



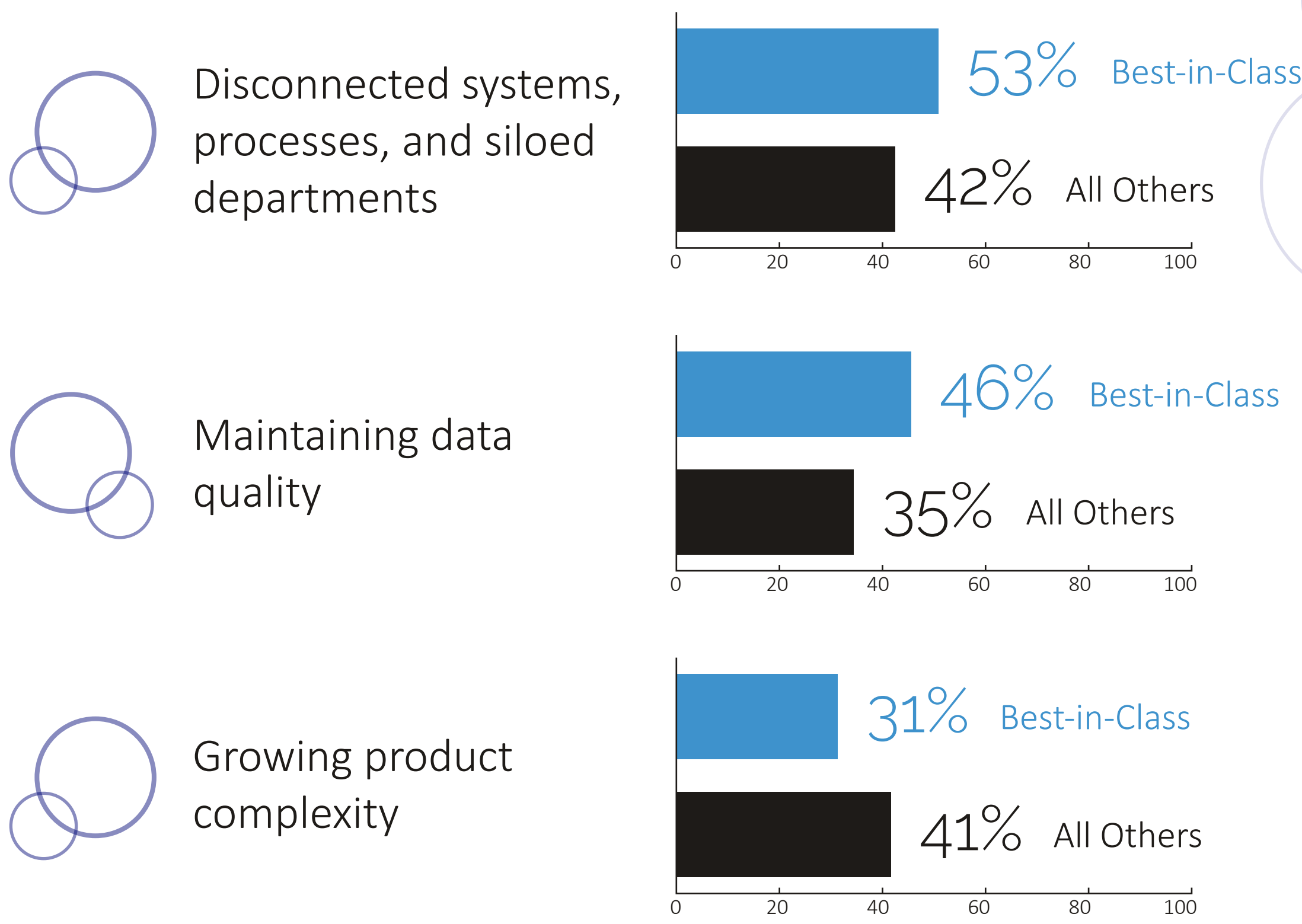
Closed Loop Quality

The Importance of Incorporating Quality Management into the Product Life Cycle

Delivering high-quality products while bolstering operations with more efficient machinery and software is top-of-mind for manufacturers and vital to successful digital transformation initiatives. A recent Aberdeen survey of 100 senior executives within large discrete manufacturing organizations revealed that automated quality services is most commonly cited as a critical feature of PLM systems (83%).

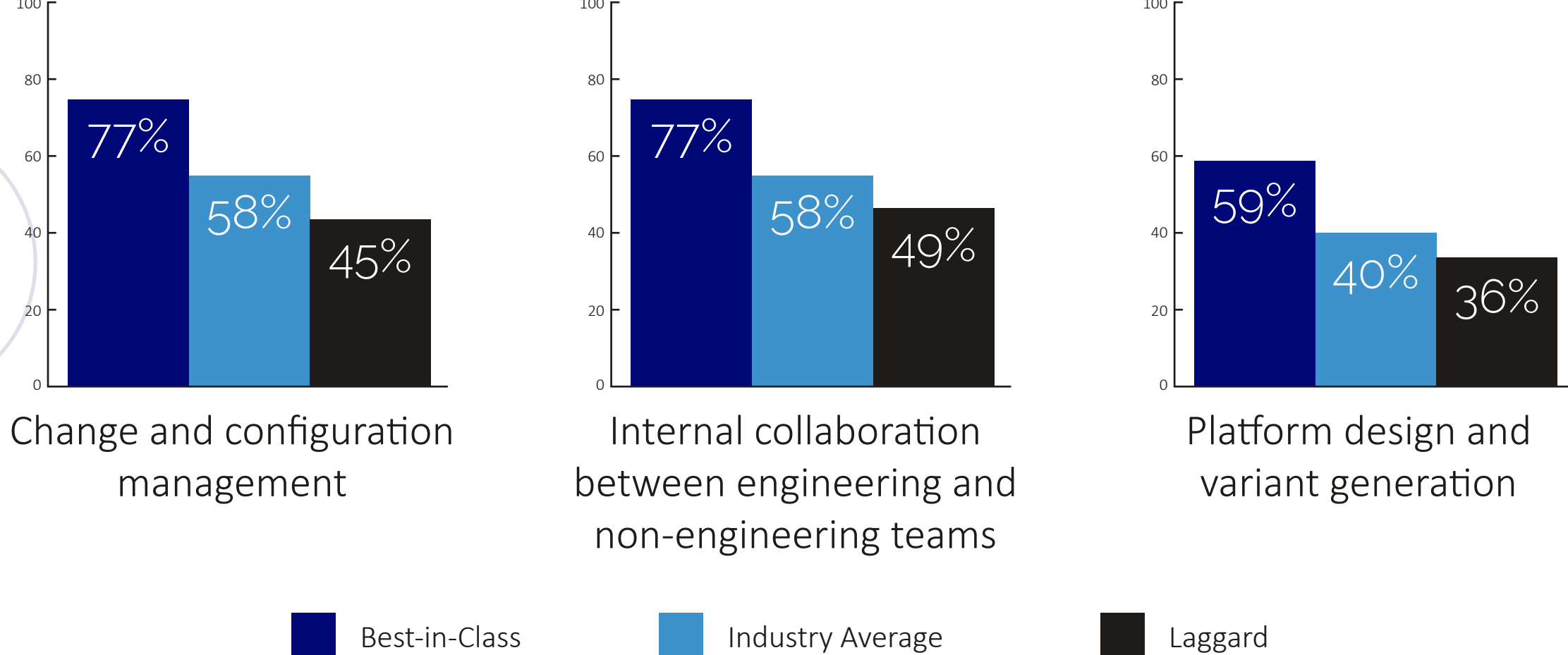
Challenges

Strategic quality measures come at a premium, in large part due to inherent challenges in today's product development processes. Best-in-Class discrete manufacturers cited the following as the “most challenging” roadblocks in their development processes:



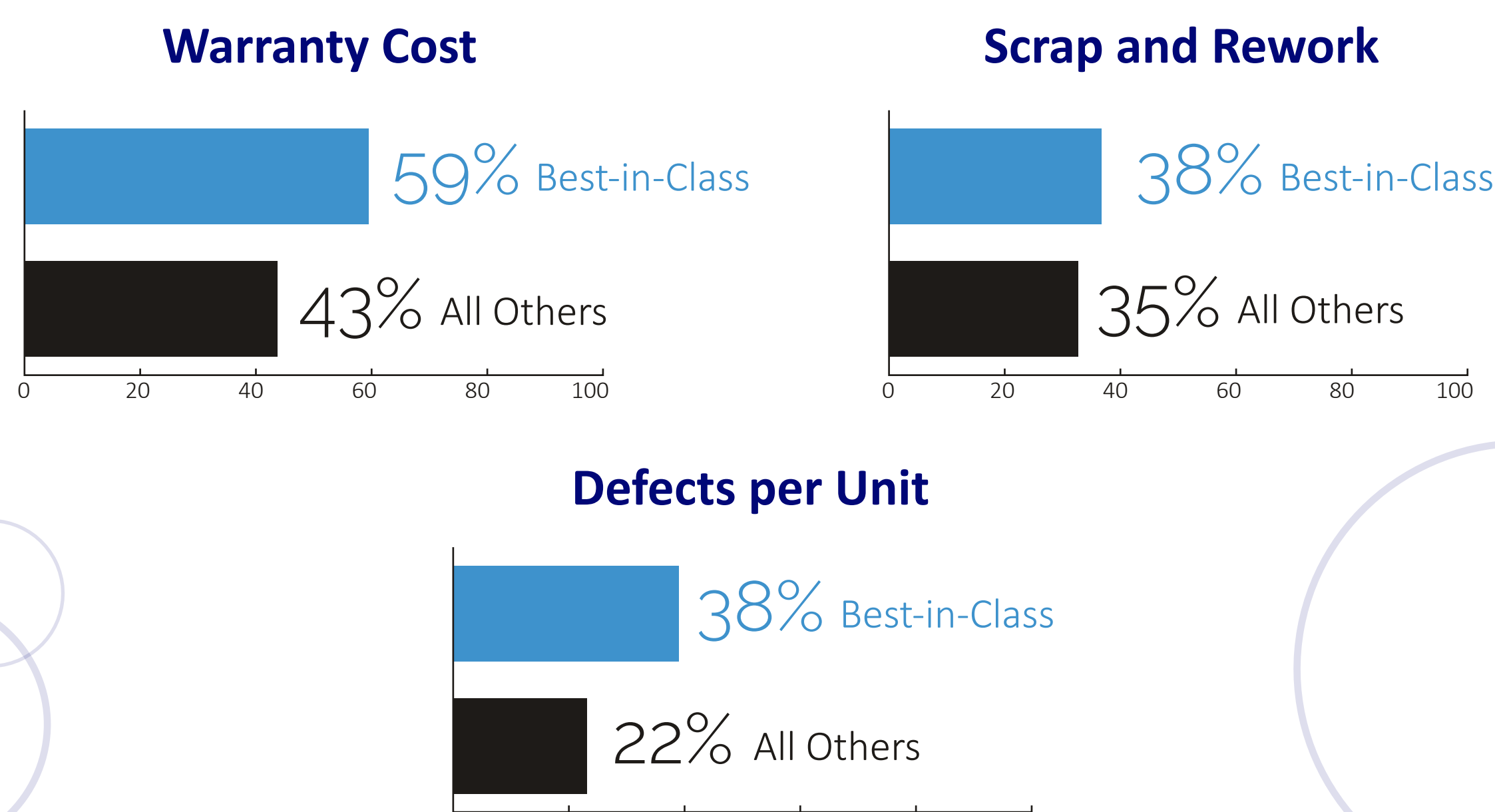
Best Practices

Best-in-Class companies are more likely to take a platform approach in their design process to help generate, manage, and validate product variants, ultimately serving customers better while maintaining quality. Companies should employ Best-in-Class strategies to tackle these quality challenges within PLM:



Business Outcomes

Focusing on quality helps to improve overall operational performance while decreasing related costs. The result? An increase in customer satisfaction leading to better brand reputation and repeat purchases. The recognition of quality as a major value driver in the product environment leads to improvements in other key areas:



*Additionally, 88% of Best-in-Class companies saw an increase in first pass yield (see sidebar), making them 2.7x more likely to drive improvement in this key metric — indicating that Best-in-Class companies are making updates to their quality processes, allowing manufacturers to produce more high-quality units.

Key Takeaways

Continuous access to quality data within PLM systems is ideal for optimizing the entire product development cycle. When reflecting on the importance of quality and the impact it has on PLM, there are three aspects to highlight:

- Senior executives view automated quality processes as critical value drivers.
- Technology and process maturity are influential best practices for driving performance.
- Top companies focusing on quality see major reduction in the costs of poor quality, including scrap, rework, line failures, and warranty claims.

Summary

Across the evolving manufacturing landscape, the need for automated quality processes tops the list as the most sought-after capability of today's technology platforms. Companies looking to enhance and extend governance and traceability initiatives should aim to achieve a Best-in-Class level of quality management to generate tangible business results in cost, accuracy, and productivity. By placing quality at the forefront of their PLM implementation, manufacturers can reduce process and system complexity while advancing their enterprise digital thread initiative.