Agile Integration Drives Digital Transformation

Agile integration — combining integration technologies, Agile delivery techniques, and cloud-native platforms to improve speed and security of software delivery — is a critical foundation for successful digital transformation. Firms whose current self-reported integration strategy supports their Agile delivery teams well or very well — meaning their integrations are always already there when needed — were considered “successful,” while firms whose current integration strategy supports their integration strategy below average or not at all were considered “less successful.” The study shows that successful firms have taken the steps to build a culture that focuses on Agile practices and supports Agile delivery teams with their Agile integration strategy; which is a combination of new and legacy applications and architectures.

KEY FINDINGS
Forrester’s study yielded the following key findings:

› **An Agile integration approach is critical.** Agile developers can craft independent integration flow such as microservices, DevOps, and APIs that best support successful digital transformation practices. This can only happen if the firm has built a culture that supports integration across a range of new and legacy applications.

› **Focus on APIs that speed up delivery and development.** Well-designed business APIs enable rapid reconfiguration to business models and processes. APIs provide software-based business building blocks that enable rapid business reconfiguration. Successful firms have attained higher levels of expertise on their development teams with external APIs.

› **Build a road map for the future.** Successful firms have invested in modernizing their integration strategy to delight their customers. Part of that process includes aligning their integration strategy with their digital transformation as a whole. This allows the metrics they measure to connect integration to business outcomes.


**METHODOLOGY**
In this study, Forrester conducted an online survey of 300 Agile development strategy decision makers in North America, the UK, France, Germany, India, and China to evaluate API integration strategy. Questions provided to the participants asked about their current approach to an Agile API integration strategy, their maturity level, and plans for the future. The study began in April 2018 and was completed in May 2018.

Click here to read the full results of the study.
Agile Integration Drives Success

Firms need an Agile integration approach to match the speed of business change. To meet customers' expanding expectations, businesses must be nimble and have deep integration across all data sources and systems. Successful firms are linking integration to business outcomes, while less successful firms are focused on tactical needs — increasing data volumes and refreshing data in real time. Successful firms are investing in agility across their organization in numerous ways:

› **Focusing on APIs.** Successful firms are building more APIs than less successful ones — from event-driven APIs to external APIs and APIs that they can charge third-party developers to use. On the other side, less successful firms are only focusing on internal APIs and documentation in developer portals that consume APIs — they have yet to build external APIs. This not only limits the sheer volume of data that these firms have to work with, but also hampers their developers internally. More APIs are empowering successful businesses to be nimbler — developers at these firms can easily build applications across diverse technologies, infrastructures, and environments — and to break down internal business silos.

› **Agile software development practices.** Development teams at successful firms are twice as likely to have 75% or more of their teams practicing Agile software development than less successful firms (see Figure 1). Creating a culture that prioritizes agility and embraces new technologies and digital disruption empowers all developers under Agile practices. Firms that have built a culture of Agile practices combine and integrate a wide range of new and legacy applications, with traditional integration architectures. Part of that cultural development includes investment in the right technology to support Agile development practices. The selection and usage of technology which supports Agile delivery teams is critical for successful digital transformations.

› **Making use of microservices.** Successful firms are more likely to be using microservices (44%, as compared to 31% of less successful firms). Microservices can live alongside custom code, making blended development-integration projects, which can add new business logic on top of legacy applications — further opening up the array of data that businesses can access, thereby supporting developers across the application development and integration life cycle. Agile development strategy decision makers at successful firms see this as a critical part of their strategy. Forty-nine percent of successful firms agree that their future integration strategy should achieve application integration using a hybrid mix of traditional integration products and newer cloud-based integration platforms.

Figure 1

“To the best of your knowledge, what percentage of the development teams at your company use agile software development practices?”

<table>
<thead>
<tr>
<th></th>
<th>More successful firms</th>
<th>Less successful firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>All teams practice or use</td>
<td>33%</td>
<td>9%</td>
</tr>
<tr>
<td>Most teams use (around 75%)</td>
<td>60%</td>
<td>38%</td>
</tr>
<tr>
<td>Half of teams use</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>Some teams use (around 25%)</td>
<td>17%</td>
<td>2%</td>
</tr>
<tr>
<td>No teams use</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Base: 144 Global Enterprise Agile Development Strategy decision-makers
Source: A commissioned study conducted by Forrester Consulting on behalf of Red Hat, May 2018
Follow The Road Map Outlined by Successful Businesses

By blending Agile integration with Agile development, successful firms have been able to better support developer teams across new technologies, including container platforms and cloud strategies. In turn, their customers are delighted with frequently updated applications and/or information presented with relevant data.

Successful firms:

› **Measure all aspects of your integration strategy.** Across the board, successful firms are more likely to be measuring all aspects of their integration strategy to gauge success. Most crucially, they are connecting integration efforts to business outcomes. These successful firms are focused on creating digital disruption, re-engineering business processes, and creating new business models/opening new markets; while less successful firms are much more focused on tactical efforts, such as improving their speed of software deployment.

› **Align integration goals with digital transformation goals.** Successful firms understand that their integration strategy is a piece of the whole — their overall digital transformation strategy. These businesses have identified key capabilities — including scalability, secure communication channels, and the ability to quickly deploy new APIs or services — as drivers of their digital transformation strategy. In turn, they are using their capabilities to fuel their integration strategy, creating a virtuous cycle of skills and priorities.

**Figure 2**

“How do you measure the success of your integration strategy?”

<table>
<thead>
<tr>
<th>Measure</th>
<th>Successful firms</th>
<th>Less successful firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater resilience in the face of digital disruption</td>
<td>44%</td>
<td>19%</td>
</tr>
<tr>
<td>Creating new business models and opening new markets</td>
<td>44%</td>
<td>26%</td>
</tr>
<tr>
<td>Re-engineering processes and streamlining organization structures</td>
<td>36%</td>
<td>19%</td>
</tr>
<tr>
<td>Publishing events or messages</td>
<td>22%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Base: 144 global enterprise Agile development strategy decision makers
Source: A commissioned study conducted by Forrester Consulting on behalf of Red Hat, May 2018

ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. Ranging in scope from a short strategy session to custom projects, Forrester’s Consulting services connect you directly with research analysts who apply expert insight to your specific business challenges. For more information, visit forrester.com/consulting.

© 2018, Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on best available resources. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies. For additional information, go to forrester.com. [E-38093]