Applications 2024: How Application Leaders Should Prepare Their Organizations to Remain Relevant and Highly Effective

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As enterprise applications adapt to the needs of the digital world, application leaders must develop new team skills, values and approaches to delivering these applications. This report shows them how to ensure continued relevancy and success through 2024.

Key Challenges

- Application teams that don't adopt new, more effective ways of working with business stakeholders in order to deliver business outcomes will fail to solve customers' problems or deliver great customer experiences.

- Traditional approaches to talent acquisition (such as requiring a three-or four-year bachelor's degree) won't produce the diverse, skilled and engaged workforce that the application organization will need in 2024.

- Enterprise application teams that focus on technologies, rather than customer and business outcomes, will be viewed by business people as transactional custodians of legacy systems, not as strategic partners in delivering differentiation and innovation.

- Application teams are no longer in a position of "command and control," as technology budgets are increasingly commanded by line-of-business owners and their product teams.

Recommendations

Application leaders governing application and product portfolios in order to enable digital transformation should:

- Build team skills supportive of business-centric strategy, vision and customer focus by adopting and scaling a product-centric approach to development.

- Make diversity a core objective and recruit talent beyond traditional sources in order to build more effective teams. Global organizations should consider partnering with educational establishments to develop curriculums more relevant to applications in the modern world.

- Pursue design thinking to foster a culture and a mindset within enterprise application teams that approach the application portfolio from the perspective of customers.

- Adopt product-based budgeting and support rapid business change and agility to improve business outcomes.

Table of Contents

List of Figures

Strategic Planning Assumptions

By 2024, IT organizations that develop core missions, visions, values and products will eliminate competitors that lack empathy and focus on shallow behaviors, tasks and projects.

By 2024, 30% of large organizations will have moved to a platform/product approach with standardized ERP capabilities at the platform core.

By 2024, 30-year-old Generation Z IT leaders will be driving innovation and trying to self-disrupt enterprises every three months.
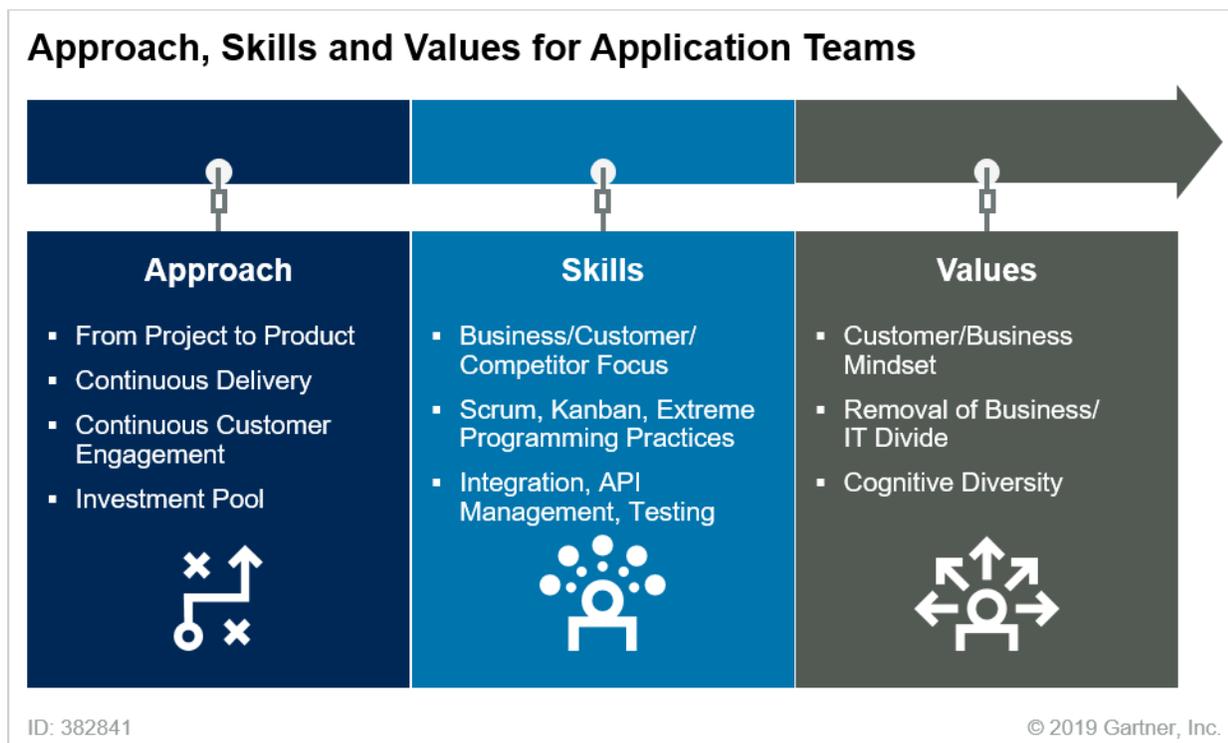
Introduction

The role of the enterprise application team is going through a fundamental redesign. Everything around the team and its portfolio is changing: technology, expectations, experience, ownership, funding models and governance.

In many organizations, the enterprise application team is unprepared for the users of 2019, let alone 2024. In 2024, application stakeholders will be extremely knowledgeable about technology and IT solutions. They will demand that new capabilities be commissioned in days, even if it means bypassing the IT department, instead of in weeks and months. Application leaders are already innovating with the best of what they have, but this won't be enough to satisfy such demands.

Today's application organizations are working flat out to avoid this failure, but are often focusing only on technology. They often lack maturity in terms of how they operate, and of their relationship with the rest of the organization. This is confirmed by data from Gartner's ITScore application maturity assessments, from which the overall average maturity score is only just over two on a five-point scale (see "Improve Your Application Strategy With Gartner's ITScore for Applications").

Faced with these issues, application leaders are asking how they should prepare their organizations to remain relevant and highly effective in the future. The answer relates less to technology than to how combined business and technology teams can best apply technology to meet business needs. This requires a shift in the focus of team skills and values toward leading innovation — toward not just managing disruption but embracing and exploiting it for business value. To effect this shift, you must embrace new strategies, including product management, digital business technology platforms, more dynamic funding and machine learning (see Figure 1).

Figure 1. Approach, Skills and Values for Application Teams

Approach, Skills and Values for Application Teams

Approach	Skills	Values
▪ From Project to Product	▪ Business/Customer/ Competitor Focus	▪ Customer/Business Mindset
▪ Continuous Delivery	▪ Scrum, Kanban, Extreme Programming Practices	▪ Removal of Business/ IT Divide
▪ Continuous Customer Engagement	▪ Integration, API Management, Testing	▪ Cognitive Diversity
▪ Investment Pool		

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Source: Gartner (January 2019)

Analysis

Build Team Skills Supportive of Business-Centric Strategy, Vision and Customer Focus by Taking a Product Approach to Development

Build application teams with new skills that enable them to be more business-centric and strategic, with a vision focused on customers, by adopting and scaling a product-centric approach to development. The IT department has evolved significantly from prior eras in which it focused on taking orders for hardware or software. In 2019, IT departments have shifted focus toward digital business, while continuing to manage portfolios of applications. As part of this shift, most have begun to assemble digital business technology platforms partly composed of existing applications.

By 2024, digital business will have completed this shift. IT departments will then be positioned to deliver and adapt business capabilities more continuously on top of these platforms, drawing on technologies like artificial intelligence (AI), predictive analytics and DevSecOps. They will drive adoption of these technologies as a means of solving business problems and delivering improved business outcomes, not merely for technology's sake. Enterprises that are transforming or optimizing their digital business can no longer afford the slow and unresponsive delivery approach of the past, which was associated with rigid requirements and waterfall delivery projects. They must adopt a business-centric strategy to drive a more continuous flow of business capabilities.

To achieve this, you, as an application leader, must develop new skills, both yourself and in your teams, by fostering business experience and understanding and customer focus. By rotating leaders and team members through business jobs, recruiting from business teams, or creating teams that combine business and technology staff, you should accumulate the business knowledge to quickly identify digital business opportunities and deliver the required capabilities.

You and your business colleagues must work together to embrace a product-centric model, and to establish the product management staff and competency required to implement it. Whether product managers report to the IT department or the business, they are crucial to enabling teams to deliver the most valuable new business capabilities first, and to keeping the product roadmap up to date to reflect ever-changing business priorities. With digital business, those priorities can change daily (see "From Projects to Products — Three Essential Actions for Every CIO Aiming to Transform Their Digital Organizations").

You must embrace the continuing evolution of tools and platforms designed to empower "citizen developers" within the business to do their work. Whether these tools are employed by mixed business and technology teams that choose the right tool for each class of work, or by support business teams that choose their own solution approach, the goal is the same. That is to take full advantage of the increasing technology capabilities of people working in primarily business jobs (see "Integrate 'Shadow IT' and Business-Led IT Into the I&T Operating Model to Enable Enterprise Agility").

Vision and Customer Focus

As this shift to product-centric delivery and digital platforms continues in the years leading to 2024, a customer-centric mindset, attitude and aptitude will increasingly trump technical skills. The application team must learn to develop a focus on the market for its work, and know how its work stacks up against that of competitors or alternatives. Customer centricity is easier to understand for external customers, but as this model matures, it permeates further down into the organization. Every team has customers, including platform teams that deliver APIs consumed by other teams. As this mindset develops:

- **Product teams learn how to do customer research.** Teams serving external customers can afford to observe customers in their natural habitat as they "get out of the office." Teams serving internal customers, however, have to find less costly ways to achieve the same kinds of insight into what their customers need. The right means might include making a videoconference recording of a customer using some software, or making a video call from a phone, or an analytics feed showing how people use software. Teams will decide what works best for each situation.

- **Everyone must understand the product vision.** All team members make crucial decisions every day that they can make on a more informed basis if they know the product vision and goals. Although product managers (whatever their title) develop the vision initially, as they work with product teams to deliver solutions, the whole team comes to "own" the vision in a very real way. This is because it reflects the results of the many daily decisions that everyone has made.

Make Diversity a Core Objective and Look Beyond Traditional Sources of Talent to Build More Effective Teams

In 2024, many organizations will be in the third wave of enterprise agility — CEO-led "enterprise agile" — as traditional business models will have adapted to digital business (see "Digital Business Transformation in Established Organizations: The Third Wave of Enterprise Agility").

Most agile teams currently reside in the IT department. By 2024, the application team will have developed and matured a "we"-based mentality, based on its product vision and a customer-centric, value-driven culture. CEO-led enterprise agile organizations don't just do development differently, they do business differently. The lines between "IT" and "the business" will no longer exist. In 2019, it is still common for new employees to take over six months to become fully productive in their roles. In 2024, when more and more workers will be switching jobs and companies at a much faster rate, this delay in productivity will no longer be acceptable (see "The Future of Work Will Demand Changes to Higher Education").

Although the core of each product team in 2024 will be stable, the broader cross-functional team will be much more fluid as team members come and go frequently. Effective communication between team members and throughout the business will be a core competency, as will an open mindset. "Experienced hands with beginners' minds" will be the mantra.

In 2019, you must begin to assemble a cognitively diverse team that brings a wide variety of experiences, perspectives and thoughts to the table. Leaders and teams must show genuine enthusiasm for the organization's mission and purpose, for its strategy and, most importantly, for its workforce and customers. Change does not require management; change requires leadership.

Talent is the differentiating factor in digital business. Organizations will not be able to attract good talent if product teams aim merely to provide palliative care to legacy systems. If your organization's "curb appeal" is not strong enough to attract and retain good talent, you must either work to improve it or accept the reality that some roles will not be filled internally.

Sourcing and developing talent for product teams will be a critical success factor for the organization in 2024. In 2019, some leading organizations, including Google and Apple, no longer require a three- or four-year bachelor's degree from candidates. Ginni Rometty, chairman, president and CEO of IBM, has stated that "As industries from manufacturing to agriculture are reshaped by data science and cloud computing, jobs are being created that demand new skills — which in turn requires new approaches to education, training and recruiting."

To pursue this kind of talent:

- Move away from scoring incoming resumes or CVs based on a limited range of technology keywords. This requires educating HR about the kind of talent you require. For example, design talent may have degrees in art or music. Product managers may have starred in a school production of "Rent" or another groundbreaking musical — their acting talent could help convey a compelling product vision.

- Look for people whose job mobility has taken them across multiple careers, rather than a straight line from a technical degree to a current technical specialty. For example, a candidate

who rowed as a crew member, then spent a year with Greenpeace, then managed a Starbucks, and then went into modeling and subsequently data science, inspired by what he or she had learned along the way. Such a person may be much more able to innovate with data and analytics technology than someone whose entire career was spent in IT.

- Look across the entire organization for ambitious staff who are looking for new opportunities. The research associate who attended night classes at the local university to learn how to program in Java may be just the team member you need.

Partner With Educational Institutions to Innovate

In 2024, application teams in large global organizations will work to create curriculums for educational establishments in order to grow the needed talent pool. In 2019, several large technology companies are already doing this as traditional universities struggle to keep pace with the demands of digital business.

> Diversity is the mixture of differences and similarities, including, for example, individual and organizational characteristics, values, beliefs, experiences, backgrounds, preferences and behaviors.
>
> Inclusion is the achievement of a work environment in which all individuals are treated fairly and respectfully, have equal access to opportunities and resources, and can contribute fully to the organization's success.

Leading application teams in 2024 will make diversity and inclusion a core value. They will look beyond resumes, elite universities, grades and grade point averages when searching for new talent. They will source diverse talent from coding boot camps, internships, community colleges and further education establishments. They will also work to close the gender imbalance at work. To take one example, in 2018, only 17% of the U.K.'s tech sector workforce was female, but the U.K. government and leading technology companies have signed a Tech Talent Charter with the goal of "bringing together industries and organizations to drive diversity and address gender imbalance in technology roles."

A 2018 report by EY entitled "The Value of Dyslexia. Dyslexic Strengths and the Changing World of Work" recommends that employers implement a neuro-diverse talent strategy that adopts a strengths-based approach to hiring, talent and work on a day-to-day basis.

Bill McDermott, CEO of SAP, stated recently that SAP has dedicated 1% of its hiring to people with autism to help its workforce be "highly productive and diverse."

Diversity in terms of age should not be overlooked, either. Build high-performance teams by including workers from all age groups and experience levels (see "Building High-Performance Teams: Diversity Matters").

To prepare your application team for 2024, you should:

- Assess the maturity of your staffing and skill-building efforts by using Gartner's ITScore framework (see "Improve Your Staffing and Skills With Gartner's ITScore for Applications").

- Establish diversity as a primary decision criterion — not something that is merely "nice to have" — for hiring, vendor management, team formation and other areas (see "Diversity's Role in an Effective Digital Workplace Program").

- Develop a value-led culture by adopting the best practices in "Flattening the Application Organization — Everyone Must Be Part of the Agile Value Stream."

- Assess your organization's ability to attract and retain key talent by looking at your application portfolio, pay, benefits, work environment, diversity, culture and values. Ask yourself honestly whether an alternate version of you would be attracted to this company.

- Take an active role in developing the skilled workforce you will need in the future by working alongside traditional and nontraditional education providers to develop curriculums, training materials and opportunities for the workforce of 2024.

Pursue Design Thinking to Foster a Culture Within Application Teams That Sees Things From the Customer's Perspective

> "People don't want to buy a quarter-inch drill. They want a quarter-inch hole!"
>
> Professor Theodore Levitt, Harvard Business School

Professor Levitt's famous quote highlights the kind of 180-degree change in approach that the successful application team of 2024 will have taken. By switching focus from technology and system inputs to customer needs, desires and outcomes, the team will have repositioned itself for success. Professor Levitt also once asked "What business are you in?" An application team in 2019 may answer "the application business" or "the technology business." The successful application team in 2024 will answer "the customer business."

In 2024, the successful application team will focus on the use of technology to meet its customers' needs, wants and desires. This is very different from focusing on the technology of applications. Applications are not the end goal, just as the quarter-inch drill isn't in Levitt's example. The successful application team in 2024 will view its portfolio, strategy and reason for existence from the customer's perspective.

Successful application leaders in 2024 will be invaluable business partners who can build a business case, estimate total costs and anchor investments to business outcomes. They will delight

stakeholders by focusing on product management, supplier management, continuous delivery and DevOps (see "Applications 2023: Critical Skills and Knowledge for Application Leaders in a Digital World").

None of this will be possible without true empathy and understanding for customers, whether internal, external or both. Use design thinking to shift your team's focus from technology inputs to customer outcomes. Along with chief architects and other IT leaders, align your team with design-thinking initiatives that are already underway, even if the role of IT is unclear.

When application leaders fully integrate their thinking with business thinking, the result transforms the relationship between business and IT (see "Design Thinking Can Revolutionize Your Customer Experience Strategies"). For digital business, the most important role for implementing design thinking is the designer of the customer experience. Whether designers reside in a separate design center, or are integrated with product teams, they are central to this mind shift (see further, "Achieving Digital Optimization With Digital Design" and "2018 CIO Agenda: Directions in UX Design Staffing").

Figure 2 reflects the reality that people are attracted to visible things, such as a plant's flowers, which we liken to behaviors exhibited and tasks undertaken as part of organizational engagements. But we must remind ourselves that a plant's hidden roots are essential, if we want its flowers to flourish. Similarly, deep engagement with design thinking — and the necessary organizational culture, values, mission and vision — is necessary to produce beneficial behaviors.

Figure 2. Deep Core Engagements With Design Thinking
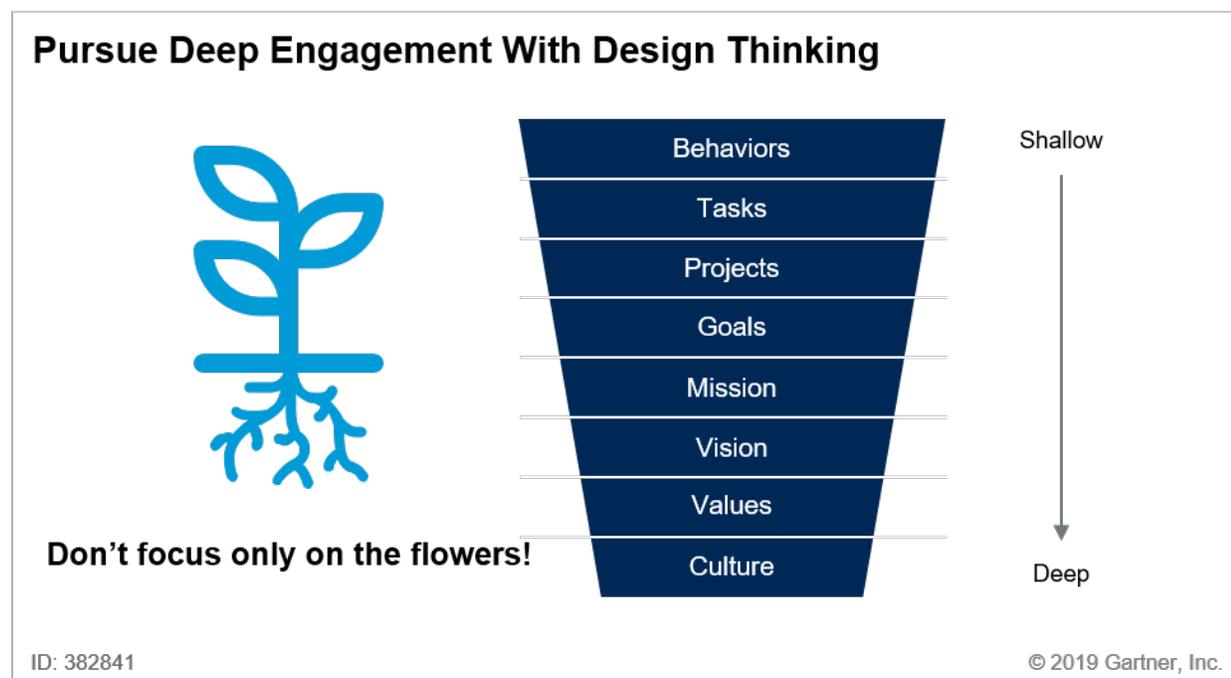
Source: Gartner (January 2019)

Adopt Product-Based Budgeting and Support Rapid Business Change

Innovation is messy, and you will have to manage many innovations by 2024. Two of the main goals of application organizations in 2024 will be to help enterprises exploit technology (for market penetration) and explore technology (for market diversification). Meeting these goals will require a very different and interactive approach to enable maximum innovation and agility.

Traditional budgeting and the organic growth process of many enterprises make it difficult for application organizations to meet these goals or to make drastic changes along the way. Moving to product-based budgeting enables you to work with business stakeholders to carve out funding for specific product lines.

Say, for example, one organization has a product team focused on the "lead to opportunity" part of the sales cycle. Its product funding reflects the high priority it places on this process and the value it delivers through increased sales and better sales efficiency. The team draws on the capabilities of an underlying SaaS CRM platform, as well as a third-party SaaS-based lead-scoring engine. Those technologies, in turn, have their own funding, which reflects their value to the entire organization. Each product line budget aligns with the profit-and-loss center that best captures that value.

Instead of an annual (and essentially ceremonial) exercise in IT budgeting, product funding enables a more continual approach between business stakeholders and finance to enable interactive planning, links to business metrics, and quarterly reviews to supplement traditional budgeting. Work with finance leaders to define product lines and categorize ongoing work into "buckets."

Work with business stakeholders and finance leaders to develop metrics. All parties will then be able to understand easily the value of innovation and effectiveness (as opposed to focusing on driving efficiency and cost optimization) for each product line, based on the value each process can deliver. For example, for "lead to opportunity," aiming for a 10% improvement in lead conversion might drive several million dollars in increased sales. Develop your own metrics to gauge a "new ROI" — a "return on innovation" — on top of a return on investment.

Encourage your application organization to break away from current norms and embrace the new role of driver of business innovation. Instead of treating the annual IT budgeting exercise as a zero-sum game, use product management and work with business stakeholders to move to product-based budgeting, which ties spending more directly to business value. Use this new approach, and the partnership with business it requires, to complete the transition to a truly digital business.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Succeeding as an Application Leader in 2023"

"2018 Strategic Roadmap for Application Strategy"

"Strengthen Five Key Pillars of Product Management to Scale for Digital Business Success"

"Apply Data and Analytics Skills to Make the Best Product Management Decisions"

"A Day in the Life of a Product Manager"

"Product Manager Role Description for Digital Business"

"Survey Analysis: IT Is Moving Quickly From Projects to Products"

"Toolkit: Assess Your Product Management Organization to Scale for Digital Business Success"

"Building High-Performance Teams: Diversity Matters"

Evidence

"This Is Why Recruiters Are Failing at Hiring Diverse Tech Candidates"

"What Customers Want From Your Products"

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