# Tech Intensity Self-Assessment | Results Overview

KEYSTONE

# The digitally transformed company

What does it mean for a company to have high tech intensity, or to be "digitally transformed"? Certainly such a company has a an advanced level of technology deployed and employees are able to take advantage of the most up-to-date offerings in tech tools and services. Our recent research, however, demonstrates that true tech intensity is about much more than mere tech deployment; truly digitally transformed firms also have differentiated technical architectures, processes, and cultures that enable them to leverage their technology to create improved business outcomes.

# The transformation journey

Our research demonstrates that many organizations follow a typical path to maturity across the different aspects of Tech Intensity (tech deployed and tech architecture, which can be aggregated into "Adoption", and process and culture, which can be aggregated into "Capability). Many organizations start at the "Traditional" stage, with siloed data structures and localized or siloed business units. As they mature through the "Bridge" and "Hub" stages, organizations grow increasingly connected, with data platforms that centralize data storage and access across the organization, and increasing support for real-time analyses. This enables teams in the business units to more easily collaborate and to develop increasingly advanced ML capabilities.

By the time they have reached the "Platform" stage of maturity, business units are able to leverage a rich and well-maintained data store to increasingly automate simple decisions and analyze the impacts of their transformations in real-time. At platform organizations, the IT group typically focuses on establishing and maintaining data and analytics foundations – providing the tools of the trade – rather than conducting analyses. Members of business units in the platform stage are typically data literate and operate relatively independently, using data to drive everyday decisions and develop AI solutions.
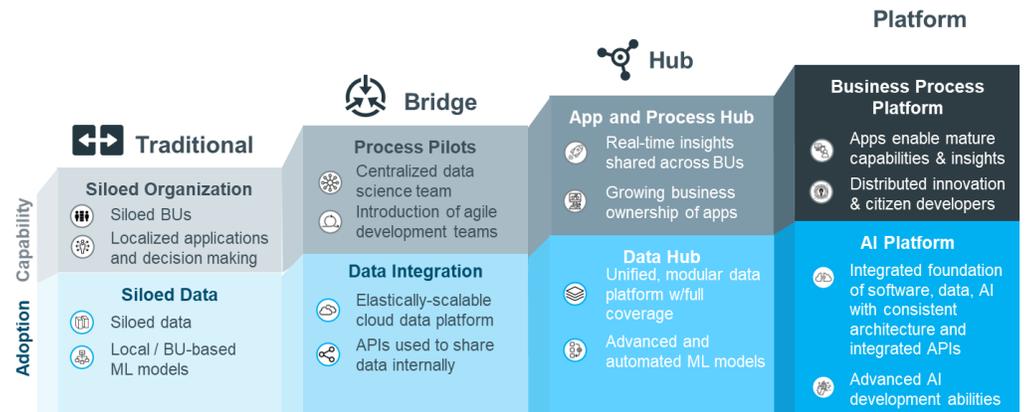


**Figure 1. Most enterprises follow a typical "maturity model" as they progress through their digital transformation journey.**

## Tech deployed

As firms increase their tech intensity, they typically deploy increasingly advanced levels of technology to support their goals. The start of this transformation journey is with the introduction of a shared data platform, often hybrid or in the cloud, that

enables the aggregation of data across teams and functions. Over time, teams add analytics and machine learning capabilities as appropriate, leveraging their collected datasets to generate actionable insights about their business in real-time. Ultimately, transformed companies deploy technology that empowers even "citizen developers" to generate these insights via the use of low-code / no-code tools.

## Tech architecture

To become technically mature, firms must evolve their architecture alongside their technology deployments. Technically intense firms typically modernize their architecture as they build it, re-architecting with a microservices-based, cloud-native approach to app development that leverages managed database services and plans for cross-organization AI / ML development. These firms architect their data platforms with a shared core, building up APIs and documentation that enable anyone to access the data they need, regardless of their departmental assignments. For companies starting on this journey, a parallel approach can be helpful – initiate pilots that break down an existing data "wall" between two organizations, using that momentum to expand outward, while also ensuring that future deployments are built with an integrated architecture in mind.

## Innovation process and culture

Alongside tech deployed and architecture, technically intense firms have differentiated processes around innovation. Many traditional firms have a centralized innovation structure, with business units rarely participating in the design and development of apps. As they mature, these firms introduce agile team structures (first in pilots and then more expansively), with business units owning app development and agile teams being given increasing decision-making authority over their products. More mature firms also introduce and expand training on the use of data, analytics, ML, and AI across both developers and non-developers, understanding that true innovation comes when all team members can generate insights. Finally, as they evolve, mature firms introduce and reinforce a learning culture on their teams, which places value on accurate measurement and experimentation to create improved business outcomes.

# Your result: Platform

*Platform organizations have successfully digitally transformed and are now leaders in terms of tech intensity. These organizations often have an integrated foundation of data, software, and AI that supports a mature innovation process, where business units own app development and innovation. This is supported by a culture of growth and measurement that empowers employees to collaborate extensively and make individual decisions that are aligned by KPIs to organizational strategy.*

While platform organizations have typically developed significant data and technology capabilities, they are still able to evolve in new and exciting ways that enable them to take differentiated advantage of their tech intensity. Platform organizations are uniquely able to focus on the automation and unification of their approach to data and ML, ensuring that the processes of real-time decision-making and cross-team collaboration are as seamless as possible. They are also able to continue to expand their tech capabilities further into business units, empowering citizen developers to create innovative solutions to business problems.

## COMMON CHARACTERISTICS

Platform organizations often:

- Set targets and objectives based on data at both leadership and team levels
- Prioritize collaboration between teams in an environment supported by an integrated data platform that enables easy data-sharing
- Drive innovation and decision-making from business units that are empowered to use technology

## COMMON CHALLENGES

Platform organizations may experience:

- Challenges in enforcing and maintaining best practices for data, analytics, and machine learning across an expanding userbase
- Difficulty in leveraging a data-driven mindset in areas that are more difficult to measure

## COMMON STEPS TO TRANSITION

Common projects that may drive the evolution of a platform organization include:

- Expansion of training programs that empower both developers and non-developers to work with data and deploy cloud AI services and ML algorithms
- Expansion and hardening of data and ML compliance practices to performance reviews and other management systems
- Standardization effort to align internal API standards with each other wherever possible
-  Expand the use of standard / best practice ML models across internal and third party offerings

## QUICK WINS FOR PLATFORM ORGANIZATIONS

Smaller projects that may further enable the evolution of a platform organization:

- Expansion of API and data-sharing documentation across different teams to drive a common standard
- Development of a catalog of ML models, including third-party models and services, across the organization to drive auditing and alignment to a set of best practices
- Expansion of training for business and product owner to drive insight development using data, analytics, AI services and machine learning