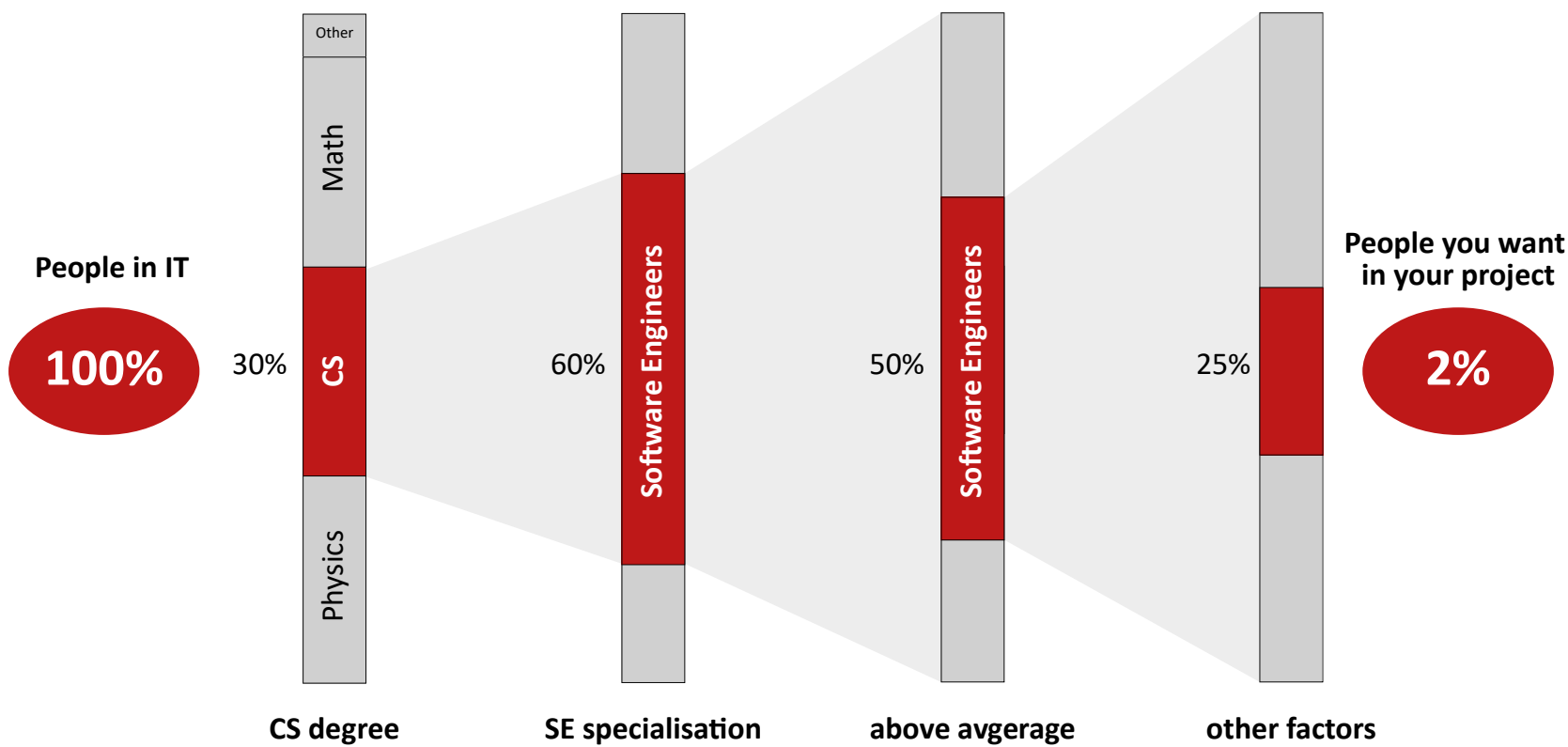


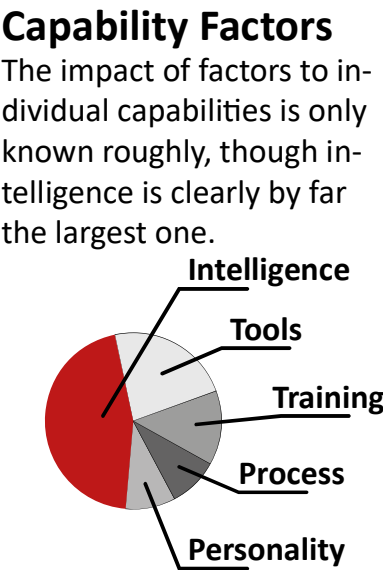


# Individual Differences in Personal Capability

## Typical Educational Backgrounds



**10x**  
Since the late 1960s, many studies consistently documented a very large spread in the levels of individual capabilities of programmers. More precisely, the productivity varies an order of magnitude: The best of programmers produce ten times as much output per time unit. The same is true for software development organisations.

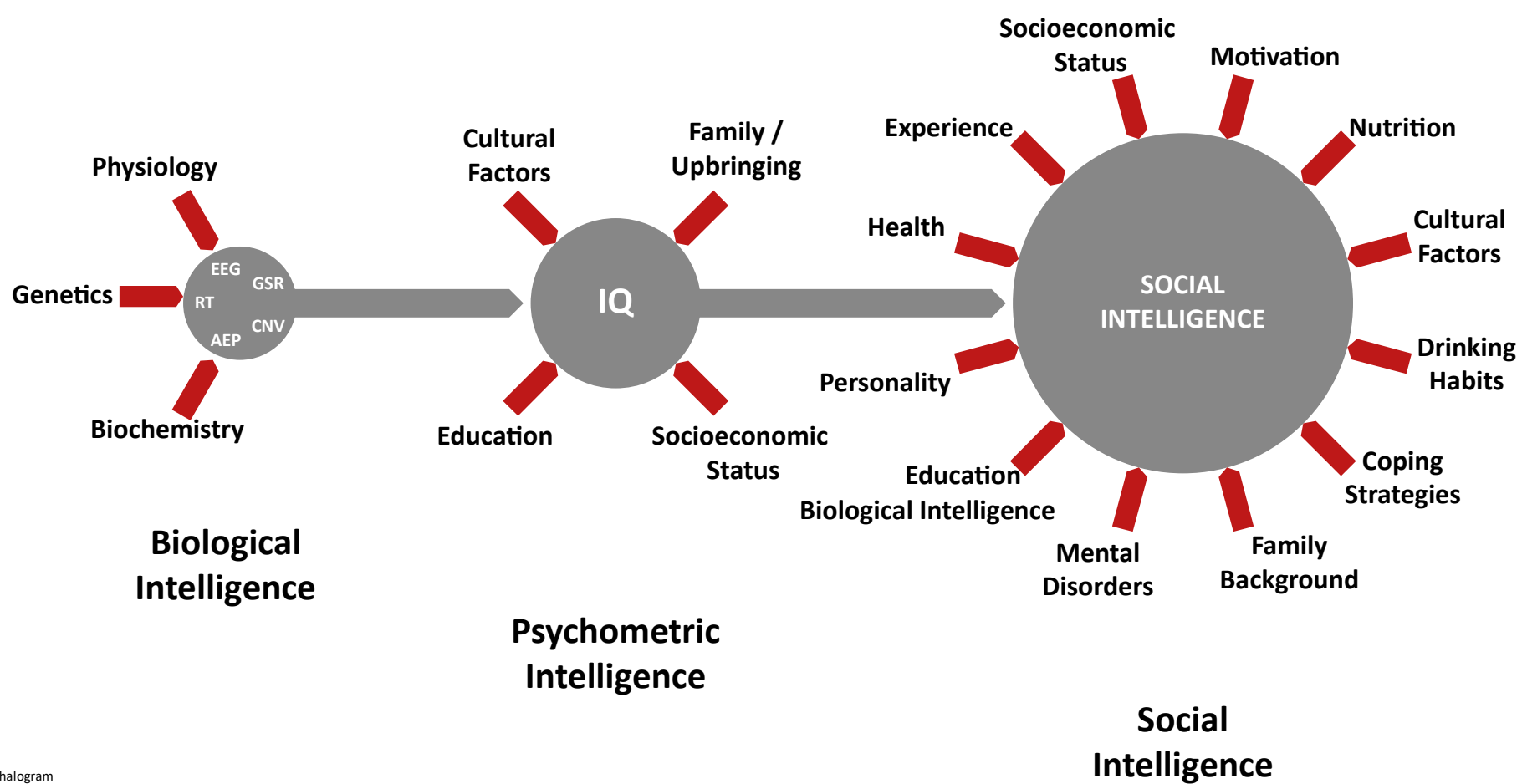


Much software is created outside of the IT industry as such. There, the number of people with CS training is a lot smaller.

According to Eurostat, 3.5% of the EU's total employment in 2015 are ICT professionals (Finland: 6.5%, Germany 3.7%).

Since 2011, the number grew by almost 1.5 million. The share of total employment increased from 3% to 3.5% (up 17%) (FI: up 14%, DE up 30%).

## Factors Contributing to Human Intelligence



Capability is a necessary, not a sufficient condition for actual performance

EEG Electro Encephalogram  
RT Reaction Time  
AEP Averaged Evoked Potential  
CNV Contingent Negative Variation  
GSR Galvanic Skin Response

Philip Vernon: Speed of Information-Processing and Intelligence. Ablex Publishing, 1987