

5 elements of successful digital transformation

If a digital transformation project is unsuccessful, it is often because technology was prioritized without devoting equal attention to people and process. In this checklist, learn how using 5 key elements when planning technology investments helps to prevent failure and produce positive outcomes.

Successful digital transformation efforts share five elements: leadership, product, development, architecture, and operations. Deficits in even one element can reduce the value of digital transformation programs or cause them to fail entirely. When building capabilities in each element, pay attention to people and process as well as technology.

Organizations that build competencies in these areas can more quickly adapt to evolving needs and increase user satisfaction.

1 Encourage leadership



- ▶ **Promote a culture of experimentation and collaboration.** Encourage transparent and honest communications and create a shared goal.
- ▶ **Reward the behaviors you would like to see:**
 - ▶ Create common purpose and vision.
 - ▶ Push decisions down the chain of command to the people doing the work.
 - ▶ Break down unnecessary barriers between departments.
 - ▶ Invest in and encourage continuous learning.
 - ▶ Foster a culture that does not place blame or punish people for failure.

2 Focus on products



- ▶ **Shift the focus from projects to products.** Projects stop when the plan is completed, while products evolve continuously as needs change.
- ▶ **Treat the product as an experiment.** Formulate a hypothesis and then build a prototype to test it.
- ▶ **Fail fast, fail often, and learn always.** If the product does not do what users want – or is too difficult to use – try a different experiment.

3 Innovate development



- ▶ **Develop empathy for other teams and users.** Encourage communications between teams so consequences of decisions are clear.
- ▶ **Aim for rapid feedback.** Get the minimum viable product (MVP) out quickly and resist the impulse to over-engineer.
- ▶ **Foster a culture of curiosity and inquiry.** Offer opportunities to build skills – and the freedom to solve problems creatively.
- ▶ **Commit to technical excellence, testing, and continuous integration.** Automate testing and deployment pipelines to improve code quality and throughput.

4 Build a solid architecture

- ▶ **Balance cost, performance, and failure characteristics. Make these trade-offs deliberately.** For example, incremental performance improvements can be quite costly. Avoid over-engineering for higher performance than users expect.
- ▶ **Create an event-driven architecture.** Develop skills in microservices techniques such as service mesh, circuit breaker patterns, caching, and service discovery – or work with a skilled partner.
- ▶ **Enforce architecture with standardized services.** Standardization allows developers to focus on domain logic instead of design patterns. In addition, standardized instrumentation can report real-time performance metrics and simplify troubleshooting.

Learn more

Read “[Avoiding digital transformation failure](#)” to learn how a trusted software supply chain (TSSC) enables, accelerates, and enforces the behaviors and practices outlined in this checklist.

5 Maintain operations

- ▶ **Develop empathy for developers and product managers.** Rather than saying “no” to projects or timelines that operations cannot support, work closely with development and product teams to come up with acceptable solutions.
- ▶ **Implement mechanisms for fault detection and fault determination.** Monitoring is the foundation of reliability.
- ▶ **Develop the technical understanding to remediate and learn from incidents.** Operational excellence requires the capabilities and judgment to respond to incidents in a live system while minimizing service disruption. Conduct post-incident analysis with the goal of learning – not blaming.

Get started

For guidance on building the five elements into your digital transformation project, contact [Red Hat® Consulting](#).



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