

Digital Engineering

The new growth engine for discrete manufacturers



Transforming product innovation and engineering – why it matters

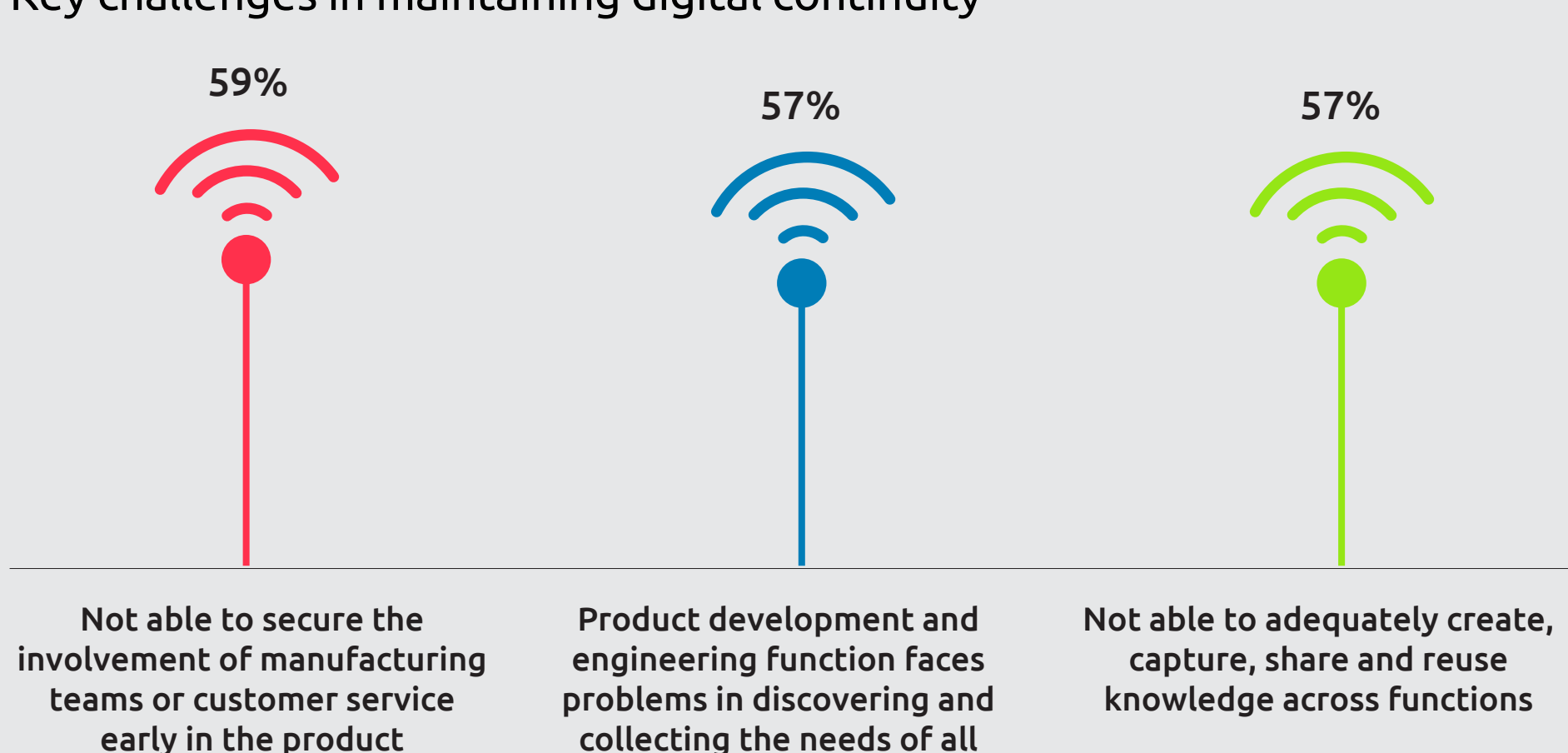
Legacy approaches to product innovation and development are not delivering an innovation return



In 2017, manufacturing industry was responsible for 58% of global R&D spend. Only 19% of discrete manufacturers feature in Forbes's list of the most innovative companies

Digital continuity is sub-optimal

Key challenges in maintaining digital continuity



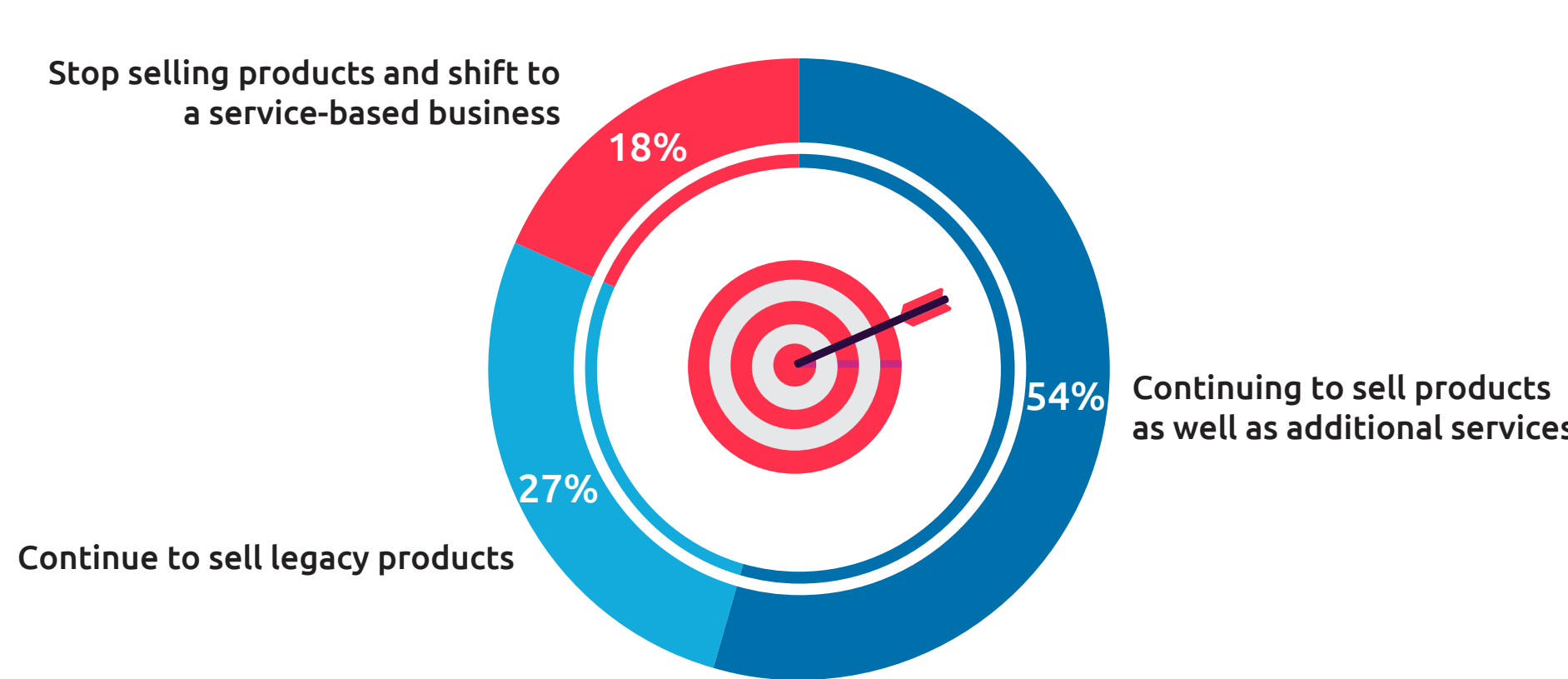
Source: Capgemini Research Institute, Digital Engineering Survey, April–May 2018 (N = 1013).

Capitalizing on the servitization opportunity require enhanced capabilities



The size of the connected products prize through manufacturing value added globally will be \$519 billion to \$685 billion by 2020.

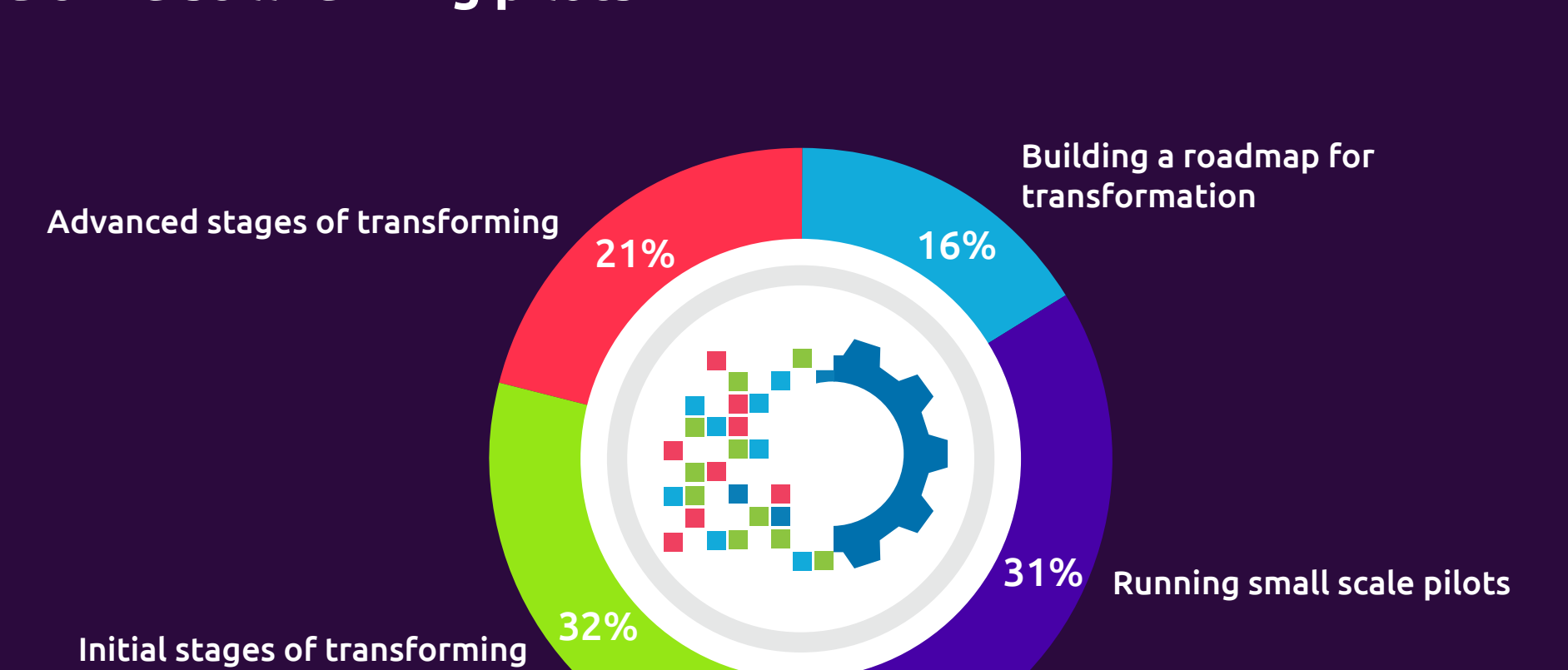
What are your ambitions with relation to smart, connected products over the next three years?



Source: Capgemini Research Institute, Digital Engineering Survey, April–May 2018 (N = 1013). Percentages may not total 100 due to rounding.

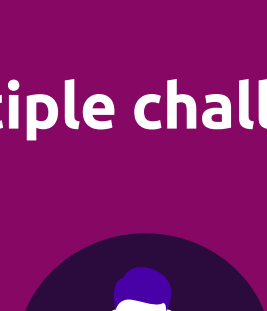
Few manufacturers have scaled their transformation efforts

Only 21% of manufacturers are at an advanced stage of transforming product innovation and engineering with close to a third still running pilots



Source: Capgemini Research Institute, Digital Engineering Survey, April–May 2018 (N = 1013).

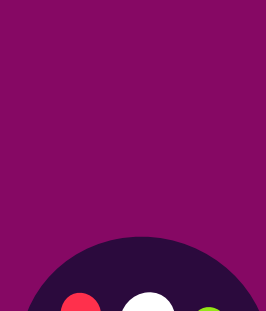
Multiple challenges slow down manufacturers



Use of digital technologies in product development processes is low



Not able to leverage product data and partner ecosystem to drive product innovation

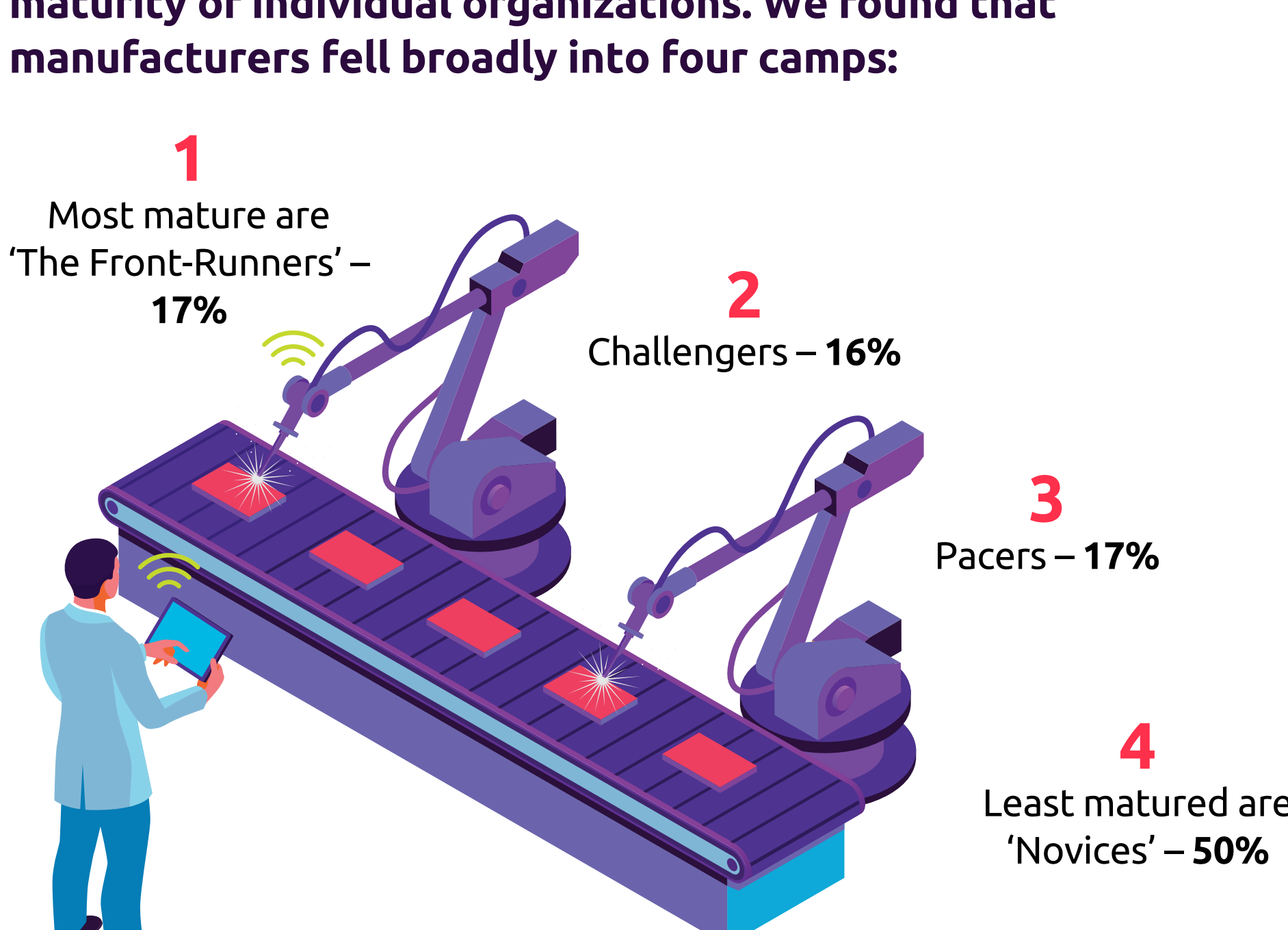


Talent shortage in non-physical skills continues to be an acute issue

Source: Capgemini Research Institute, Digital Engineering Survey, April–May 2018 (N = 1013).

How to overcome the challenges on the road to transformation

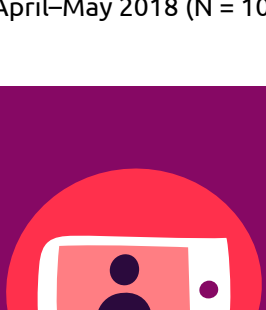
The transformation roadmap will vary depending on the maturity of individual organizations. We found that manufacturers fell broadly into four camps:



Source: Capgemini Research Institute, Digital Engineering Survey, April–May 2018 (N = 1013).



Novices need a clear vision, strong leadership capability, and a focus on bridging gaps in both technology and talent



Pacers need to focus on building a partner ecosystem and a digital culture



Challengers must develop talent and build on data competencies

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