Enterprise Fusion Is Central To Successful Digital Transformation: A Spotlight On The Life Sciences Industry

Life Sciences Companies Are Making Progress, But Lag In Critical Areas

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Introduction

Digital transformation is a requirement to keep up with today's consumers and to win in any industry. This makes improving customer experience (CX) a primary driver for many transformation efforts. However, as firms invest in digital transformation to improve CX, initiatives often focus on the front-end, customer-facing processes (i.e., mobile apps, websites, customer portals) and less on the back-end processes (i.e., supply chain, fulfillment) that support those functions. This fragmented approach can create unsatisfactory and inconsistent experiences for customers. Successful digital transformation and delivery of better CX require firms to transform the entire enterprise through a cohesive, tightly integrated approach across front- and back-end processes.

In 2018, Cognizant commissioned Forrester Consulting to test the hypothesis that digital transformation will succeed best when two conditions are met: 1) when transformation spans the enterprise from customer touchpoints all the way to fulfillment and beyond; and, 2) when leaders take a fused, not siloed, approach to this transformation. The study found that fused firms are 2.5 times more likely to report double-digit revenue growth than siloed firms.

To specifically understand digital transformation and enterprise fusion in the life sciences industry, Forrester profiled the 53 life sciences respondents from the 2018 study and added 52 new life sciences respondents in 2019 (which included respondents from pharma, biotech, and medical devices firms) from the US and UK. Analysis of responses from these aggregate 105 respondents revealed that life sciences firms are taking the right steps toward enterprise fusion, but only a small percentage succeed at truly being fused enterprises. However, life sciences firms have an opportunity to improve their delivery of impactful customer experiences as part of their digital transformation efforts.

KEY FINDINGS

› The life sciences industry is one of only three industries surveyed with more than 20% of firms classified as fused (i.e., tightly integrated); however, that still means a long road for the nearly 80% of firms not fused.

› In the life sciences industry, customers come in many forms — healthcare providers, patients, payers — which makes managing CX more challenging. Life sciences firms need dedicated leadership to guide comprehensive CX decision making to meet the needs of different customers.

› Over 80% of life sciences firm respondents agree that back-end processes play a critical/important role in delivering digital priorities. Many are taking steps to integrate both front- and back-end processes to be a fused enterprise, but they face both technical and organizational challenges.

› Firms are slow with innovation as they are playing catch-up to support their current capabilities. Life sciences firms will better enable innovation as front- and back-end processes (including technology systems and data) are connected and integrated.
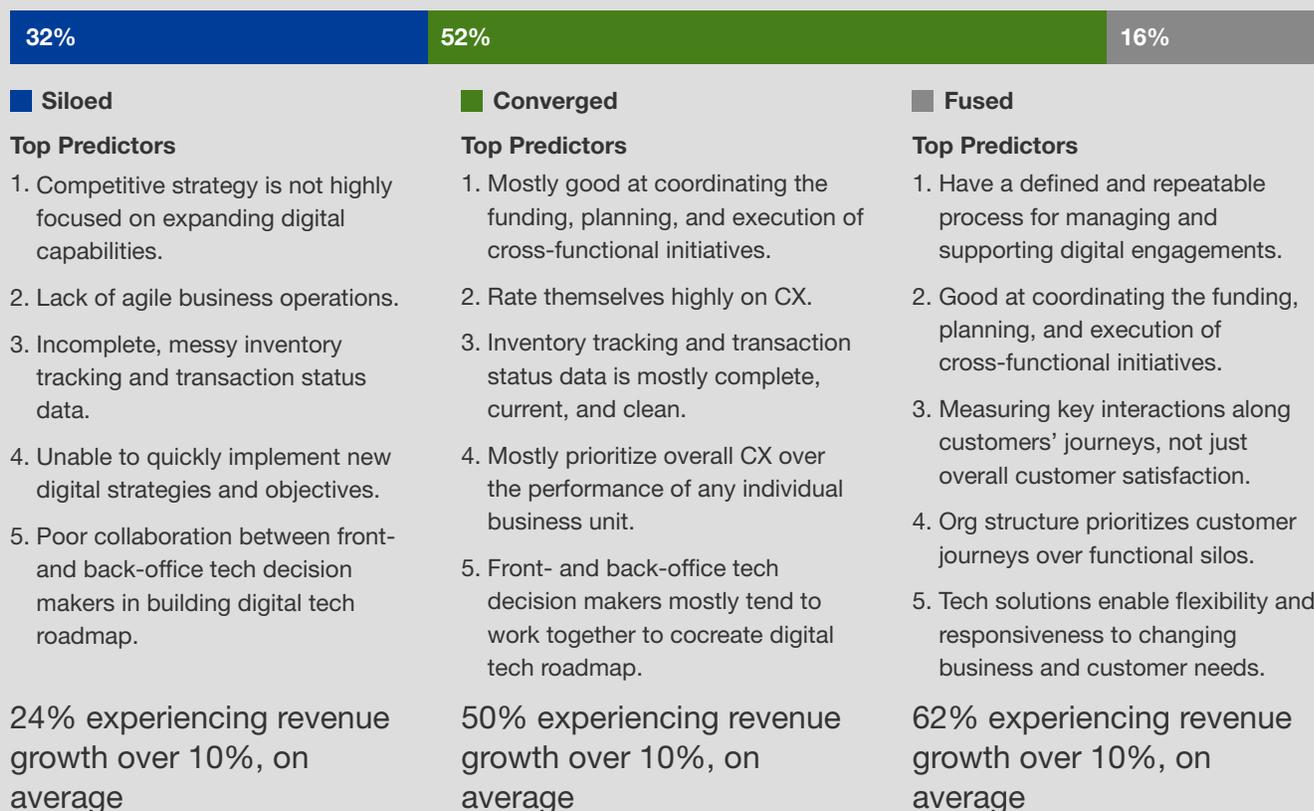
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Defining Enterprise Fusion

Digital transformation is more than a buzzword — it's a means for survival and growth. In the long term, respondents cite their primary transformation objectives as improving customer experience and increasing revenue, which they ranked above other elements, such as increasing employee productivity and reducing cost. However, many firms focus only on a narrow piece of customer experience — prioritizing investments in "doing digital" (narrowing their focus to the front-end processes for customers) rather than "being digital" (enabling the organization with the proper technology and capabilities to support the front-end processes).

Forrester's 2018 study, commissioned by Cognizant, found that firms that are able to "fuse" front- and back-end processes for seamless delivery on customer needs saw greater revenue growth. We defined enterprise fusion by the degree to which a company could integrate processes, organization (culture), technology, and data insights to drive successful, customer-centric outcomes with digital transformation. Our study determined that firms are at one of three stages of enterprise fusion — siloed, converged, or fused — with siloed firms being the least integrated and fused firms being tightly integrated. The study found that fused firms are 2.5 times more likely to report double-digit revenue growth than siloed firms (see Figure 1).

Click here to read the 2018 study:

"Enterprise Fusion: Your Pathway To A Better Customer Experience"

Figure 1: Attributes Of Enterprise Fusion Maturity

32%	52%	16%
■ Siloed	■ Converged	■ Fused

Top Predictors

Top Predictors	**Top Predictors**	**Top Predictors**
1. Competitive strategy is not highly focused on expanding digital capabilities.	1. Mostly good at coordinating the funding, planning, and execution of cross-functional initiatives.	1. Have a defined and repeatable process for managing and supporting digital engagements.
2. Lack of agile business operations.	2. Rate themselves highly on CX.	2. Good at coordinating the funding, planning, and execution of cross-functional initiatives.
3. Incomplete, messy inventory tracking and transaction status data.	3. Inventory tracking and transaction status data is mostly complete, current, and clean.	3. Measuring key interactions along customers' journeys, not just overall customer satisfaction.
4. Unable to quickly implement new digital strategies and objectives.	4. Mostly prioritize overall CX over the performance of any individual business unit.	4. Org structure prioritizes customer journeys over functional silos.
5. Poor collaboration between front- and back-office tech decision makers in building digital tech roadmap.	5. Front- and back-office tech decision makers mostly tend to work together to cocreate digital tech roadmap.	5. Tech solutions enable flexibility and responsiveness to changing business and customer needs.
24% experiencing revenue growth over 10%, on average	50% experiencing revenue growth over 10%, on average	62% experiencing revenue growth over 10%, on average

Base: 517 decision makers across IT and LOB involved in enterprisewide digital transformation initiatives
Source: A commissioned study conducted by Forrester Consulting on behalf of Cognizant, June 2018

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THE LIFE SCIENCES INDUSTRY IS SEEING MOVEMENT TOWARD ENTERPRISE FUSION, BUT MOST FIRMS ARE NOT THERE YET

An analysis of the life sciences industry respondents shows a distribution across maturity groups with 21% fused, 48% converged, and 31% siloed. Compared to the other industries in the overall survey group, the life sciences industry had the third-highest percentage of fused at 21%, which puts life sciences among the leading industries in the pursuit of a fused enterprise (see Figure 2). As demonstrated by the 79% not fused, however, most life sciences firms are still working on this transition.

In the 2018 study, Forrester found that fused firms outperform others by performing three primary actions:

› **Elevating CX to a top priority backed with executive sponsorship.**

› **Making operational functions a cornerstone of digital strategy.**

› **Prioritizing innovation-oriented digital capabilities.**

This spotlight on the life sciences industry will examine these three key contributing factors to becoming a fused enterprise, specifically identifying where the life sciences industry is advancing or lagging.

Figure 2

Life science companies are among the top three leading industries when it comes to enterprise fusion
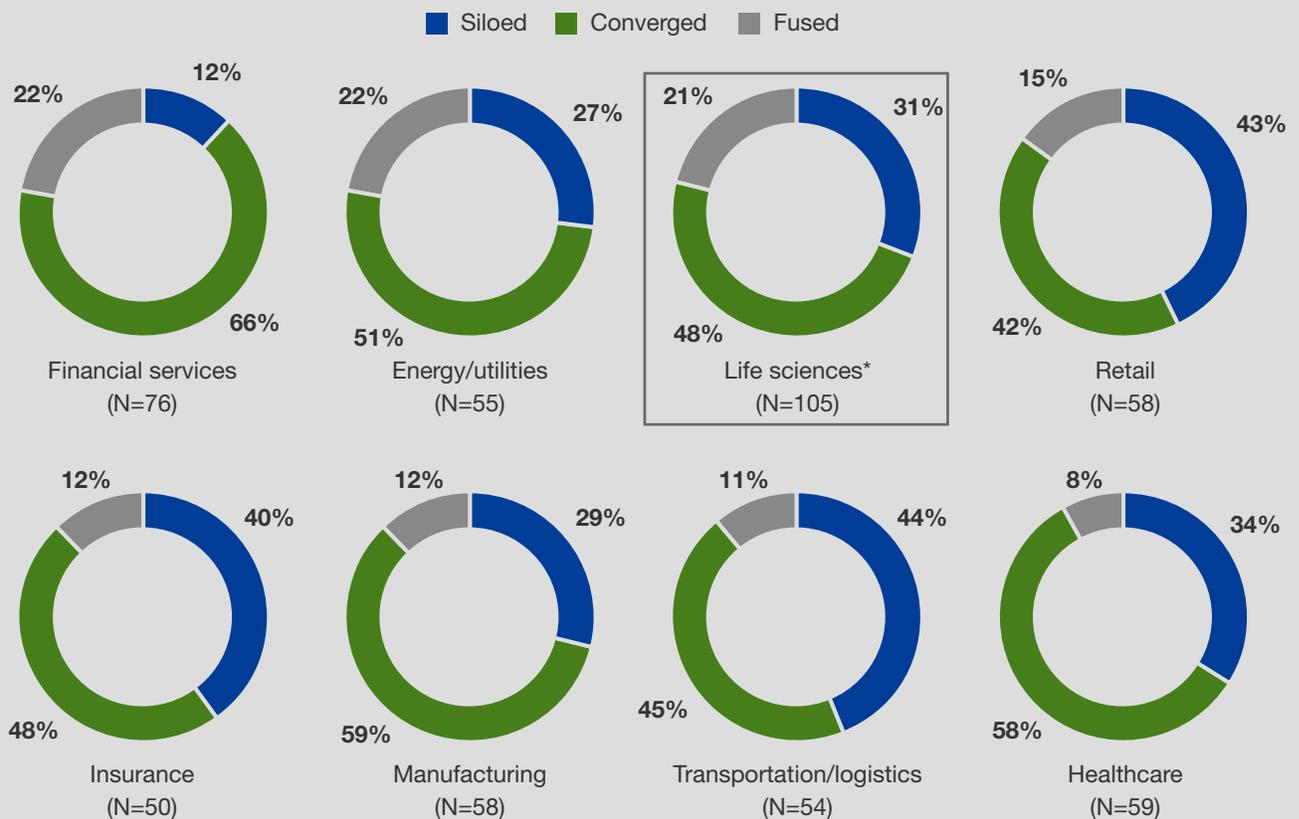
■ Siloed   ■ Converged   ■ Fused

Financial services
(N=76) — Siloed 12%, Converged 66%, Fused 22%

Energy/utilities
(N=55) — Siloed 27%, Converged 51%, Fused 22%

Life sciences*
(N=105) — Siloed 31%, Converged 48%, Fused 21%

Retail
(N=58) — Siloed 43%, Converged 42%, Fused 15%

Insurance
(N=50) — Siloed 40%, Converged 48%, Fused 12%

Manufacturing
(N=58) — Siloed 29%, Converged 59%, Fused 12%

Transportation/logistics
(N=54) — Siloed 44%, Converged 45%, Fused 11%

Healthcare
(N=59) — Siloed 34%, Converged 58%, Fused 8%

Base: 517 decision makers across IT and LOB involved in enterprisewide digital transformation initiatives
Source: A commissioned study conducted by Forrester Consulting on behalf of Cognizant, June 2018
*Base: 105 decision makers across IT and LOB involved in enterprisewide digital transformation initiatives for life sciences companies
*Source: A commissioned study conducted by Forrester Consulting on behalf of Cognizant, June 2018 and May 2019

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Elevating CX To A Top Priority

As life sciences firms continue to advance their digital transformations, CX is a primary area of focus. To enhance CX, firms must first understand the different types of customers they serve and the unique needs they present at engagement, purchase, and use. For life sciences firms, the diversity of customers — ranging from individual healthcare professionals to provider organizations to patients and payers — adds complexity to the journey of becoming a fused enterprise. Life sciences firms are doing well to prioritize CX, and most consider it to be a competitive advantage to their business.

CURRENT STATE

Over 60% of life sciences respondents cited improved CX as a desired outcome of digital transformation, and 50% are prioritizing CX with support originating from the top — 77% report having a chief customer experience officer (CCEO) or equivalent. The establishment of a CCEO or equivalent and an associated governance model are important steps. They ensure that enterprise decisions are made in the context of customer types who will engage across specific, varied experiences such as with therapy, a drug discovery process, a regulatory requirement, or a medical device. This senior-level focus on CX helps life sciences firms to check the first box in operating as fused enterprises: elevating CX to a top priority backed with executive sponsorship.

CHALLENGES

Nearly two-thirds of life sciences respondents surveyed recognize that CX can be a competitive advantage and thus prioritize CX-related efforts. However, this is a gradual process for many firms: Fewer than 50% of life sciences respondents surveyed consider their firms to be ahead of their peers in their quality of CX. The life sciences industry also falls in the middle of the pack when it comes to firms' average, self-reported quality of CX (see Figure 3), which supports the idea that life sciences firms are moving in the right direction, but they need to do more work to deliver better CX.

Figure 3

Self-rated CX (1=worst, 10=best)
(Averages shown)

Finserv/banking	8.8
Retail	8.3
Energy/utilities	8.2
Transportation/ logistics	8.1
Life sciences	8.0
Healthcare	7.9
Media & entertainment	7.9
Manufacturing	7.9
Insurance	7.6
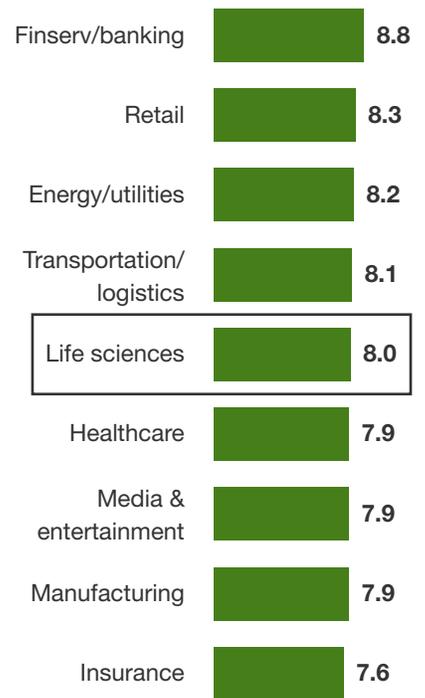
Base: Variable counts of decision makers across IT and LOB involved in enterprisewide digital transformation initiatives
Source: A commissioned study conducted by Forrester Consulting on behalf of Cognizant, June 2018 and May 2019

Making Operational Functions A Cornerstone Of Digital Strategy

Life sciences firms recognize that success in their approach to fusion depends not only on realizing competitiveness through their focus on CX across customer types, but also on their ability to enhance and integrate back-end processes in alignment with that priority. Life sciences joins retail, manufacturing, and insurance as the industries most focused on enhancing back-end processes, in contrast to healthcare and transportation/logistics, which are among the least focused. Life sciences firms are focused on appropriate operational improvements; however, these firms must accelerate improving their shared vision for digital transformation, outdated technology, and data quality issues across the enterprise.

CURRENT STATE

Enhancing back-end processes is a top priority for nearly 50% of life sciences respondents who participated in our research. Over 80% of life sciences respondents surveyed agree that the supply chain and finance functions in their firms have a critical/important role in delivering on organizational efficiency and effectiveness. These functions have an impact on customers — providers, patients, or medical professionals — at the front end all the way to affecting back-end operations.

CHALLENGES

Life sciences firms grapple with technical and organizational challenges as they strive to enable enterprise fusion and integrate. Among these are front-line deterrents, such as inadequate budgets (31%) and lack of shared vision (30%), and back-end deterrents, including outdated technology (38%) and data quality issues (31%). These challenges feed the inability to, for example, realize the benefit in delivering a consistent CX across channels relevant to customer types — an obstacle for 38% of life sciences respondents' firms (see Figure 4).

Figure 4

Life sciences companies are combating both organizational and technical challenges to integrating front- and back-end processes to support delivery of customer experiences

Organizational	Technical
31% have inadequate budgets	**38%** are unable to deliver a consistent CX across channels
30% lack shared vision	**38%** have outdated technology
30% have customer privacy concerns	**34%** have poor systems integration between front- and back-end processes

Base: 105 life science decision makers involved in enterprisewise digital transformation initiatives
Source: A commissioned study conducted by Forrester Consulting on behalf of Cognizant, June 2018 and May 2019

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Prioritizing Innovation-Oriented Digital Capabilities

The right CX strategy must drive the right operational improvements to prepare life sciences firms to deliver more innovative, impactful experiences, such as understanding medical device patients' experiences with a website or providing mobile apps to physicians as an engagement tactic for more immediate outcomes. Over 50% of life sciences respondents' firms are actively using data from both front- and back-end systems to implement improved or new capabilities in an integrated way to meet customer needs. This is no small task, as life sciences firms must innovate to keep up with the speed of several different customer constituencies, each with varying needs. However, life sciences firms are slower on the innovation front as they are focused on solidifying back-end processes to support new digital experiences. Given the variety and complexity of life sciences, that's not surprising. But innovation is important, and the need to ensure the right combination of baseline capability and design thinking is critical to support any new capabilities or services.

CURRENT STATE

Over 41% of life sciences respondents' firms are building or adopting a new generation of digital platforms to support business priorities relevant to pharma, biotech, and medical device firms. Examples could include marketing technologies for physician engagement, eProcurement portals for hospitals, and medical-grade wearable diagnostic systems. But customer-facing digital platforms must ensure back-end data gathering and analytics across multiple sources to make these capabilities work. These capabilities range from internet of things (IoT) to digital health and feed a range of key use cases, such as administering outcomes-based pricing contracts and measuring patient outcomes. More than one-third of life sciences firms are working with business partners on these changes to create new sources of value for their customers.

CHALLENGES

Innovation — across CX, product, supply chain, technology, and business model — is hampered without the right foundation of back-end processes. Nearly 50% of life sciences firms are hiring more support for back-end processes, which takes the focus away from innovation with new services but is a necessary prerequisite (see Figure 5). Among other industries surveyed, retail shows a similar level of firms hiring for this purpose, with all other industries at lower levels (around 40% or below). Another innovation challenge is in exploring and deploying IoT, which is a critical industry enabler across the product lifecycle from drug discovery to patient medication adherence. Just over 30% of life sciences firms are using IoT, which is 10% less than the average adoption rate from the 2018 cross-industry study.

Figure 5

Life sciences companies are focused on enabling the back office to better support new front-office functions

☑ **48%** are putting greater emphasis on enabling back-office functions to support front-office processes

☑ **46%** are planning on investing more in back-office technology

☑ **46%** are working with service partners to streamline front- and back-end processes

Base: 105 life science decision makers involved in enterprisewise digital transformation initiatives
Source: A commissioned study conducted by Forrester Consulting on behalf of Cognizant, June 2018 and May 2019

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Key Recommendations

The early days of digital transformation were about recognizing the role and importance that technology plays in helping firms deliver valuable experiences to their customers. As life sciences firms mature in their digital transformation journeys, they must integrate front-end digital investments with back-end systems and processes to form a truly digital and fused enterprise. The life sciences respondents who participated in our research find their firms in the middle of this journey, succeeding organizationally with the right strategies but falling short when it comes to putting the right technologies and strategies into action. To achieve enterprise fusion, life sciences firms can learn from fused organizations by considering the following recommendations:

Connect around the customer journey. Fusion requires a center point and a shift in the way of working. For life sciences firms, prioritizing the "customer journey" is challenging given the diversity of customers served and relevant regulatory environments. Small, cross-organization, agile teams can improve the customer journey by considering discrete needs along with points of commonality both on the customer-facing front end and, critically, at the back end. This approach will help to establish a new way of working and to support the collaboration necessary for a fused enterprise.

Make changes to technology strategy built on cloud-based and microservices architectures. Leading firms recognize that new digital tools and front-end innovation will not succeed with siloed back-end technologies and platforms. Leading executives are moving aggressively with technology modernization, such as implementing cloud- and microservices-based platforms, rather than updating or segregating the current tech stack.

Invest in data management to fuel the AI rush. Siloed firms face a conundrum on data quality. Technology silos create multiple sources of record, which lead to disparate views of life sciences' multicustomers, of processes and products, and of services. Disparate views result in conflicting decision making, which exacerbates the challenge of creating a fused enterprise. Quality, well-managed data matters and only becomes more critical as AI and automation drive operational and clinical advancements such as smart manufacturing in the life sciences industry.
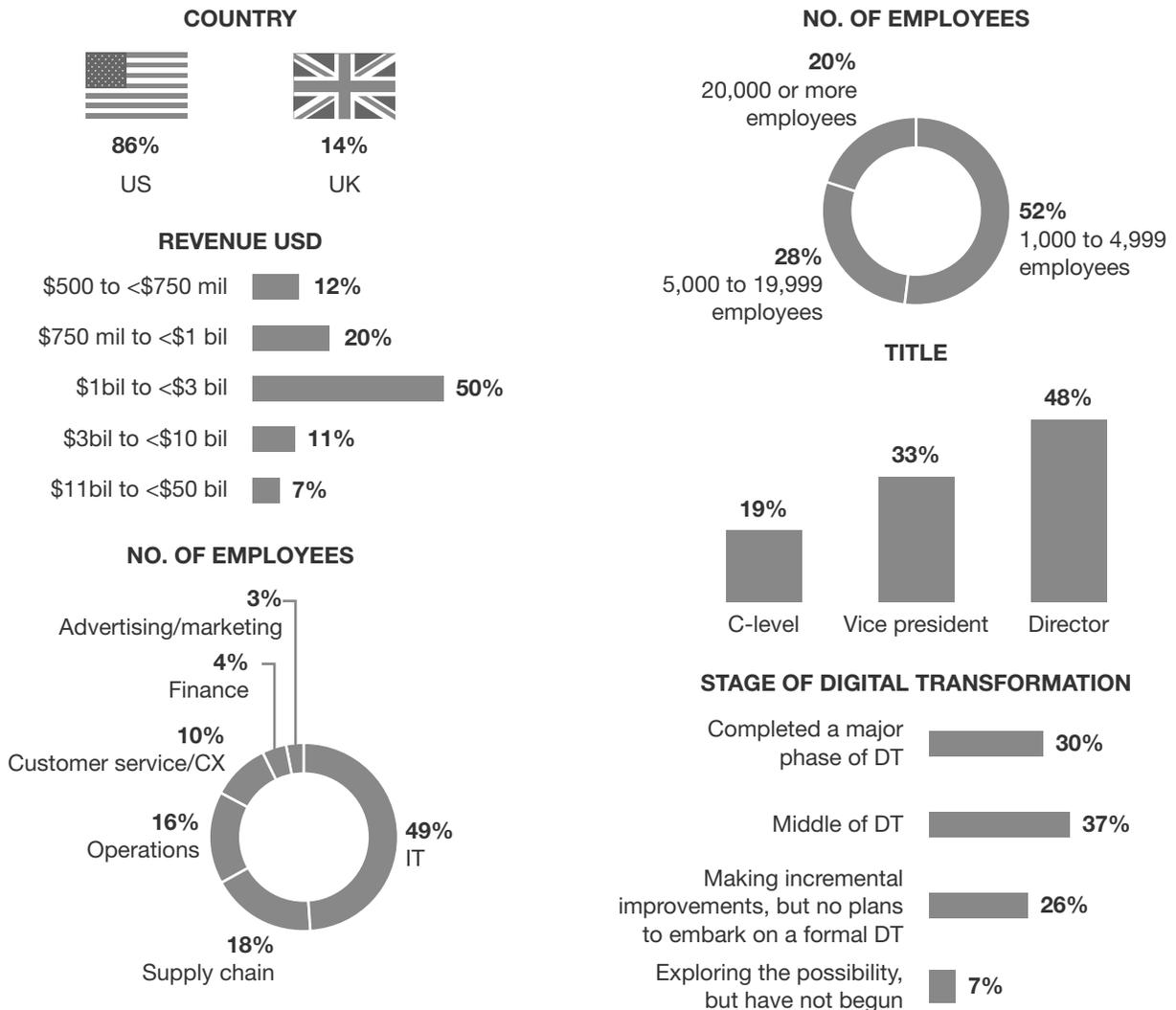
Embrace partners to speed things up and bring in new ideas and modern practices. Although converged firms demonstrate more digital maturity than siloed firms, they too must adapt to remain relevant. The good news is that most converged firms have established a vision and implemented an operating model and metrics to realize a fused enterprise. The ongoing transformation takes time, effort, and investment. Identifying, selecting, and managing a partner ecosystem are critical to realizing a fused enterprise because partners bring several critical elements: perspectives and insights shaped by their broad industry views; skills in technology integration that are often difficult to find; expertise in digital processes; and outside expertise on change management approaches that work.

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Appendix A: Methodology

In 2018, Forrester conducted an online survey of 517 IT and line-of-business (LOB) decision makers in the US and UK across eight industry segments. For this study, Forrester profiled 53 life sciences respondents from the 2018 study and added 52 new life sciences respondents in 2019, for a total count of 105 life sciences respondents across the US and UK to evaluate enterprise fusion. Survey participants included decision makers in IT, supply chain, operations, customer service, finance, and advertising or marketing. Questions provided to the participants asked about decision making within their digital transformation efforts. Respondents were offered a small monetary incentive as a thank you for time spent on the survey.

Appendix B: Demographics/Data

COUNTRY

86%
US

14%
UK

REVENUE USD

$500 to <$750 mil	**12%**
$750 mil to <$1 bil	**20%**
$1bil to <$3 bil	**50%**
$3bil to <$10 bil	**11%**
$11bil to <$50 bil	**7%**

NO. OF EMPLOYEES

3%
Advertising/marketing

4%
Finance

10%
Customer service/CX

16%
Operations

49%
IT

18%
Supply chain

NO. OF EMPLOYEES

20%
20,000 or more employees

52%
1,000 to 4,999 employees

28%
5,000 to 19,999 employees

TITLE

19%
C-level

33%
Vice president

48%
Director

STAGE OF DIGITAL TRANSFORMATION

Completed a major phase of DT	**30%**
Middle of DT	**37%**
Making incremental improvements, but no plans to embark on a formal DT	**26%**
Exploring the possibility, but have not begun	**7%**

Base: 105 life science decision makers involved in enterprisewise digital transformation initiatives
Source: A commissioned study conducted by Forrester Consulting on behalf of Cognizant, June 2018 and May 2019

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For more information, read the entire report: "Enterprise Fusion: Your Pathway To A Better Customer Experience"

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