

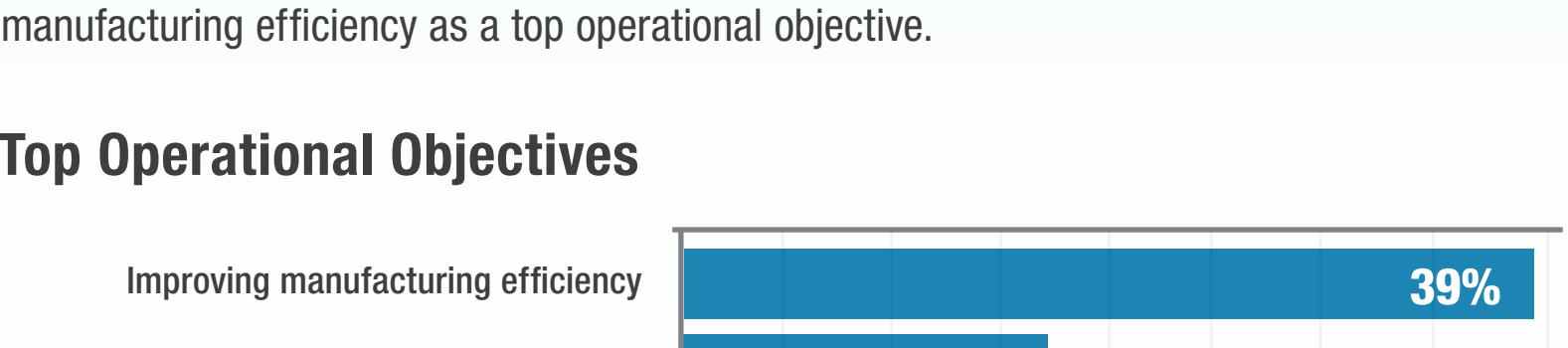
DESIGNING FOR SUSTAINMENT IN A&D:

3 STEPS to Digital Transformation and Meeting the Evolving Needs of Customers

Today there is perhaps no industry better suited to benefit from Digital Transformation than the Aerospace & Defense industry. Why?

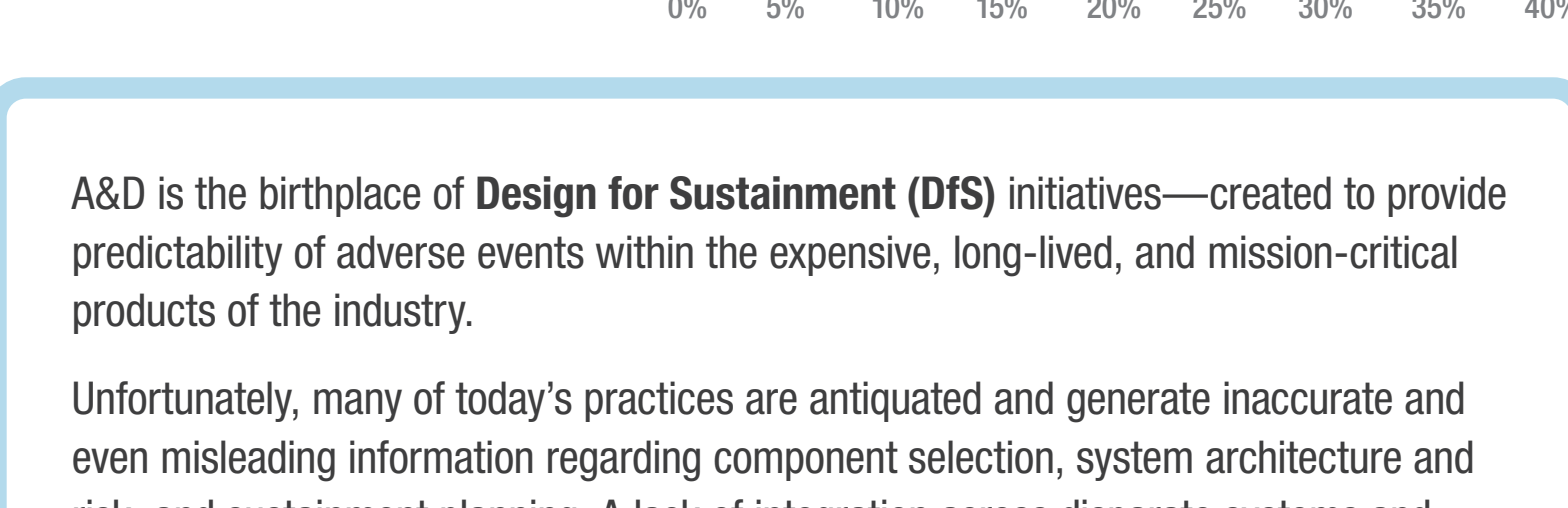
In addition to A&D's opposing and interconnected drivers and challenges like growing supplier networks, shrinking defense budgets, and the production of high-volume, configure to order (CTO) products, today customers in both the commercial and defense sectors have rising demands

- A&D buyers are making decisions on the total cost to acquire and maintain aircraft and defense systems, which regularly have lifecycles of decades, rather than months or years like other industries.
- The visibility, analytics, and integrative capabilities offered by the Digital Transformation Framework are becoming critical in fulfilling these demands
- A&D suppliers need to update outdated systems and processes with cutting edge technology – Digitally Transforming their operations.



A&D companies are feeling plenty of pressure, placing heavy emphasis on improving manufacturing efficiency as a top operational objective.

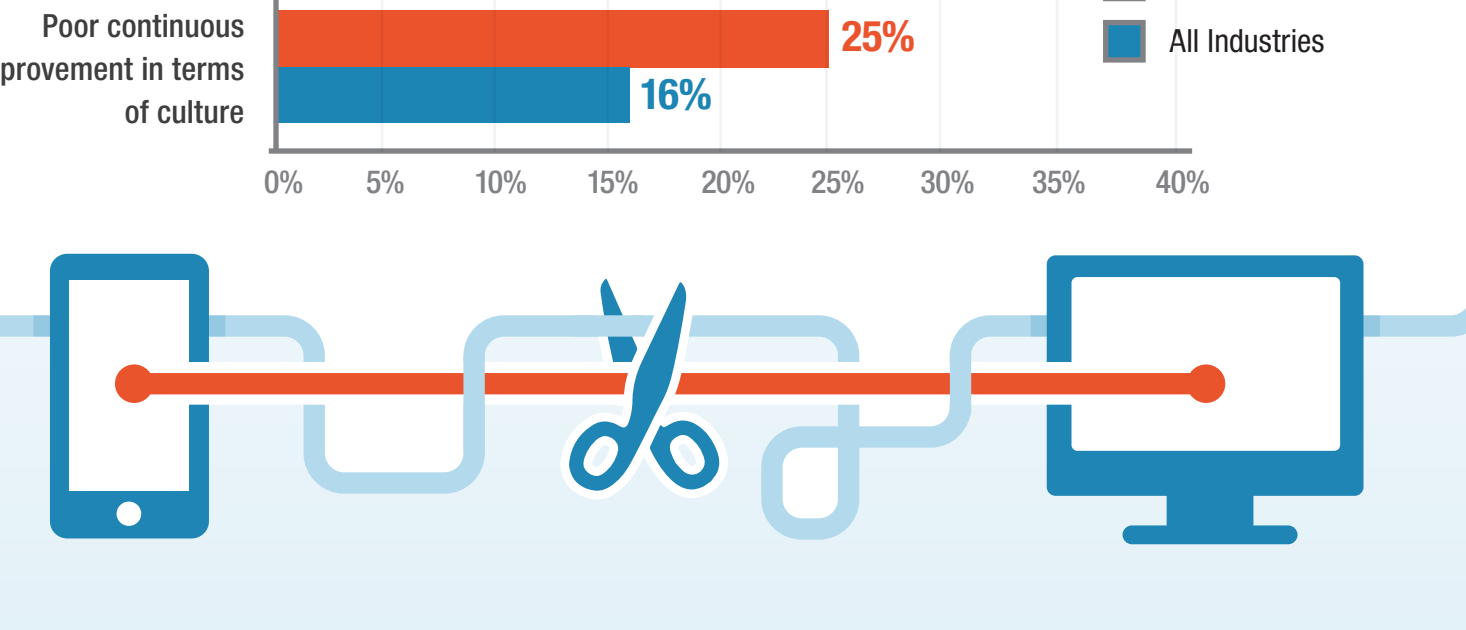
Top Operational Objectives



A&D is the birthplace of **Design for Sustainment (DfS)** initiatives—created to provide predictability of adverse events within the expensive, long-lived, and mission-critical products of the industry.

Unfortunately, many of today's practices are antiquated and generate inaccurate and even misleading information regarding component selection, system architecture and risk, and sustainment planning. A lack of integration across disparate systems and data sources is a key root cause behind this.

Top Operational Challenges

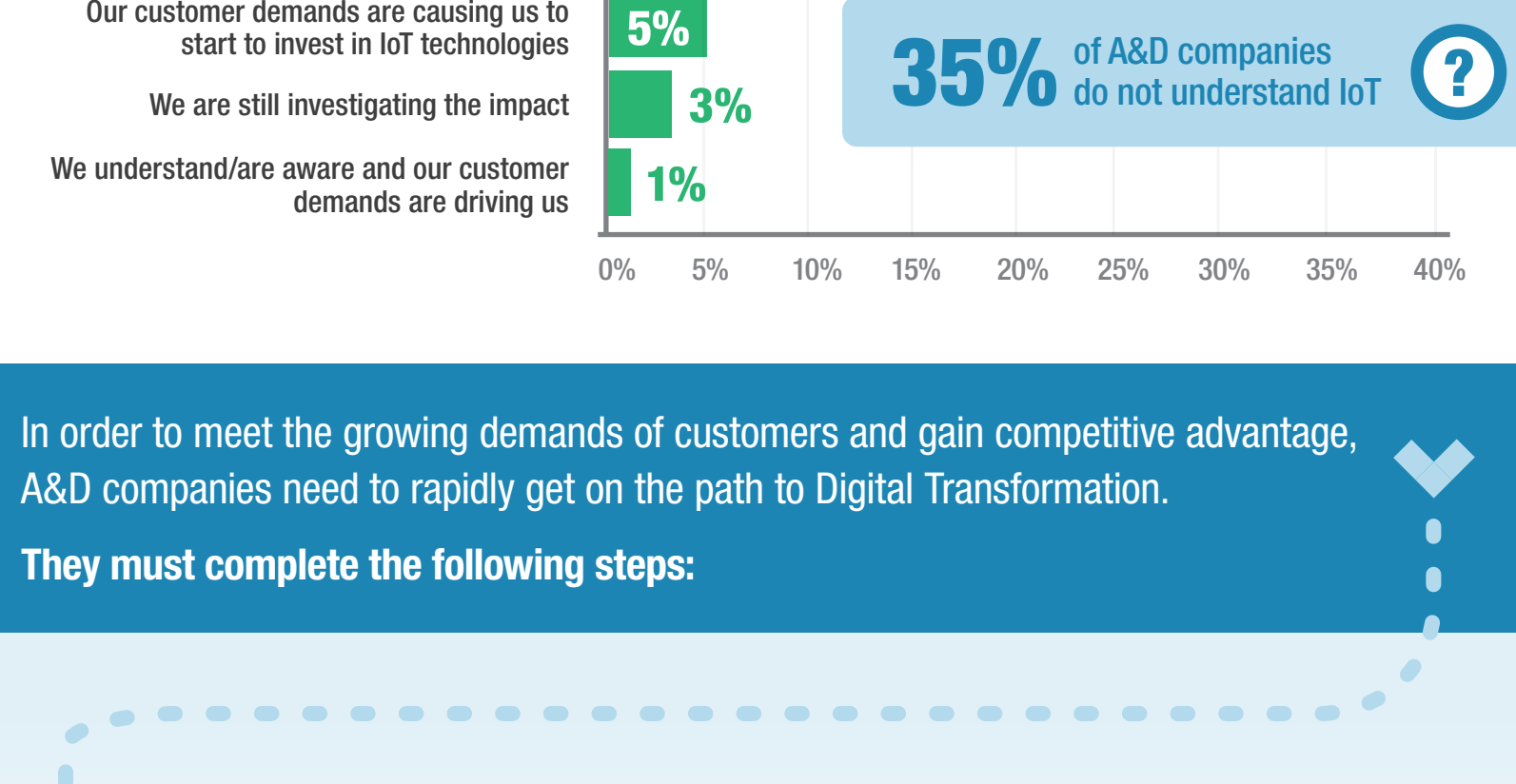


DfS CONCEPTS INCLUDE DESIGN FOR:

- Availability
- Reliability
- Maintainability
- System Safety
- Cost
- Testability
- Logistics

It's not just a disconnect in systems—there's a gap in thinking as well. Though there's evidence that manufacturers are glimpsing the possibilities of Smart Connected Assets, the education and awareness about the Industrial Internet of Things (IIoT), is lagging behind where it needs to be.

How is the Internet of Things (IIoT) impacting your business today?

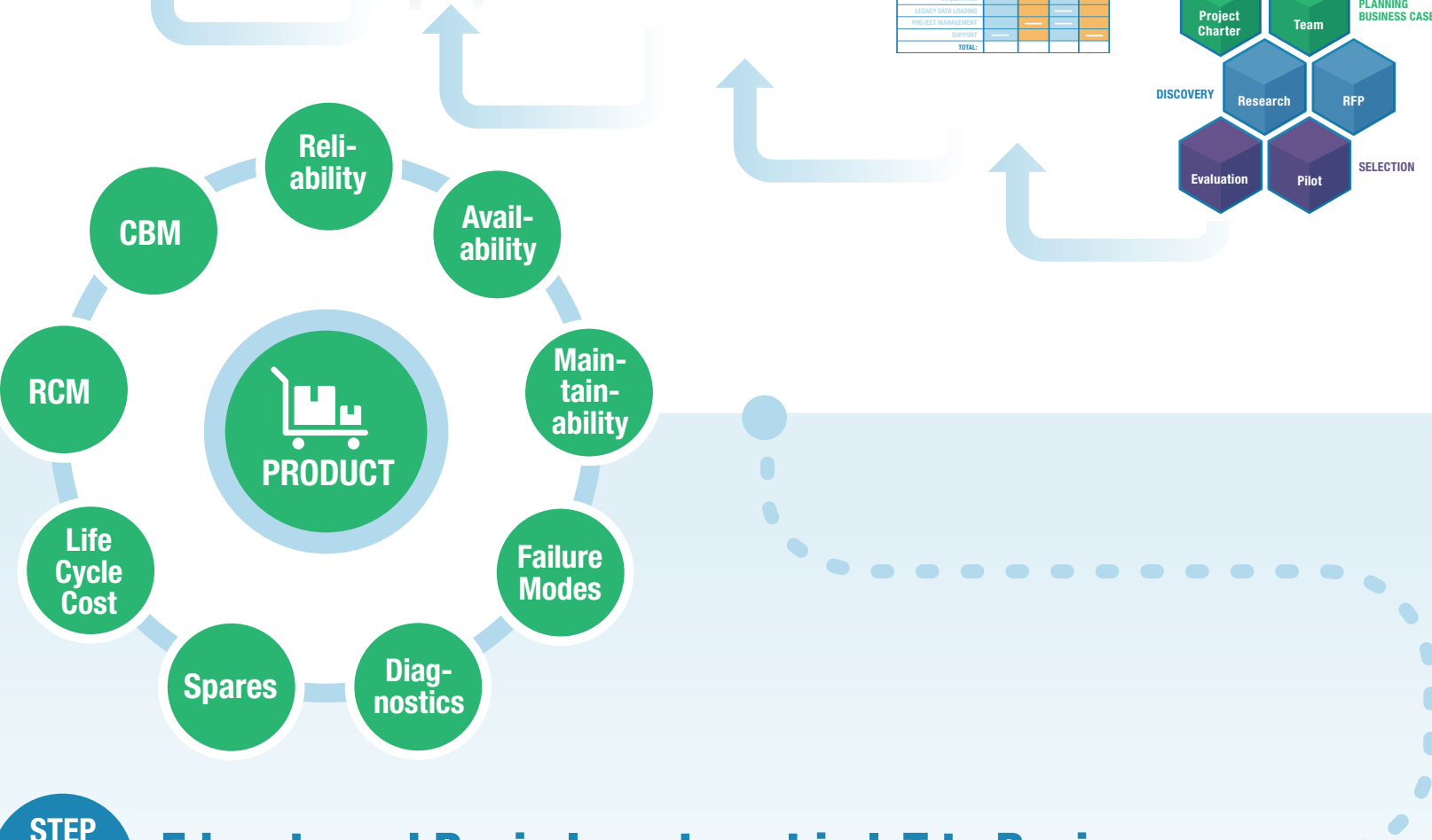


In order to meet the growing demands of customers and gain competitive advantage, A&D companies need to rapidly get on the path to Digital Transformation.

They must complete the following steps:

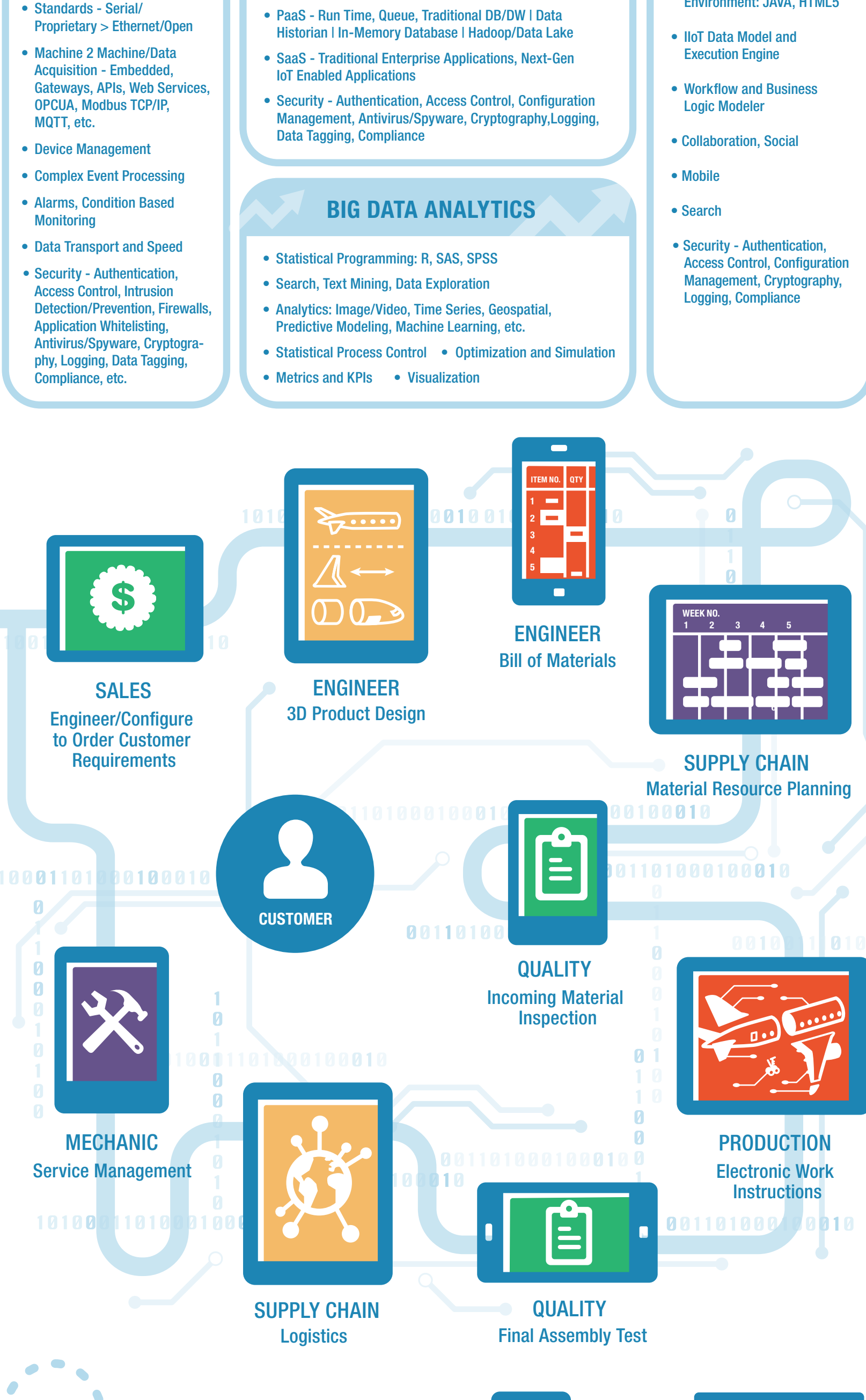
STEP 1 Embrace the importance of Digital Transformation laterally, vertically, and across the product lifecycle

Digital Transformation Framework

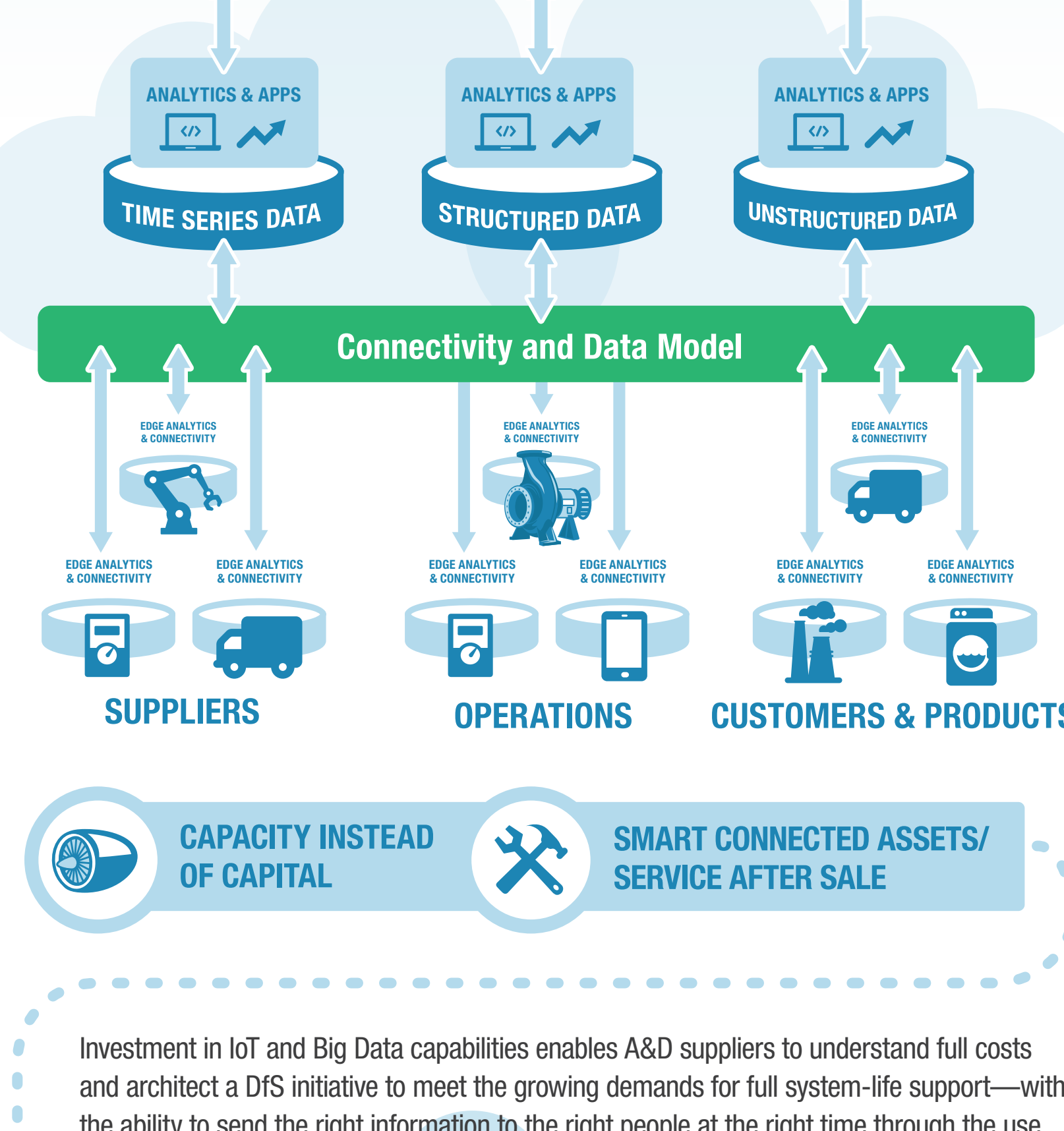


STEP 2 Educate and Begin Investment in IIoT to Begin Weaving the Digital Thread Across the Value Chain

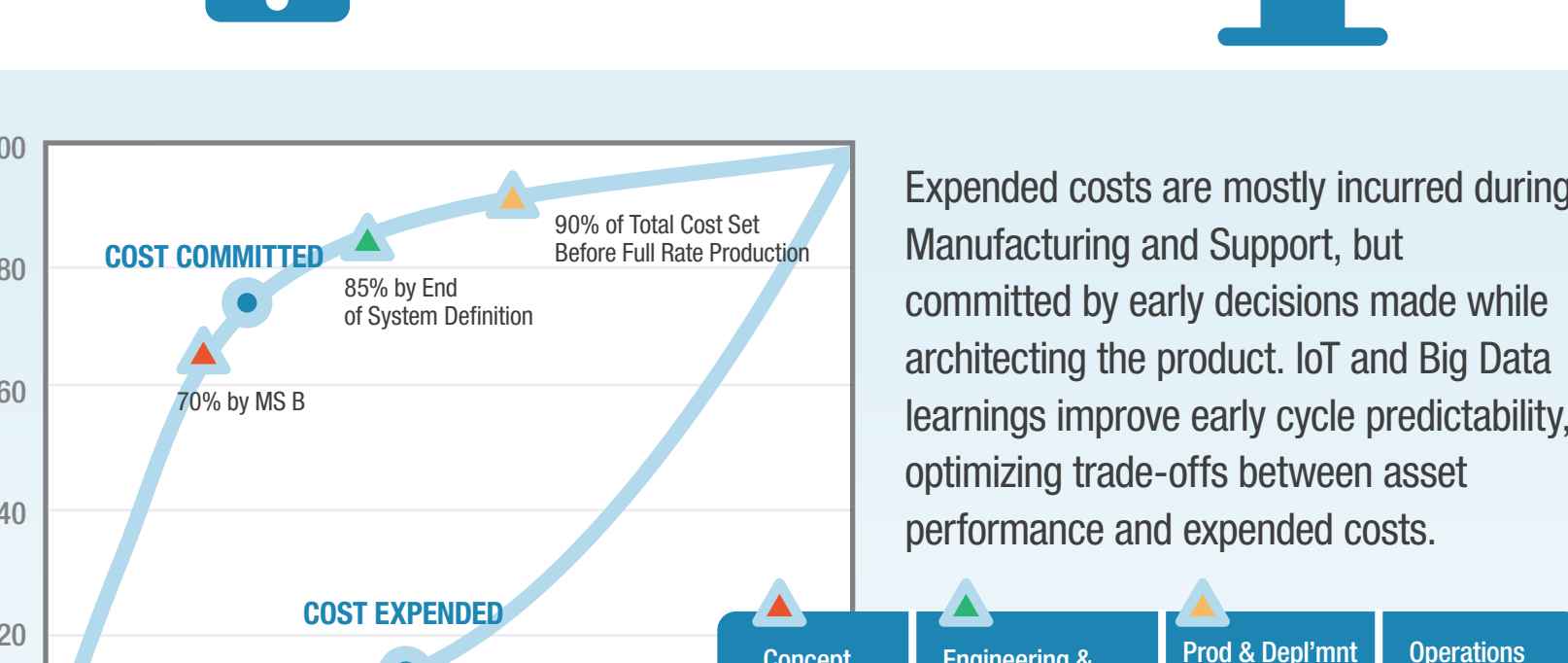
Industrial Internet of Things Platform



STEP 3 Elevate data management and predictive analytics capabilities to gain new operational intelligence and insights, and move toward the possibility of new business models



Investment in IIoT and Big Data capabilities enables A&D suppliers to understand full costs and architect a DfS initiative to meet the growing demands for full system-life support—with the ability to send the right information to the right people at the right time through the use of mobile devices.



Expended costs are mostly incurred during Manufacturing and Support, but committed by early decisions made while architecting the product. IIoT and Big Data learnings improve early cycle predictability, optimizing trade-offs between asset performance and expended costs.

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