THE NEXT GROWTH FRONTIER

INTELLIGENT DIGITAL PLATFORMS
Companies in all industries have been racing to build digital platforms that can help attract customers and achieve competitive advantage. But, with more companies now operating platform businesses, the opportunities for true differentiation are waning. What’s needed to tap into the new platform-enabled sources of value? The answer, according to new Accenture research, is intelligence.
INTRODUCTION

In a previous Accenture study, we explored the state of the platform economy, how companies were approaching their platform strategies, and the progress they had made in platform implementation. That research found that while companies were beginning to embrace platforms as a part of their business strategy, actual implementation of platforms varied from company to company and industry to industry, with four in ten companies having yet to even get their platforms off the ground.

Today, the platform landscape is dramatically different. Our survey of 500 C-level executives (see “About the Research”) reveals that companies overall have made significant progress in building their platform’s foundation, and a small group of innovators have moved past the basics to deploy more sophisticated and intelligent platforms that are opening up vast opportunities for new value creation.

In the following report, we discuss our findings in more detail and offer some insights on what companies should consider as they work to build on their platform progress to date.
Accenture defines a digital platform as a foundational technology that allows for the creation of new services that facilitate an exchange between producers and consumers of information, products, or services and enhances an organization’s digital processes and capabilities.

**HOW INTELLIGENT IS YOUR DIGITAL PLATFORM?**

Digital platforms are assuming an increasingly central role in virtually all industries, representing a growing proportion of economic activity for many companies. And as platforms become more ubiquitous, they also will become more intelligent. A view of the platform landscape reveals a progression of maturity—from a foundational integration of critical data to the deployment of more-sophisticated analytics and artificial intelligence applications that enable anything to be delivered, automatically and intelligently, as a service (Figure 1).
Figure 1: The digital platforms maturity spectrum

End-to-End business visibility
Transform the core of business
Identifying business opportunities dynamically

OUTCOMES-AS-A-SERVICE

TOP 1
Security as a Service

TOP 2
Fraud Detection as a Service

TOP 3
Hardware as a Service

TOP 4
Networking as a Service

TOP 5
Blockchain as a Service

Offering evolution

Self-Adapting/ Learning (AI Enabled Application)

Insights Layer (Data Abstraction and Data Modelling)

Business Data Layer (Sensors, IoT, AR/VR, ERP, CRM, Robots...)

Smart Monitoring

Mixed Sensing

Fraud Detection, AML Pilferage

Healthcare Logistics

Source: Accenture Research
According to our research, more companies not only consider platforms a key part of their business, but have also taken greater steps in building their platform capabilities.

For example, in our 2018 survey, just under half of participating executives said platforms are core to their organization’s business strategy. This year, that figure has risen to 66 percent—a substantial jump that illustrates the momentum behind the platform economy (Figure 2). Executives in the banking, insurance, and consumer goods industries were the most likely to describe platforms as core to their strategy. Those that view their platform as only an enabler of their business strategy dropped from 40 percent last year to 27 percent this year.

Figure 2: Digital platform’s relationship with business strategy

Source: Accenture digital platforms survey, 2019
WHY THE SWITCH?

It’s because a platform that’s at the core of the business strategy pays bigger dividends. Our analysis found that companies that view platforms as core to their strategy are much more likely than those viewing platforms as an enabler to generate more than 30 percent of their revenue from their platform (37 percent versus 25 percent).

Perhaps even more significant is the progress companies have made in their platform journey. As shown in Figure 3, nearly half of executives reported their company has integrated its business data layer, a prerequisite for platform operation. A further 37 percent said their company has taken the next step to add an insights layer that applies analytics for data abstraction and modeling.
However, with most companies having now joined the platform economy, differentiation and competitive advantage is getting harder to achieve. Thus, the next steps in this evolution are where the new opportunities lie: adding AI-enabled applications that transform the platform into an intelligent, self-adapting and, self-learning environment through which companies can deliver unique, highly differentiating outcomes-as-a-service.

Source: Accenture digital platforms survey, 2019
Almost nine in 10 executives agreed that companies can increase their chances of success in their platform plays by applying intelligence to generate higher value, and up to 48 percent expect their company will generate more than 30 percent of its revenue from analytical models and AI-enabled applications in three years—up from just 18 percent today. Furthermore, nearly two-thirds of executives in our survey ranked outcomes-as-a-service as a top-three objective of their digital platform strategies (with the most popular outcomes-as-a-service models being those targeting security and fraud detection).

But progress toward such intelligent digital platforms remains slow. Only a small proportion of companies represented in our survey (around 13 percent) have made the leap to AI, and even fewer (about 4 percent) have reached the outcomes-as-a-service level.

The companies that do have these more mature platform capabilities also appear to be more confident in the return they’re getting on their platform investment. For instance, companies that have integrated their business data layer are twice as likely as those that can deliver outcomes-as-a-service to say that return on investment is a challenge.

Perhaps that’s because mature platform capabilities are generating a lot more revenue. According to our research, approximately 44 percent of companies with mature platform capabilities attribute more than 30 percent of their revenue today to their platform. That figure is expected to rise up to 78 percent for these companies in three years.
The fact is, “anything-as-a-service” has become a defining business model of the 21st century, and executives are eager to leverage digital platforms to drive growth and competitive advantage. That’s why they’re ramping up their platform investments. Our survey found that companies allocating more than 30 percent of their spending to developing and implementing digital platforms, products, and services can rise from just 29 percent today up to 58 percent in three years. Perhaps not surprisingly, companies with the most mature platform capabilities—those that provide outcomes as a service—are outspending others by a considerable margin, and will continue to do so three years from now (Figure 4).

Figure 4: Percentage of companies allocating more than 30% of their total investment to developing and implementing digital platforms—today and in three years—by the maturity of their platform capabilities.

Source: Accenture digital platforms survey, 2019
One company that has developed highly mature platform capabilities that represent the next level of value creation is Biesse Group. This Italy-based global leader in manufacturing technology pioneered a cloud-based Industrial Internet of Things (IIoT) solution called SOPHIA to enable the company to offer new, robust aftermarket services for its machines. SOPHIA was built on Accenture Connected Platforms as a Service (CPaaS) (since rebranded as AIP+) on a Microsoft Azure IoT platform, whose flexible architecture and preconfigured IoT services were key to quickly piloting and then fully deploying the solution to more than 15 Biesse Group machine models at customers in approximately 25 countries.

The first set of services provided by SOPHIA, offered via a pay-per-use model, includes preventive maintenance alerts, machine management, manufacturing events analysis and remote diagnostics, and remote software distribution. Biesse Group’s service department receives notifications about machine performance, enabling service reps to proactively contact customers to pre-empt or handle machine outages. Sensors and devices on the machines produce in-depth key performance indicator and usage analytics, the results of which are displayed on easy-to-view dashboards using Microsoft Power BI data visualization on mobile devices. The performance reports are periodically shared with customers, and the machine’s technical documentation can be accessed via the app. Also available are advanced services such as in-depth machine analytics that improve overall equipment effectiveness and productivity.
Today, SOPHIA connects more than 1,000 Biesse Group machines, giving customers a flexible menu of value-added services and a transparent view into machine performance to improve machine productivity and increase uptime with predictive maintenance. Service response times for machine outages are now 50 percent faster and customers can get diagnostic information 60 percent quicker. In addition, “first-time fix” metrics—whereby a technician can fix an issue the first time—increased by nearly 90 percent.\(^6\)

Overall, SOPHIA and the insights it generates have created significant new revenue streams for Biesse Group, while helping the company strengthen customer service and loyalty, reduce warranty and maintenance costs, improve service department efficiency, and enhance product development.
HOW CAN YOU CAPITALIZE ON THE NEXT LEVEL OF VALUE-CREATION OPPORTUNITIES?

Executives in our survey have high expectations for their platforms, whether those they built themselves or those from platform providers. Six in ten executives:

- Expect that more than 30 percent of their organization’s revenue will be generated from platforms by 2022.
- Foresee digital platforms helping their organization boost productivity and cost efficiencies.
- Want to use digital platforms to personalize products and services for customers.

To achieve those goals and generate the return on investment they’re looking for, companies will have to build on the foundation they have laid to create new value for customers and a commercially viable business model.
TARGET EMERGING CUSTOMER NEEDS, INCLUDING ADJACENT MARKETS

One of the keys to creating new value is building a platform that addresses emerging customer needs predictively, and intelligently leverages the information convergence that enables the personalized, contextual, innovative services that drive recurring revenues. That’s something executives in our survey recognize: about 82 percent believe a digital platform with advanced analytics models and an AI layer allow for enhanced and differentiated consumer experiences.

A compelling example of a company using advanced digital platform capabilities to disrupt a market and create new value is Olay. One of Procter & Gamble’s multi-billion-dollar cosmetic brands, Olay has built a skin analysis platform called Olay Skin Advisor that uses analytics and AI to help customers explore and purchase skin care and cosmetic products. This is important, given that 30 percent of the time, skin care customers go home empty-handed because they aren’t sure which products are right for them.
Olay created a digital experience where customers can get a skin care consultation online. The solution applies image analytics and AI to customers’ “selfies” and makes specific product recommendations based on customers’ facial features, giving customers greater confidence to make purchases.

Importantly, the solution has enabled Olay to tap the cosmetics market for men, who are more likely than women to feel uncomfortable shopping for and getting consultations on cosmetics and skin care products in public spaces where Olay’s products are often sold, such as department stores.

Olay’s efforts show how platforms can help companies better target and serve existing markets. But when looking at unmet customer needs, it’s also important to not overlook adjacent markets, which offer immense potential for further growth. Yet only 18 percent of executives in our survey said growth in adjacent markets is a key objective of their digital platform strategy. By not giving due consideration to adjacent market spaces, companies—even those with mature platform capabilities—could be reinforcing the status quo of their market and customer segments and passing up opportunities to find new sources of revenue.

To understand the potential payoff from pursuing adjacencies, one needs to look no further than webscale, digital-born platform players Amazon, Facebook, and Uber, which are continuously diversifying outside their “native” markets into healthcare, financial services, and food delivery, respectively. In the process, they’re racking up incredible year-on-year growth and dominating their markets.
GET MORE, AND MORE MONEY, FROM DATA

Another key to achieving desired returns on platform investments is how companies deal with data.

Platforms generate a lot of rich data that present significant value-creating opportunities. In fact, eight in ten executives said data monetization is a key source of differentiation, competitive advantage, and new revenue streams. Overall, executives anticipate a 10 to 11 percent profit margin improvement and ROI from their data monetization strategy and data management investment. Just under half of executives expect, on an average 30% of their revenues to come from monetizing data within three years—up from an average of 17 percent today (Figure 5). Companies that deliver outcomes-as-a-service have even higher expectations, with around 61 percent of executives in those organizations expecting to generate more than 30 percent of their revenue within three years by monetizing data.

Figure 5: The proportion of total revenue generated by data monetization, today and in three years

Source: Accenture digital platforms survey, 2019
Given this, it’s encouraging that most companies in our survey appear to be making progress toward putting in place what they need to effectively monetize their data.

Eight in 10 executives indicated their company has a clear data strategy in terms of data ownership and democratization, as well as in how to use data. This is critical to enabling end users to effectively use applications built atop digital platforms to do analyses, create reports, generate insights, and even build simple applications with low-code/no-code development tools—which ultimately drives organizations toward self-service analytics.

Additionally, about four in ten executives on average said their company has “fully mature” capabilities for using data to achieve a number of important objectives—from developing new products and services, minimizing customer churn, and plugging revenue leaks, to improving operational efficiency, boosting marketing ROI, and detecting fraud and piracy.

Yet, despite this maturity, significant data-related challenges remain. At a high level, consumer data protection and ownership continues to be a top concern for about half of participating executives. Additionally, executives reported encountering a number of challenges in sharing data with their ecosystem partners, most prominently regulatory issues, contractual and financial risks, and data breaches (Figure 6).

Thus, it’s not surprising that only about one-third of companies are willing to share open data sets with their ecosystem partners. The remainder would consider sharing only with some sort of encryption (57 percent) or would not share at all (9 percent).
A third key factor influencing a platform’s success is a company’s ability to foster an ecosystem around its platform.

Over 80 percent of executives said their ecosystem will be important to delivering true outcomes. The key benefits offered by platforms are attracting new customers (62 percent), as well as application developers (52 percent), third-party vendors (51 percent), and even competitors (51 percent).

Executives also believe ecosystem partners will be enticed to join their platform business to access tools that will help them innovate, access new customers, and reduce their operating costs (Figure 7). Companies with mature platforms—which are widely adopted by the ecosystem and offer greater economies of scale and scope—are much more likely than those with basic platform capabilities to see lower operating costs as an incentive (79 percent versus 60 percent).
Three-quarters of executives also indicated that their ecosystem is paying directly or indirectly for the development and maintenance of the platform.

Figure 7: Primary incentives for ecosystem partners to join a platform

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<tr>
<th>Incentive</th>
<th>Percentage</th>
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<tr>
<td>Access to tools that will help to innovate</td>
<td>66%</td>
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<tr>
<td>Access to new customers</td>
<td>62%</td>
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<tr>
<td>Reduce operating cost</td>
<td>60%</td>
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<tr>
<td>Access to developer network</td>
<td>54%</td>
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<tr>
<td>Access to new development capabilities and talent</td>
<td>39%</td>
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Source: Accenture digital platforms survey, 2019

But the cost of collaborating with ecosystem partners is a concern—42 percent of executives said it’s one of the top three challenges digital platform owners and providers in their industry face—yet about three-quarters of executives also indicated that their ecosystem is paying directly or indirectly for the development and maintenance of the platform. Innovative pricing models—such as monthly subscriptions (39 percent), service bundling (23 percent), and pay-as-you-go (19 percent)—also are being used to help stave off the cost of collaboration for those using analytical models and AI-based applications offered on digital platforms.
WHERE DO YOU GO FROM HERE?

As our research shows, companies have made considerable progress in implementing their platform’s building blocks. However now, with platforms on the verge of becoming ubiquitous and commoditized, the opportunities that digital platforms based solely on a “business data layer” present for differentiation and competitive advantage are becoming more scarce. Thus, companies need to continue to innovate by thinking beyond the basics to how they can add the intelligence and “as-a-service” layers that will enable them to capture new markets and revenue streams. As they do so, companies should keep three key things in mind.
DIGITAL PLATFORM BUSINESSES TYPICALLY REQUIRE DIFFERENT TREATMENT FROM THE LEGACY BUSINESS

A platform business requires a new and different operating model from the ones that have driven traditional businesses. And in most cases, a platform business has a better chance of succeeding if it’s not constrained by the legacy business. Companies in our survey are giving their platform business varying levels of autonomy (Figure 8)—with about 29 percent running it as separate from, but still within, the legacy business and 24 percent operating it as a distinct business with its own P&L. In just under 17 percent, the platform business has the greatest autonomy, treated as a sovereign unit with the freedom to operate independent of traditional legacy processes. Companies with the most mature platforms—those that deliver outcomes-as-a-service—are most likely to run their platform business as a sovereign unit or as an accelerator within separate business units.

Figure 8: Current digital platform operating models among survey participants

Source: Accenture digital platforms survey, 2019

21 Intelligent Digital Platforms
NEW AND DIFFERENT SKILLS WILL BE REQUIRED TO TAKE THE PLATFORM TO THE NEXT LEVEL

For the vast majority of companies in our survey, the next phase in their platform journey will involve adding intelligence, and that will require specialized skills in building analytical models and applying AI—skills that may not currently be prevalent in the organization. Most executives in our survey recognize they need to close this critical skills gap and have identified various ways to do so—from upskilling in-house talent and teaming with ecosystem partners that can bring these skills to the table, to hiring new talent from outside the company and outsourcing certain aspects of their platform capabilities to a third party (Figure 9).

Figure 9: How companies are addressing platform skills gaps

Source: Accenture digital platforms survey, 2019
A CONTINGENCY PLAN IS A MUST

While we know that digital platform-based businesses are becoming ubiquitous, history also shows that inevitably, due to network effects, we can expect a few major platforms—so-called “dataopolies”—to dominate each industry. Thus, companies must have contingency plans in place to deal with this eventuality.

Virtually all those in our survey (98 percent) have such a plan (Figure 10). The most common route involves working with technology service providers to refine their digital platforms strategy. A smaller percentage (15 percent) said they would consider abandoning their digital platform strategy—either by returning to their traditional business model or, less likely, adopting a competitor’s platform, if their digital platform strategy fails. Eight percent said they’d adopt a third-party digital platform.
As our research illustrates, the platform economy has arrived and most companies have embraced platforms to create new value. But now’s not the time to relax. It’s critical for companies to keep their foot on the gas so they can make the leap from basic digital platforms to the intelligent digital platforms that can help them enter and win in uncontested spaces, earn “supernormal” returns, and drive stronger growth. Doing so will require sharply focusing on unmet customer needs, getting more out of data, and creating a robust ecosystem of partners. It also will hinge on the ability to find or develop the skills necessary to add the intelligence capabilities for delivering “as a service” outcomes, and to build an innovative new operating model to maximize these new platforms’ impact and the value they can unlock.

Figure 10: Contingency plans if current platform strategies falter

Source: Accenture digital platforms survey, 2019
REFERENCES


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ABOUT THE RESEARCH

Accenture surveyed 500 C-level executives in 12 countries (Germany, Australia, Brazil, China, France, Italy, Japan, Singapore, Spain, United Kingdom, Ireland, and the United States). Respondents represented companies across nine industries (banking, insurance, electronics and high-tech, communications, retail, consumer goods and services, health, utilities, and industrial equipment) with annual revenue of at least US$500 million (18 percent had revenues of more than US$10 billion). Sixty-three percent of companies were business-to-business firms while the remainder were business-to-consumer enterprises.

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