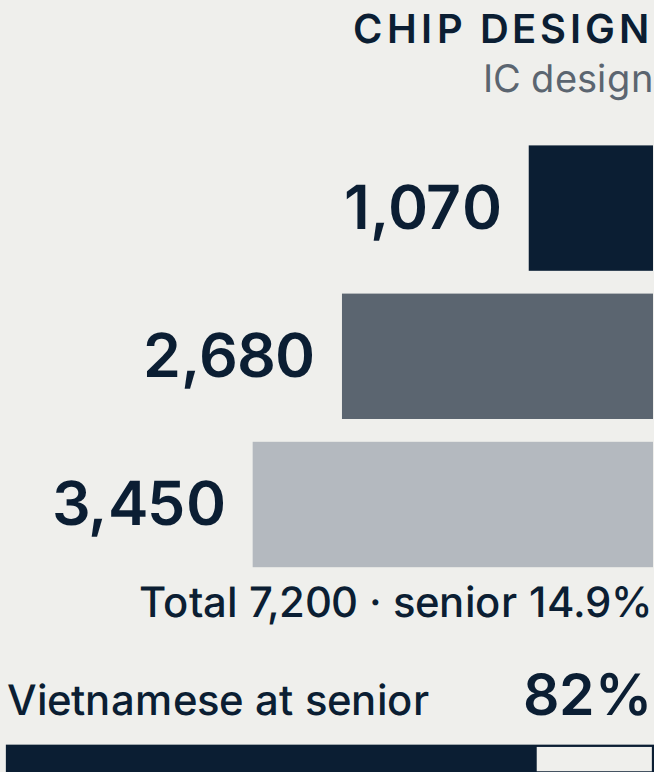
WHERE KELSON WORKS

Tiers follow scope of ownership, not job titles.



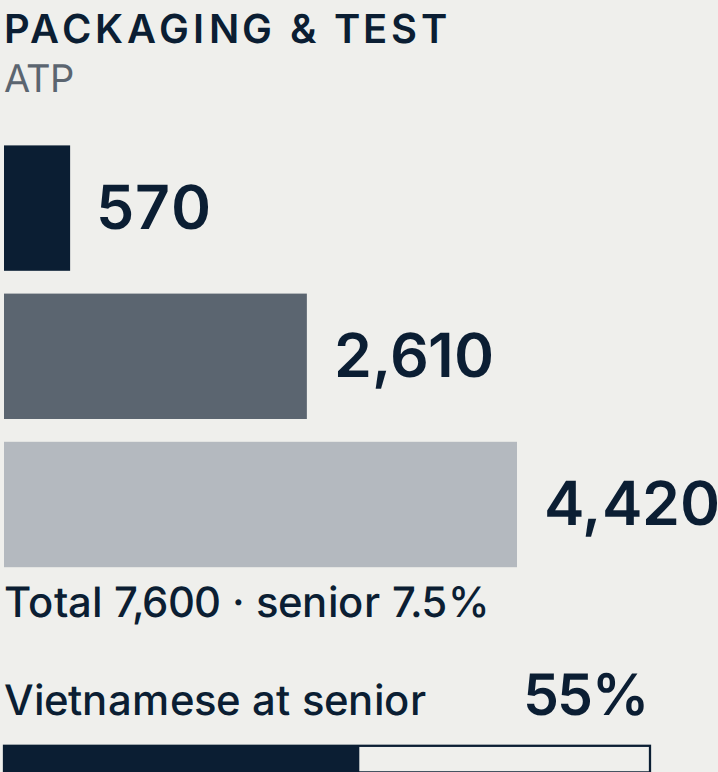
Semiconductors

Same industry, two very different talent pyramids.



MAJOR SITES

Marvell · 500+ engineers
Renesas · Synopsys · Cadence
Qualcomm · FPT Semiconductor



MAJOR SITES

Intel · HCMC
Amkor · Bac Ninh
Hana Micron · Bac Giang

READING THE NUMBERS

3.2 : 1
entry engineers per senior
in chip design

7.8 : 1
entry engineers per senior
in packaging & test

257
of 570 seniors in packaging
& test are foreign (45%)
vs 193 of 1,070 in design

Electronics

The largest sector. The steepest pyramid.



Total 63,400 engineers · senior 6.1%



R & D

Samsung R&D Vietnam
~2,500 engineers (2026)
LG Innotek · Hai Phong

MANUFACTURING

Samsung · LG · Foxconn · Luxshare
Goertek · Pegatron · Jabil · Canon

READING THE NUMBERS

10.3 : 1

entry engineers per senior,
the steepest of any sector

66%

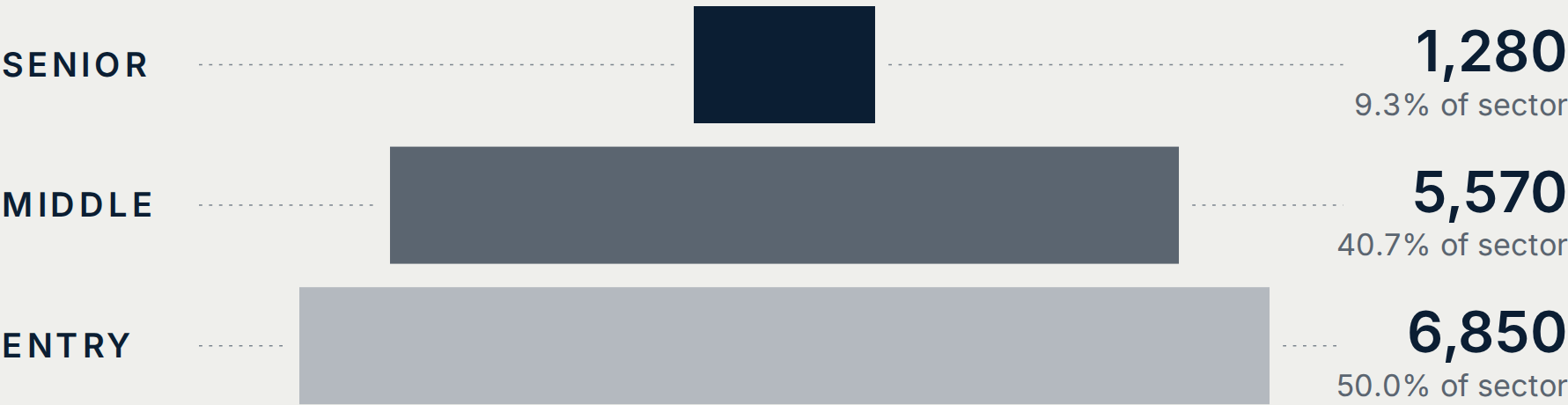
of all engineers work in
electronics, but only 54%
of the senior tier

1,600

foreign seniors: two in three
of all foreign seniors
in the five sectors

Automation & robotics

Value is moving toward integration.



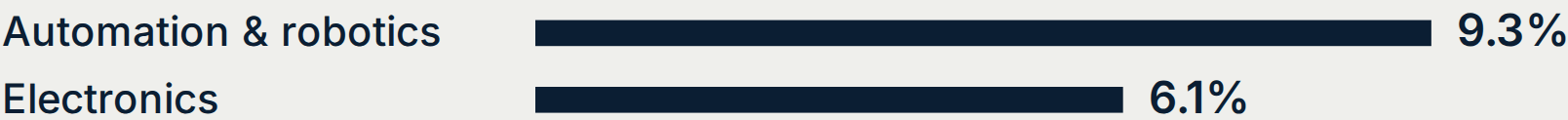
Total 13,700 engineers · senior 9.3%



VALUE CHAIN



SENIOR SHARE OF SECTOR HEADCOUNT



READING THE NUMBERS

5.4 : 1

entry engineers per senior

41%

of the sector is middle tier, the pipeline to senior

+87%

growth of the senior tier if 1 in 5 middle engineers moved up (a what-if)

Applied AI in manufacturing

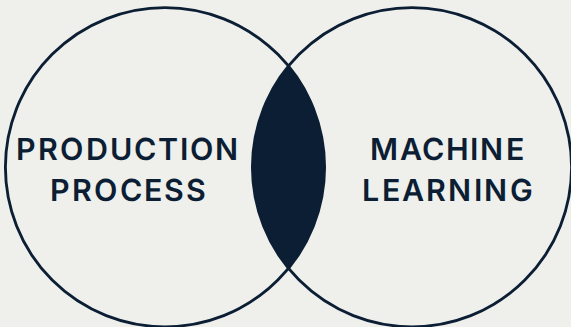
Not a pyramid. It bulges in the middle.



Total 1,860 engineers · senior 9.9%



THE SCARCE OVERLAP



Machine learning talent is not what is scarce. People who know both the production process and the model are: about 184 at senior level.

READING THE NUMBERS

886

middle engineers, more than 790 at entry. The only sector with this shape

9.9%

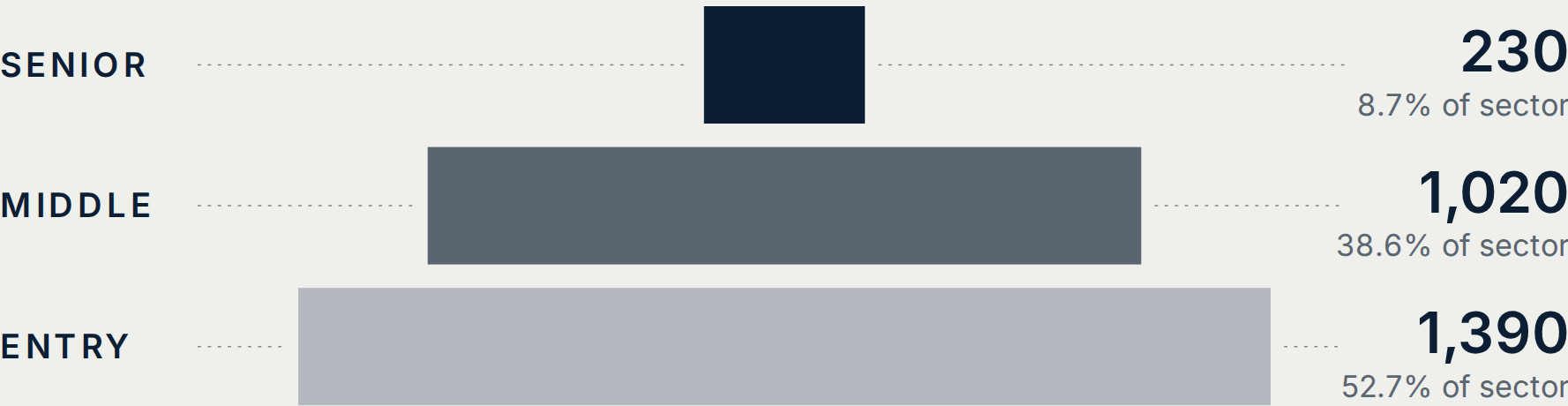
senior share, second only to chip design (14.9%)

1 in 4

senior seats held by foreign engineers (26%)

Data centres

Small and young. The senior tier is still forming.



Total 2,640 engineers · senior 8.7%



MAJOR SITES

Viettel IDC · VNPT · FPT Telecom · CMC Telecom
ST Telemedia · NTT · Equinix

Scope: design, construction and operation of data centres. Excludes the power grid.

READING THE NUMBERS

6.0 : 1

entry engineers per senior

39%

of senior seats held by
foreign engineers, about 90

3.2%

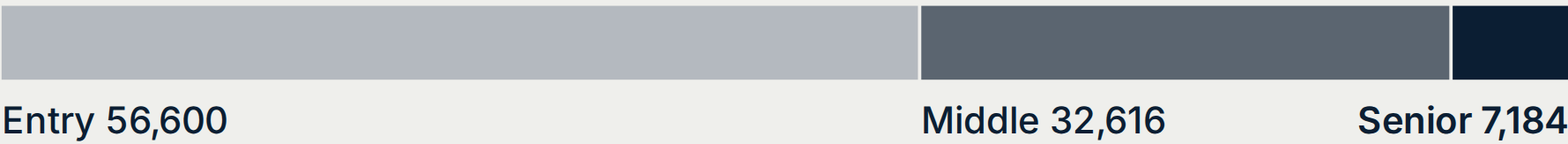
of the nation's 7,184 seniors
work in data centres

96,400

engineers across 5 sectors

7,184

at senior level



SIX PYRAMIDS, SIX SHAPES



Chip design
senior 14.9%



Packaging & test
senior 7.5%



Electronics
senior 6.1%



Automation & robotics
senior 9.3%



Applied AI
senior 9.9%



Data centres
senior 8.7%

Each pyramid is drawn to its own scale.

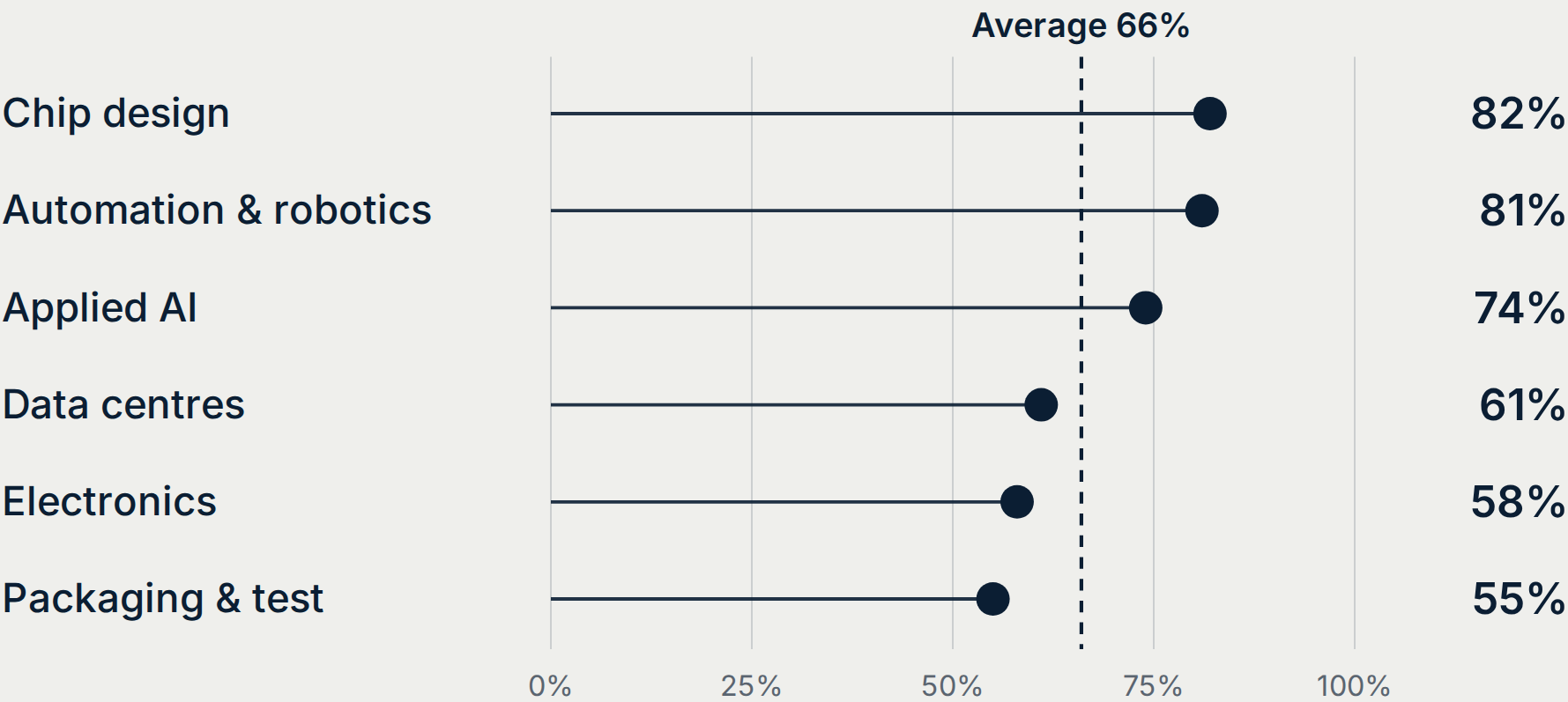
SENIOR SHARE OF EACH SECTOR

ENTRY PER SENIOR

Chip design	14.9%	3.2 : 1
Applied AI	9.9%	4.3 : 1
Automation & robotics	9.3%	5.4 : 1
Data centres	8.7%	6.0 : 1
Packaging & test	7.5%	7.8 : 1
Electronics	6.1%	10.3 : 1

At senior level, who holds the seats?

Share of Vietnamese nationals (incl. returnees from abroad) at senior level



2,450 foreign engineers at senior level,
out of about 7,184 people.

WHERE THE FOREIGN SENIORS SIT



The gap is not about ability. The senior tier takes years to form.
The gap will close. The question is how fast.



With only about 7,200 people at senior level nationwide, finding the right one is not a matter of screening CVs.

Kelson runs technical search in exactly these five sectors: semiconductors, electronics, automation & robotics, applied AI in manufacturing, data centres.

An hour of interview, years of work.
We read the years.

kelsonsearch.com

The map will be updated. If you see a number that looks wrong, tell me.

